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Consumer Trust in User-Generated Brand Recommendations on Facebook

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ABSTRACT

The transparency of social web paves the way for user-generated content (UGC) to become a trusted form of brand communication. Research offers little guidance on UGC and trust development in social networking sites (SNS) and has yet to debate the effects of adskepticism in the context of UGC and SNS. This study builds on theory to develop a conceptual framework that yields insights into the development of consumer trust towards user-generated brand recommendations (UGBR). A set-theoretic approach using fuzzy-set qualitative comparative analysis is applied to data derived from 303 consumers. The study findings suggest that high levels of trust in UGBR are associated with high levels of trust toward Facebook friends and provide support for the moderating role of ad-skepticism. Benevolence and integrity are found to be necessary/core conditions for the development of trust toward Facebook friends. Ability and disposition to trust are of peripheral importance. The significance of the findings and their implications are discussed.

Keywords: trust, user-generated content, brand recommendations, social networking sites, fsOCA

INTRODUCTION

In the participatory context of social networking sites (SNS), firms are not any more the sole source of brand-related communications. The emergence of user-generated content (UGC) have caused a paradigm shift from the publisher to the user-centric media model (Christodoulides, Jevons, & Bonhomme, 2012). This shift undermines the hegemony of firm-generated brand claims; consumers no longer find them trustworthy (Nielsen, 2015). Thus, UGC is increasingly becoming the new form of brand communication (Dhar & Chang, 2009). In fact, Deloitte USA reveals that: 62% of U.S. consumers read brand recommendations online; 98% deem these trustworthy; and 80% reported that these have affected their purchase intention (Pookulangara & Koesler, 2011). Such findings highlight the potential of user-generated brand recommendations (UGBR) in shaping consumers' perceptions. Despite the level of trust bestowed to UGC, research on trust towards UGBR remains scarce.

In an online environment, traditional communication practices are likely to be avoided. This is likely to be more prominent if consumers are skeptical about the content of the advertising message or the advertising medium itself (Kelly, Kerr, & Drennan, 2010). Thus, skeptics are likely to seek alternative sources of brand information; they visit SNS, search for UGC, and review UGBR (Dhar & Chang, 2009). In light of this new reality, research has yet to debate the effects of ad-skepticism in the context of UGC and SNS. The present study contends that ad-skepticism plays a deterministic role in consumers' inclination to trust UGBR.

The aim of this study is to examine trust towards UGBR on Facebook. The study contends that trust towards UGBR comprises an interplay between trust towards Facebook members, content, and the Facebook itself. Thus, a conceptual framework is put forward to comprehend intentions of trust towards Facebook friends and UGBR (see Figure 1). This association is moderated by consumers' skepticism towards advertising. The study's framework is controlled for gender, Facebook experience and use, and trust towards Facebook.

To test propositions, the study employs a set-theoretic analytical method; that is, fuzzy set qualitative comparative analysis (fsQCA). fsQCA conceptualizes cases as unique combinations of characteristics and provides further insights into the relationship between multiple predictors and an outcome (Ragin, 2008). The present study contributes to the literature by offering insights into the process by which consumers develop trust towards UGBR in SNS. This is the first study that examines the interplay of trust towards SNS members and UGBR and the underlying role of ad-skepticism.

THEORETICAL BACKGROUND

User-Generated Content

UGC is identified as any material that is created outside professional practices, reflects effort, and is publicized online (Christodoulides et al., 2012). UGC takes various forms; the most relevant is consumer-produced reviews and recommendations (Muñiz & Schau, 2007). Recent studies (e.g., Goh, Heng, & Lin 2013) highlight the persuasive power of UGC over marketergenerated content. Due to the dynamic networks of SNS and the ease of content sharing, consumers are becoming pivotal authors of brand stories (Gensler, Volckner, Liu-Thompkins, & Wiertz, 2013). The literature on brand-related UGC revolves around two streams of research: consumers' perception towards and motivations for engaging in brand-related UGC (Cheong & Morrison, 2008).

Trust and SNS

Trust is the "willingness of a party to be vulnerable to the actions of another based on the expectation that the other will perform a particular action important to the trustor" (Mayer, Davis, & Schoorman, 1995, p. 712). It comprises cognitive (i.e., trustor's beliefs about the trustee) and behavioral aspects (i.e., willingness to rely on and be vulnerable to trustees'

actions) (Moorman, Deshpandé, & Zaltman, 1993). Theory argues that the trusting beliefs of benevolence, integrity, and ability are predictors of trust (Gefen & Straub, 2004). These represent the concept of trustworthiness and comprise the trustees' personal characteristics that are inevitable for trust development. Additionally, an individual's general expectations about the trustworthiness of others affects the formation of trust; this personality trait is referred to as the propensity to trust (Mayer et al., 1995).

Trust in social media has been found to eliminate perceived risk and uncertainty (Hong & Cha, 2013). Trust in a social network community, generates an atmosphere that eliminates opportunistic behaviors and allows members to openly interact (Shin, 2013). It directs behaviors and actions, and simplifies decision-making (Haiji, 2014). Further, trust facilitates information exchange and knowledge integration; thus, is considered a catalytic mechanism for evaluating sources and appraising UGBR (Chu & Kim, 2011). Drawing on interpersonal and organizational-based trust (e.g., Mayer et al., 1995; Rotter, 1967), it is posited that benevolence, integrity, ability, and propensity to trust influence the intention of the trustor to trust his/her Facebook friends. When such intentions occur, consumers are likely to deem UGBR by friends trustworthy.

RESEARCH PROPOSITIONS

Trustworthiness

Trust in online environments encompasses both the willingness to depend on and dimensions of trustworthiness (See-To & Ho, 2014). Prior studies assert that trustworthiness positively impacts attitudes towards and the willingness to use and share UGC (Ayeh, 2013). Drawing on Hsiao, et al. (2010), online trust is formed when the trustor perceives the trustees' benevolence, integrity, and ability as favorable. Thus, trust of on Facebook, can be

understood as an interpersonal trust between the trustor and his/her Facebook friends (Lu, Zhao, & Wang, 2010).

Benevolence reflects the extent to which a trustee is believed to want to help the trustor, even though the trustee is not required to be helpful and no extrinsic reward comes from doing so (Mayer et al., 1995). On SNS, benevolence is the belief that the information provider is interested about his/her friends' wellbeing and wants to be helpful (See-To & Ho, 2014). Thus, on Facebook, if the trustor considers his/her friends to be supportive and helpful he/she is more likely to trust them. Integrity is the extent to which a trustee is perceived to adhere to morals and ethical principles (Colquitt, Scott, & LePine, 2007). In the context of SNS, integrity refers to the perception that the information provider is honest (Dickinger, 2010). Applying this to Facebook, if the trustor considers his/her Facebook friends to be sincere he/she is more likely to trust them (Hsiao et al., 2010). Ability refers to trustees' domain-specific skills and competencies through which they are able to influence the trustor (Mayer et al., 1995). In SNS, ability is the belief that Facebook friends provide legitimate information (See-To & Ho, 2014). If the trustor perceives his/her friends as competent he/she is more likely to be trust them. Thus, beliefs about the trustworthiness of Facebook friends affects their trusting intention:

RP1: Intention to trust Facebook friends will be high when they exhibit high: (a) benevolence; (b) integrity; and (c) ability.

Propensity to Trust

Propensity to trust refers to general expectations about others' trustworthiness and explains how individuals vary in their disposition to trust (Cheung & Lee, 2006). This perspective is rooted in the belief that others are trustworthy and that better results can be achieved by trusting them (Gefen, 2000). In an online context, dispositional trust is positively linked to: trusting

beliefs (Moody, 2014), online shopping (Lu, Zhao, & Wang, 2010), community members (Cheung & Lee, 2006), and institutional based trust (See-To & Ho, 2014). Thus, it is posited:

RP2: Intention to trust Facebook friends will be high when propensity to trust is high.

Trust Towards UGBR

Trust in UGBR refers to perceptions about the reliability, usefulness, and effect of brand recommendations made by friends on Facebook and willingness to rely on them (Soh, Reid, & King, 2009). Research on trust towards others on SNS and UGBR is scarce. However, in the context of SNS, trust towards others is linked to the desire to receive (and share) information online (Chu & Kim, 2011). In SNS communities, social value develops in conjunction with the intellectual value of UGC and the quality of knowledge exchanged (Mathwick, Wiertz, & De Ruyter, 2007). Trust in others motivates an exchange of information online (Seraj, 2012). Thus:

RP3: Trust in UGRB will be high when trust toward Facebook friends is high.

Ad-Skepticism

Skepticism entails an individual's tendency to question and/or doubt content (Skarmeas & Leonidou, 2013). Ad-skepticism refers to consumers' perceptions that claims made about a brand in an advertisement are either untruthful and/or implausible (Hibbert et al., 2007). Skeptics react unfavorably to advertising and disbelieve its claims; in fact, skeptics are unlikely to process marketer-generated content (Obermiller & Spangenberg, 1998). Thus, skepticism challenges advertising's ability to foster trust about brand claims (Li & Miniard, 2006). Advertising in a an online environment is likely to be avoided if the user is skeptical toward the advertising message (Kelly, Kerr, & Drennan, 2010). Thus, if SNS users are

skeptical toward advertising, the likelihood that they will perceive value in peer recommendations will be high. Skeptics are expected to trust UGBR more because they perceive them as trusted alternatives. Hence:

RP4: The relationship between intention to trust Facebook friends and trust in UGBR is stronger for individuals with high rather than low levels of ad-skepticism.

METHODOLOGY

Sample, Context, and Procedures

Data was collected through self-reported questionnaire. The study targets consumers engaging in the consumption of brand-related UGC; thus, an online survey was deemed the best method of administration. Although various types of brand-related UGC and platforms for dissemination exist, the focus is UGBR on Facebook.

The questionnaire was pretested with a small sample of consumers recruited on Facebook; no major changes were observed. Snowball sampling was employed to disseminate the link of the survey; first, it was distributed to the researchers' contacts and was subsequently shared by others on Facebook (see Christodoulides et al., 2012). Responses were screened on the basis of: age (i.e., under 18), country of residence (i.e., outside UK), and Facebook inexperience (i.e., no use). Responses outside these parameters were eliminated, resulting in 303 usable questionnaires.

Perceptions of trust could vary considerably for high vs. low-involvement products. Research on UGC mainly focuses on high-involvement categories; so this study concentrates on a low-involvement context. A pre-test that involved consumers evaluating their level of involvement with several product categories indicated that frozen potato fries was a suitable low-involvement product. The questionnaire first exposed respondents to a fictitious brand (i.e., McSpuds) recommendation likely to be viewed on Facebook (see Figure 2). With this

stimulus in mind, respondents were asked to respond to questions capturing the framework of the study.

Measures

Measures from previous studies were adapted to the specific context of SNS and UGC. See Appendix for measures, sources, response formats, and internal consistency estimates. Gender, Facebook experience (i.e., 1 = Less than 1 year, 2 = 1-2 years, 3 = 2-3 years, 4 = 3-4 years, and 4 = 3-4 hours, and usage (i.e., 4 = 3-4 hours), and usage (i.e., 4 = 3-4 hours) were gauged for control purposes.

Measures Validation

An overall measurement model was run using the ERLS estimation procedure in EQS. Internal consistency reliabilities were within acceptable levels. Measures were assessed through a confirmatory factor analysis (CFA); each item was restricted to load on its a priori specified factor while the underlying factors were allowed to correlate (Anderson & Gerbing, 1988). The measurement model suggests an acceptable fit (Table 1). Table 2 shows the summary statistics and construct correlations. Discriminant validity was secured using the: (1) chi-square difference (Gerbing & Anderson, 1988); and (2) and Fornell and Larcker's (1981), tests.

Insert Table 1 and 2 here

Assessment of Common Method Bias (CMB)

To ensure that CMB was not introduced in the study, several procedural actions were followed (Podsakoff et al., 2003). First, measures were kept simple and specific and psychologically separated in the questionnaire. Second, two post-hoc statistical tests were applied. Initially, Harman's single-factor test was employed whereby all measures were

introduced into a principal components analysis with varimax rotation. The unrotated factor solution revealed that no single factor explained more than 20% of the variance (Podsakoff & Organ, 1986). Next, a CFA in which all indicators were restricted to load on a single factor was performed. The indices suggested a poor model fit; thus, CMB does not pose a problem in this study.

Proposition Testing and Results

fsQCA was used to test propositions. fsQCA suggests multiple solutions of predictors and combinations that can lead to the outcome of interest (Rihoux & Ragin, 2009). A solution outcome suggests necessary (i.e., conditions that produce the outcome but by themselves may not be enough) and sufficient (i.e., conditions that always lead to the outcome) associations (Ragin, 2008).

fsQCA proceeds in three steps: (1) data calibration; (2) truth table construction and identification of relevant combinations; and (3) simplification and assessment. First, all variables of interest were calibrated into fuzzy sets. Fuzzy sets demonstrate degrees of membership in a particular category and range from 0 to 1. We applied to all summated scales involved 3 cut-off points for calibration: 0.05, 0.50 and 0.95 for full non-membership, crossover point, and full membership, respectively (Fiss, 2011).

The second step comprises the construction of the truth table. A truth table consists of 2^k rows; k accounts for the number of predictors incorporated in the analysis (Crilly, 2011). The truth table illustrates all possible combinations of predictors with the outcome (Fiss, 2011). For the purposes of this study we developed two truth tables involving: (1) 2^4 possible combinations of drivers (i.e., BEN: benevolence; INTE: integrity; ABIL: ability; and PROP: propensity to trust) of trust towards Facebook friends (TRFBFR); and (2) 2^6 possible combinations (i.e., TRFBFR; SKEP: ad-skepticism; GEND: gender; FBUSE: Facebook use;

FBEXP: Facebook experience; and TRUMED: trust in medium) for trust towards UGBR. To identify meaningful combinations between predictors and outcomes, the truth tables needed to be reduced on the basis of: (1) minimum number of cases (i.e., one); and (2) minimum level (i.e., 0.75) of consistency (Ragin, 2008). Consistency is the "degree to which a combination of causal conditions is reliably associated with the outcome" (Crilly, 2011, p. 705).

Next, fsQCA simplifies derived combinations into a reduced set of configurations and provides complex, intermediate, and parsimonious solutions for output assessment (Rihoux & Ragin, 2009). We adopt complex solutions as they make no simplifying assumptions. In addition to consistency, coverage is also employed to evaluate the findings. Coverage comprises the empirical importance of the solution and indicates how much of the outcome is captured by the entire solution and each pathway separately (Fiss, 2011). For a solution to be explanatory, coverage must range between 0.25-0.65 (Ragin, 2008).

Table 3 shows the derived solutions for model one and two. The first model tested conditions (i.e., BEN, INTE, ABIL, and PROP) that lead to high trust towards Facebook friends (TRFBFR); the second investigated conditions of TRFBFR and SKEP for high trust towards UGBR while controlling for GEND, FBUSE, FBEXP, and TRUMED. fsQCA findings reveal two pathway solutions for each model. All solutions exhibit acceptable consistency and coverage.

For high TRFBFR, the first pathway indicates a combination of: high BENE and ABIL and low INTE. The second solution combines: high BENE and PROP and low INTE. Thus, BEN and INTE are sufficient (i.e., core) predictors to TRFBFR; whereas, ABIL and PROP are necessary (i.e., peripheral). The findings provide support for RP1a and partial support for RP1c and RP2. Contrary to expectations in RP1b, low levels of integrity are required for high TRFBFR.

For high levels of UGBR, the solution reveal three sufficient (i.e., TRFBFR, SKEP, and TRUMED) and two necessary conditions (i.e., FBUSE and FBEXP). GEND is absent in both pathways, thus irrelevant to high degrees of UGBR. The first pathway requires a combination of high TRFBFR, SKEP, and TRUMED, and low FBEXP. The second reveals: high TRFBFR, SKEP, and TRUMED, and low FBUSE. The findings are in line with RP3 and RP4.

Insert Table 3 here

DISCUSSION

This research sought to provide insights into the consumer trust formation process toward Facebook friends, and ultimately UGBR, by also investigating the role of ad-skepticism. The study contributes to a better understanding of trust development in SNS. Specifically, findings reveal that not all dimensions of trustworthiness are born equal. On Facebook, more and less emphasis is given on the trustee's benevolence and integrity, respectively. The trustor's disposition to trust and perceptions about the trustees' ability are of peripheral importance. Thus, trust toward Facebook friends is high when the trustor perceives that the online behavior of his/her friends is helpful/altruistic. Contrary to expectations, beliefs about the integrity of Facebook friends is of less importance; in fact, low levels are required. A plausible explanation is that despite the importance of UGC, in the context of SNS users' honesty to providing brand related information may still be doubted.

Findings support the suggested association between intention to trust Facebook friends and trust towards UGBR. Trust in UGBR can be better understood in relation to an individual's intention to trust his/her Facebook friends who distribute such recommendations. The findings show that high degrees of trust towards UGBR can be generated when high trust towards Facebook friends occurs. This finding extends previous research (e.g., Cheung & Lee, 2006; Hsiao et al., 2010; Shin, 2013). fsQCA findings also shed light on the role of ad-

skepticism on the development of trust; they reveal a combination of high ad-skepticism and trust toward Facebook friends for high trust towards UGBR. Thus, the association between trust towards Facebook friends and UGBR is stronger, when consumers' are highly skeptical about firm-generated brand communications.

The results bare practical implications as well. Managers should acknowledge that consumers' trust in UGBR is affected by their intention to trust their Facebook friends, which in turn is influenced to a greater extent by benevolence and integrity and to a lesser extent by ability and propensity to trust. Managers should engage consumers to generate and disseminate brand-related UGC on social-media. Managers should incentivize consumers to trust UGBR by SNS members; they should stress that their intentions and activities are honest and altruistic. They should point out to customers that UGBR aim to aid their decision making process. Managers could utilize the 'wisdom of the crowds'; for instance, they could link a corporate website to a review or specific recommendation. Essentially, UGBR could be used as the new form of 'customer testimonials'. Finally, firms should be aware that adskepticism fuels trust towards UGBR. Managers may need to segment target audiences according to their level of skepticism and target skeptics with UGBR.

Limitations and Future Directions

This research is not free of limitations. In order to enhance the internal validity of the findings a fictitious brand was used. In a real-life situations, consumers are likely to have prior perceptions or attitudes toward the recommended brand. Future research may consider the replicability of the findings and the role of brand familiarity, brand knowledge, and related constructs in the formation of trust toward UGBR. Another limitation concerns the use of a single stimulus from a low-involvement product category. Other researchers should examine the applicability of the findings in high-involvement product categories. Also, the

results have focused on British residents though UGC and SNS are not bound to a specific geography. Future research may address this by examining the moderating role of (national) culture in the formation of trust toward Facebook friends and trust in UGBR. Finally, the selected context for this study was SNS, but UGBR are admittedly found in abundance in blogs and forums. Future research may focus on these platforms.

REFERENCES

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological bulletin, 103, 411-423.
- Ayeh, J. K., Au, N. & Law, R. (2013). Do we believe in TripAdvisor? Examining credibility perceptions and online travellers' attitude toward using user-generated content. Journal of Travel Research, 52, 437-452.
- Cheong, H. J., & Morrison, M. A. (2008). Consumers' reliance on product information and recommendations found in UGC. Journal of Interactive Advertising, 8, 38-49.
- Cheung, C. M. K., & Lee, M. K. O. (2006). Understanding consumer trust in internet shopping: A multidisciplinary approach. Journal of the American Society for Information and Technology, 57, 479-492.
- Christodoulides, G., Jevons, C., & Bonhomme, J. (2012). Memo to marketers. Quantitative evidence for change: how user-generated content really affects brands? Journal of Advertising Research, 52, 53-64.
- Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. International Journal of Advertising, 30, 47-75.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. Journal of Applied Psychology, 92, 909-927.
- Crilly, D. (2011). Predicting stakeholder orientation in the multinational enterprise: A midrange theory. Journal of International Business Studies, 42, 694 –717
- Dhar, V., & Chang, E. A. (2009). Does chatter matter? the impact of user-generated content on music sales. Journal of Interactive Marketing, 23, 300-307.
- Dickinger, A. (2010). The trustworthiness of online channels for experience-and goal-directed search tasks. Journal of Travel Research, 50, 378-391.
- Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. Academy of Management Journal, 54, 393-420.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of Marketing Research, 18, 382-388.
- Gefen, D. (2000). E-commerce: The role of familiarty and trust. International Journal of Management Science, 28, 725-737.
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-Products and e-Services. Omega, 32, 407-424.
- Gensler, S., Volckner, F., Liu-Thompkins, Y. & Wiertz, C. (2013). Managing brands in the social media environment. Journal of Interactive Marketing, 27, 242-256.
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. Journal of Marketing Research, 25, 186-192.
- Hajli, N. (2014). A study of the impact of social media on consumers. International Journal of Market Research, 56, 387-404.
- Hibbert, S., Smith, A., Davies, A., & Ireland, F. (2007). Guilt appeals: Persuasion knowledge and charitable giving. Psychology & Marketing, 24, 723-742.
- Hong, I. B. & Cha, H. S. (2013). The mediating role of consumer trust in an online marching in predicting purchase intention. International Journal of Information Management, 33, 927-939.

- Hsiao, K.L., Chuan-Chuan Lin, J., Wang, X.Y., Lu, H.P. & Yu, H. (2010). Antecedents and consequences of trust in online product recommendations: An empirical study in social shopping. Online Information Review, 34, 935-953.
- Kelly, L., Kerr, G., & Drennan, J. (2010). Avoidance of advertising in social networking sites: The teenage perspective. Journal of Interactive Advertising, 10, 16-27.
- Li, F., & Miniard, P. W. (2006). On the potential for advertising to facilitate trust in the advertised brand. Journal of Advertising, 35, 101-112.
- Lu, Y., Zhao, L., & Wang, B. (2010). From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intentions." Electronic Commerce Research and Applications, 9, 346-360.
- Mathwick, C., Wiertz, C., & De Ruyter, K. (2007). Social capital production in a virtual P3 community. Journal of Consumer Research, 34, 832-849.
- Mayer, R. C., & James H. Davis (1999). The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment. Journal of Applied Psychology, 84, 123-136.
- Mayer, R. C., Davis, J. H., & Schoorman, D. F. (1995). An intergrative model of organisational trust. Academy of Management Review, 20, 709-734.
- McShane, S. L., & Von Glinow, M. A. (2008). Perception and learning in organizations. In S. L. McShane & M. A. Von Glinow (Eds.), Organizational behavior (4th ed., pp. 68-100). New York: McGraw-Hill Irwin
- Moody, G. D., Gallettta, D. F., & Lowry, P. B. (2014). When trust and distrust collide online: The engenderment and role of consumer ambivalence in online consumer behaviour. Electronic Commerce Research and Applications, 13, 266-282.
- Moormann, C., Deshpandé, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. Journal of Marketing, 57, 81-101.
- Muñiz, Jr, A. M., & Schau, H. J. (2007). Vigilante marketing and consumer-created communications. Journal of Advertising, 36, 35-50.
- Nielsen (2015). Global trust in advertising and brand messages, Available: http://www.nielsen.com/us/en/insights/reports/2015/global-trust-in-advertising-2015.html [Accessed: 22/04/2016]
- Obermiller, C., & Spangenberg, E. (1998). Developement of a scale to measure consumer skepticism towards advertising. Journal of Consumer Psychology, 7, 159-186.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of Management, 12, 531-544.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88, 879.
- Pookulangara, S., & Koesler, K. (2011). Cultural influence on consumers' usage of social networks and its' impact on online purchase intentions. Journal of Retailing and Consumer Services, 18, 348-354.
- Ragin, C. C. (2008). Redesigning social inquiry: Fuzzy sets and beyond. Chicago: University of Chicago Press.
- Rihoux, B., & Ragin, C. C. (2009). Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques. Thousand Oaks, CA: Sage.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. Journal of Personality, 35, 651-665.
- See-To, E. W., & Ho, K. K. (2014). Value co-creation and purchase intention in social network sites: The role of electronic Word-of-Mouth and trust–A theoretical analysis. Computers in Human Behavior, 31, 182-189.

- Seraj, M. (2012). We create, we connect, we respect, therefore we are: Intellectual, Social, and Cultural Value of Online Communities. Journal of Interactive Marketing, 26, 209-222.
- Shin, D. H. (2013). User experience in social commerce: In friends we trust. Behaviour & Information Technology, 32, 52-67.
- Skarmeas, D., & Leonidou, C. N. (2013). When consumers doubts, watch out! The role of CSR skepticism. Journal of Busines Research, 66, 1831-1838.
- Soh, H., Reid, L. N., & King, K. W. (2009). Measuring trust in advertising. Journal of Advertising, 38, 83-103.

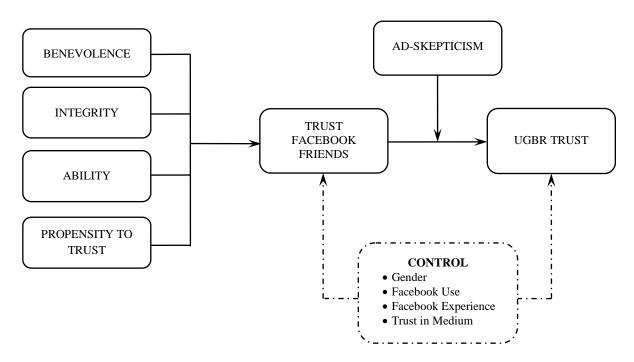


Figure 1. Conceptual Framework.



Figure 2. Stimulus for UGBR.

Table 1. Measurement Model.

Construct	Scale Items	St. Loadings	t-Value	Construct	Scale Items	St. Loadings	t-Value
Benevolence	BENEV1	.78	14.93	Gender	GEND	.76	13.43
	BENEV2	.89	18.21	Facebook use (daily)	FBUSE	.95	21.41
	BENEV3	.82	16.07	Facebook experience	FBEXP	.96	21.80
	BENEV4	.65	11.64				
				Trust in medium	TRUM1	.88	18.34
Integrity	INTEG1	.67	11.55		TRUM2	.91	19.31
	INTEG2	.61	9.87		TRUM3	.91	19.37
	INTEG3	.80	14.42				
	INTEG4	.65	11.18	Reliability	RELIA1	.73	a
				-	RELIA2	.79	13.48
Ability	ABIL1	.76	14.54		RELIA3	.85	14.69
•	ABIL2	.81	15.87		RELIA4	.89	15.54
	ABIL3	.76	14.43		RELIA5	.87	15.03
	ABIL4	.74	14.01		RELIA6	.87	15.06
	ABIL5	.64	11.49		RELIA7	.73	12.51
	ABIL6	.75	14.24		RELIA8	.65	11.08
					RELIA9	.63	10.58
Propensity to trust	PRTRU1	.84	16.60				
	PRTRU2	.66	11.88	Usefulness	USEFL1	.83	a
	PRTRU3	.73	13.42		USEFL2	.90	18.57
	PRTRU4	.76	14.41		USEFL3	.85	17.23
	PRTRU5	.75	13.98		USEFL4	.76	14.56
Trust Facebook Friends	TRFBFR1	.64	10.29	Affect	AFFE1	.93	a
11450140000111101145	TRFBFR2	.62	9.88	T MICON	AFFE2	.93	25.27
	TRFBFR3	.77	12.77		AFFE3	.79	18.24
Ad-skepticism	SKEPT1	.75	14.61	Willingness to rely on	WTRO1	.89	a
The skepticism	SKEPT2	.71	13.60	vininghess to rely on	WTRO2	.88	19.78
	SKEPT3	.77	15.24		WTRO3	.72	14.43
	SKEPT4	.86	17.78		WTRO4	.75	15.17
	SKEPT5	.89	18.81		WIROT	.73	13.17
	SKEPT6	.87	18.12	Second-order Factors (UGBR)			
	SKEPT7	.87	18.09	Reliability	RELIA	.85	12.09
	SKEPT8	.89	18.81	Usefulness	USEF	.91	14.41
	SKEPT9	.79	15.70	Affect	AFFE	.77	13.28
	SIXLI I	.17	13.70	Willingness to rely on	WTRO	.70	11.43
				willinghess to rely on	WINO	.70	11.43

Goodness-of-Fit Statistics: $\chi^2_{(1483)} = 2914.38$, p < .001; NFI = 0.98; NNFI = 0.99; CFI = 0.99; RMSEA = 0.06

^a Fixed parameter

Table 2. Correlation Matrix and Summary Statistics.

Vai	iable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1.	Benevolence	1	-	-	-	•	-	•	•			•	-	-	-
2.	Integrity	04	1												
3.	Ability	.02	.46	1											
4.	Propensity to trust	04	.28	.30	1										
5.	Trust Facebook friends	.42	09	.07	.05	1									
6.	Ad-skepticism	.45	10	10	.01	.40	1								
7.	Reliability	.40	09	04	05	.37	.42	1							
8.	Usefulness	.32	06	03	00	.29	.37	.55	1						
9.	Affect	.33	07	11	04	.39	.45	.52	.56	1					
10.	Willingness to rely on	.39	03	05	.02	.32	.28	.53	.52	.50	1				
11.	Gender	06	.16	.02	.01	.04	10	04	05	03	04	1			
12.	Trust in medium	.40	00	.01	.01	.41	.45	.36	.35	.36	.37	01	1		
13.	Facebook experience	.02	.03	06	.02	.07	.02	.04	.01	.06	.09	.06	.01	1	
14.	Facebook use (daily)	09	.04	02	.09	.06	01	.03	.03	01	.04	.08	00	.19	1
Sur	nmary statistics														
Nu	mber of items	4	4	6	5	3	9	9	4	3	4	2	3	5	5
M		3.67	4.20	4.61	4.60	3.64	3.57	4.69	4.63	4.61	4.31	NA	4.02	NA	NA
SD		1.31	.93	.84	1.08	1.25	1.38	1.11	1.28	1.30	1.45	NA	1.39	NA	NA

Notes: (1) Sample size = 303. (2) Correlations greater than $|\pm|.11|$ are significant at the p < .05 level. (3) NA = not applicable

Table 3. Conditions to Trust Facebook Friends and UGBR.

	Raw	Unique	
Complex Solution	Coverage	Coverage	Consistency
Model 1: TRFBFR			
Model: f_TRFBFR = f(f_bene, f_inte, f_abil, f_prop)			
bene * ~inte * abil	0.389369	0.059773	0.852432
bene * ~inte * prop	0.389166	0.059571	0.846730
Solution coverage: 0.448940; Solution consistency: 0.840116 Frequency cutoff: 4.000000; Consistency cutoff: 0.862800			
Model 2: UGBR			
Model: $f_UGBR = f(f_trfbfr, f_skep, gend, fbuse, fbexp, trumed)$			
trfbfr * skep * trumed * ~fbexp	0.317033	0.026807	0.892201
trfbfr * skep * trumed * ~fbuse	0.436922	0.146696	0.891407
Solution coverage: 0.463730; Solution consistency: 0.874102 Frequency cutoff: 1.000000; Consistency cutoff: 0.909442			

Notes:

⁽¹⁾ The sign (~) indicates low levels, whereas, its absence high levels.

⁽²⁾ bene = benevolence; inte = integrity; abil = ability; prop = propensity to trust; trfbfr = trust facebook friends; gend = gender; fbuse = facebook use; fbexp = facebook exeprience; trumed = trust in medium; and skep = adskepticism.

Appendix. Measurement Scales.

Constructs	Reliability
TRUSTWORTHINESS: Please indicate the extent of your agreement or disagreement with each of the following statements (7-point Likert scale, adapted from Mayer and Davis 1999):	
Benevolence: My Facebook friends are very concerned about my welfare. My needs and desires are very important to my Facebook friends. My Facebook friends really look out for what is important to me. My Facebook friends will go out of their way to help me.	.86
Integrity: My Facebook friends have a strong sense of justice. I never have to wonder whether my Facebook friends will stick to their word. My Facebook friends try hard to be fair in dealing with others. Sound principles seem to guide my Facebook friends' behaviour.	.77
Ability: My Facebook friends are very capable of performing tasks. My Facebook friends seem to be successful in the things they try to do. My Facebook friends have much knowledge about the subjects we discuss in this social network. I feel confident about my Facebook friends' skills. My Facebook friends have specialized capabilities that can add to the conversation in this social network. My Facebook friends are well qualified in the topics we discuss.	.88
Propensity to Trust: Please indicate the extent of your agreement or disagreement with each of the following statement (7-point Likert scale, adapted from Gefen 2000): I generally trust people. I tend to count upon other people. I generally have faith in humanity. I feel that people are generally reliable.	s .86
I generally trust people unless they give me a reason not to. Trust Facebook Friends: Please indicate the extent of your agreement or disagreement with each of the followis statements regarding your propensity to trust others (7-point Likert scale, adapted from McShane and Von Glind 2008):	
Most of my Facebook friends can be counted on to do what they say they will do. I tend to trust my Facebook friends, even those whom I have just met for the first time. I believe that most of my Facebook friends are generally trustworthy	
Skepticism Toward Advertising: Please indicate the extent of your agreement or disagreement with each of the following statements regarding advertising (7-point Likert scale, adapted from Obermiller and Spangenberg 1998):	ng .94
I can depend on getting the truth in most advertising. Advertising's aim is to inform the consumer. I believe advertising is informative. Advertising is generally truthful. Advertising is a reliable source of information about the quality and performance of products. Advertising is truth well told. In general, advertising presents a true picture of the product being advertised. I feel I've been accurately informed after viewing most advertisements. Most advertising provides consumers with essential information.	

UGBR: Please indicate the extent of your agreement or disagreement with each of the following statements. Brand recommendations posted by my Facebook friend are (7-point Likert scale, adapted from Soh, Reid, and King 2009):

Reliability: .93

Honest

Truthful

Credible

Reliable

Dependable

Accurate Factual

Complete

Clear

Usefulness: Valuable Good Useful Help people make the best decisions	.89
Affect: Likeable Enjoyable Positive	.91
Willingness to Rely On: I am willing to rely on brand recommendations by my Facebook friends when making purchase-related decisions. I am willing to make important purchase-related decisions based on brand recommendations by my Facebook friends. I am willing to consider brand recommendations by my Facebook friends when making purchase-related decisions. I am willing to recommend the brand recommended by my Facebook friends to my friends or family.	.89
Trust in Medium: Please indicate the extent of your agreement or disagreement with each of the following statements regarding Facebook (7-point Likert scale, adapted from Gefen 2000):	.93
I think that Facebook's website is credible. I trust Facebook's website. I believe that Facebook's website is trustworthy.	