

Impact of Social Media's Perceived Online Community Value on User's Responses

Zoha Rahman*, Dr. Kumaran Suberamanian**, Dr. Hasmah Zanuddin***

Dr. Sedigheh Moghavvemi *****, Dr. Mohd Hairul Nizam Bin Md Nasir*****

Abstract—Increasingly, consumers use social media as a vehicle for pre-purchase information gathering and post purchase experience sharing. Although existing social media research provides some valuable insights, it is relatively lacking in theory based research on the basic mechanisms through which desired brand goals are achieved. Value creation in online communities is a very crucial question that still needs further research. This study is an attempt to observe popular fan-pages' followers' activities of selected fan-pages of Malaysia and survey (n= 318) on followers of those fan-pages to show the impact of user's perceived online community value on their behavioral responses. The purpose of this paper is to investigate the impact of users' perceived community value on fan page engagement activities alongside the impact of fan-page engagement actions on fan-page loyalty. Besides, the impact of Fan-page loyalty on brand WOM (Word of Mouth) and purchase intention is also explored. Besides, the moderating impact of user's trust between the relationship of fan-page engagement and fan-page loyalty is also explored. The concepts of Diffusion of Innovation (DOI) theory is applied to create a unified model that was empirically validated by SEM analysis through AMOS. These findings have theoretical implications for social media and online interaction related literature as well as critical business implications for B2C (Business to Consumer) marketers to differentiate themselves within the inflating number of online platforms.

Keywords—Online community value, Social Media, Social Media Engagement, Fan-page, Fan-page loyalty, WOM, Purchase Intention.

I. INTRODUCTION

Facebook page results into more selling opportunities for B2C companies by driving more traffic to their websites and enhancing selling opportunities (Matista, 2015 ,Zoha Rahman, 2016)). But it is still not clear what is happening inside of the

Manuscript received Februray, 2017. This research is funded and supported by UMRG - (Project no: RP024B-15HNE & RP024D-15HNE)] Program of University of Malaya, Malaysia.

* Research Assistant, Faculty of computer Sciences and Information Technology, University of Malaya (UM), Kuala Lumpur, Malaysia
E-mail: joha_du@yahoo.com

** Associate Professor, Faculty of Arts and Social sciences, University of Malaya (UM), Kuala Lumpur, Malaysia

*** Associate Professor, Faculty of Arts and Social sciences, University of Malaya (UM), Kuala Lumpur, Malaysia

**** Senior lecturer, Faculty of Business and Accountancy, University of Malaya (UM), Kuala Lumpur, Malaysia

***** Senior Lecturer, Faculty of computer Sciences and Information Technology, University of Malaya (UM), Kuala Lumpur, Malaysia

“black box” fan page and what the crucial constructs are for managing fan pages (Benedikt Jahn, 2012 (Zoha Rahman K. S., 2016)). Companies have reacted to the emergence of Facebook with enthusiasm, and brand profiles have proliferated accordingly. (He'lia G. P., 2014). However, empirical research on fan pages is still in its infancy (Benedikt Jahn, 2012). Few studies in the past examined the relationship between liking a brand on the Facebook fan page and possible outcomes (Chetna Kudeshia, 2016) and the relationship between brand engagement and brand love in an offline environment (Bech-Larsen, 2010; Sarkar, 2014) and a similar relationship remains majorly unexplored in context of online channels (Chetna Kudeshia, 2016). Another study indicated that on-line participant observation could help provided more in-depth explanations about how the public social media engagement model actually works (Linjuan Rita Men, 2013). Additionally recent study indicated an urge for Future research to clarify the effects of social media interaction and to derive guidelines for strategic management decisions (Schultza, 2016; Zoha, 2016) The present study thus aimed to fulfill this gap by examining whether real online fan-page members' perceived value results into fan-page engagement; fan-page engagement results into fan-page loyalty and fan-page loyalty results into brand WOM activities and purchase intention. Furthermore, in online communities, trust has a major influence on consumer behaviour (Hoffman E., 1999), thus we explored the moderating impact of users' trust level in fan-page between the relationship of users' fan-page engagement actions and fan-page loyalty. The motive is to come up with the a unified S-O-R model of utilizing fan-page and to investigate the factors that create value for online community members in fan-pages and their impacts on expected outcome. These findings have theoretical implications for social media and online interaction related literature as well as critical business implications for B2C marketers to distinguish themselves within the expanding figure of social sites.

II. FRAMEWORK AND HYPOTHESIS DEVELOPMENT:

To show the impact of Perceived community value on fan-page engagement; fan-page engagement on fan-page loyalty; fan page loyalty on Brand WOM and Purchase Intention, we utilized DOI (Diffusion of Innovation) Theory (Rogers, 1962).

IV. DATA ANALYSIS

This study tested the model using structural equation modelling using Amos 19. To analyze data via AMOS, it is necessary to check the Univariate and Multivariate of normality. An examination of these values shows minimal indication of serious multivariate outliers. The factor –item composition was verified by undertaking Exploratory Factor Analysis. Principal Component Analysis (PCA) based factor extraction together with Varimax Rotation reinforced the factor-item composition. All the variables (except two) achieved factor loadings above the criteria of 0.50 (Guadagnoli, 1988). After EFA two items were deleted for further study as they didn't match the criteria. All factors achieved a cumulative variance explanation of 70.21%, much above the suggested explanation (Costello, 2005).

A. Internal Consistency and Composite Reliability:

Internal consistency reliability is a measure of how well the items on the test measure the same construct or idea and is usually measured with Cronbach's alpha (α) [$\alpha \geq 0.7$ Acceptable], a statistic calculated from the pairwise correlations between items (George, 2003). The Alpha value of each construct achieved the floor criteria All constructs were further verified with CR (composite Reliability) statistics and established to be reliable as their specific CR values are larger than the floor estimation of 0.7 (Nunnally, 1979)

B. Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) is a multivariate statistical procedure that is used to test how well the measured variables represent the number of constructs and able to confirm the validated measurements developed by previous research (Solutions, 2013).

C. Analysis of the Structural Model:

The proposed structural model was tested for an overall model fit. In this study, the Chi-square P value turns out to be significant, but all other Model fit indices were acceptable. Chi-square is affected by sample size (it is always significant when $N > 200$) (Moss, 2016). Model fit indices for all the individual constructs were calculated and the results have been indicated in Table 1.

TABLE 1: MODEL FIT INDICES

Indices	Recommended Value (Hair J. F., 2010)	Model fit indices
GFI	> 0.9	0.912
CFI	> 0.9	0.981
Chisq/df	< 5.0	2.387
AGFI	> 0.9	0.963
RAMSEA	< 0.08	0.051

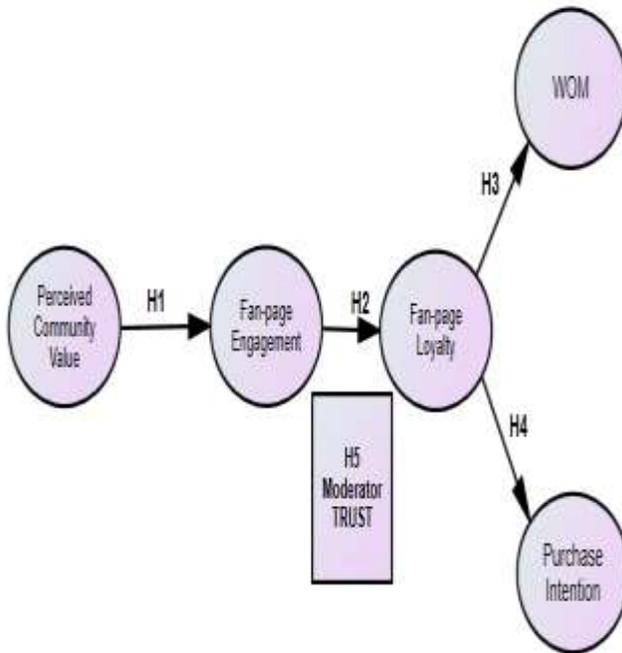


Fig 1: Theoretical Framework

III. METHODOLOGY OF THE RESEARCH:

A survey on fan page followers was conducted to test the main hypothesis in our research framework. We selected fan page followers as our respondents, because they can provide the most valuable information on fan page behavioral pattern and measure engagement metrics (Elliott, 2011). The survey questionnaire along with the research objective and motivations were made accessible through a web-link to the followers of Malaysian fan-pages. In total 356 completed questionnaires were returned by the respondents, out of which 318 responses were found to be valid and complete, and thus used for the study.

A. Measurement Instrument

The research model contains five constructs, perceived community value, fan page engagement, fan-page loyalty and WOM (Fig. 2). For the constructs of the research model, multi-item scales were adopted from the previous studied and modified based on the current research. Perceived community value comprise of five self-administered measured variables adopted from (Chetna, 2016); “fan page engagement” comprises of five items adapted from (Benedikt Jahn, 2012), “fan-page loyalty” comprised of three items adopted from (Hsin, 2014). Consequently, “Purchase Intention” comprises of six items adopted from (Chetna, 2016). Respondents were asked to rate the questions on five point Likert scales from 1= strongly disagree and 5= strongly agree.

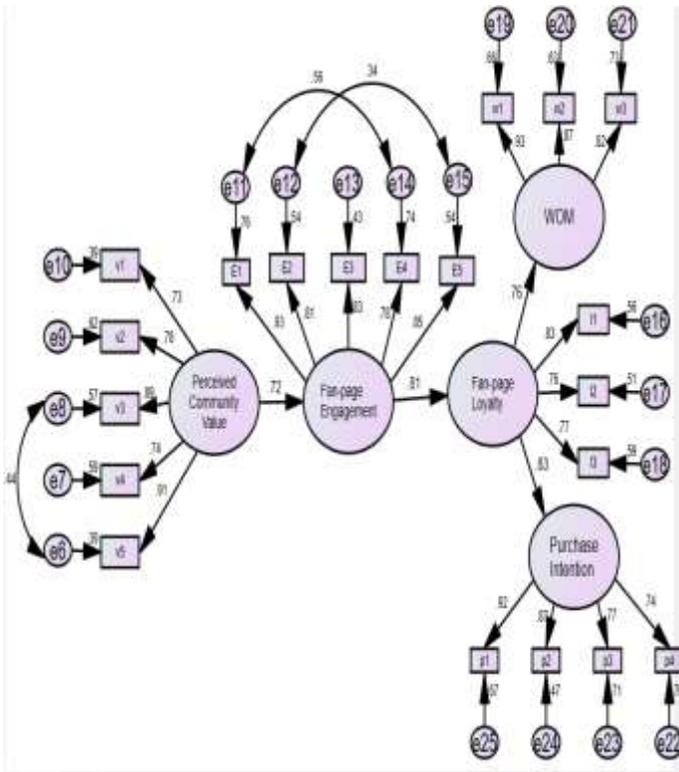


Fig. 2: Structural Model

The structural model is estimated by examining the path coefficients (Beta weights) which indicate the strength of the relationship between dependent and independent variables. From the five paths proposed in the model, four were found to be statistically significant and depicting positive impact on predicted construct (Table 3). Path from perceived community value to engagement is verified as significant ($\beta = 0.72$, $p < 0.05$) supporting H1, the path from Engagement to loyalty was found to be significant with strong positive impact ($\beta = .81$, $p < 0.001$) confirming H2, Path from loyalty to WOM was found to be significant ($\beta = .76$, $p < 0.05$) accepting H4, path from loyalty to purchase intention ($\beta = 0.83$, $p < 0.001$) is recorded as significant approving to admit H4.

D. Moderation analyses

Moderation analysis was conducted to determine the trust based variances in terms of hypothesised relationships as part of the proposed structural model. The significant moderating effects are evidenced by the hypothesised wise Z-score statistic. The outcomes of the analysis can be seen in Table 4. Respondents were asked to provide their positive or negative opinion about trust on their followed brand. About 69% of the respondents provided a positive response on trusting their followed brand. To test the hypothesised moderation model in the SEM, two group models (Trust –Yes and Trust-No) were tested. From the moderation analysis, trust is found as a significant moderator between the relationship of fan-page engagement and fan-page loyalty, confirming the acceptance of hypothesis 5 (H5). Without trust (Trust-No), engagement actions have no significant impact ($\beta = .07$, $p > .05$) on loyalty, while with trust (trust-yes), engagement actions have a significant impact ($\beta = .14$, $p < .05$) on fan-page loyalty.

V. FINDINGS

The findings of the study reveals that the online user's perceived community value is highly significant in generating online engagement activities. That is, purposive values, self-discovery, entertainment value, social enhancement value, and interpersonal connectivity features of perceived community value are influencing in producing fan-page engagement activities. Fan-page engagement activities are also highly significant in creating fan-page loyalty. These findings are consistent with a previous study indicating that social media engagement infuses a sense of empowerment over social media activities (Kang, 2014). That is, if users tend to involve in fan-page in interactive and engaging manner, they tend to be loyal to that fan-page. But the loyalty towards that particular fan-page is highly dependent on the trust on that followed brand. Without trust, though users tend to be engaged in fan-pages, they do not show loyalty towards those fan-pages. The finding is consistent with previous findings (Grabner, 2002; Hoffman E., 1999; LiI, 2007). Besides, fan-page loyalty is positively related to the Word of Mouth (WOM) communication. If consumers tend to be loyal towards the fan-pages, they tend to produce WOM communication in their respective friends' network. However, Fan-page loyalty is also positively related to the user's purchase intention.

VI. CONCLUSION

The research offers information for B2C (Business-to-Consumer) companies in employing fan-page based on user categories. This work endorses that marketers advance their engagement with followers and marketers and use real time and content marketing strategies to achieve this (Chetna K. P., 2016). Firms should not merely use this platform to push their product, they must hear from users and 'on the moment marketing' to provide marketers with plenty of opportunities to engage their audience (Jahn, 2014; Linjuan, 2013; Zoha R. K., 2016). We empirically tested the fan-page users' perceived community value of actual active online participants and reported their social media engagement actions, loyalty and the purchase intention of their respective followed brands. The study established a theoretical framework on fan page users' perceived community value and its relationship with the engaged users' loyalty, WOM and purchase intention.

Authors of rejected papers may revise and resubmit them to the journal again.

ACKNOWLEDGMENT

This research is funded and supported by postgraduate research [Postgraduate Research Grant (PPP) - (Project no: RP024B-15HNE & RP024D-15HNE)] Program of University of Malaya, Malaysia. We would like to give our special thanks and gratitude to the University of Malaya Research Grant Program for injecting financial support to have necessary research equipment, research-workers, research assistants associated with this research.

REFERENCES

- [1] Anderson, R. a. (2003). E-satisfaction and e-loyalty: a contingency framework. *Psychology & Marketing*, Vol. 20 No. 2, pp. 123-138. DOI: 10.1002/mar.10063.
- [2] Arndt, J. (1997). Role of product-related conversations in the diffusion of a new Product. *Journal of Marketing Research*, 4(3), 291-295, DOI: 10.2307/3149462.
- [3] Bech-Larsen, T. L. (2010). Two studies of consequences and actionable antecedents of brand love. *Journal of Brand Management*, 17(7), 504-518.
- [4] Benedikt Jahn, W. K. (2012). How to transform consumers into fans of your brand. *Journal of Service Management*, Vol. 23 Iss 3 pp. 344 - 361.
- [5] Bennett, W. L. (2011). Communicating civic engagement: Contrasting models of citizenship in the youth web sphere. *Journal of Communication*, 61, 835–856.
- [6] Bergkvist, L. &-L. (2010). Two studies of consequences and actionable antecedents of brand love. *Journal of Brand Management*, 17(7), 504-518. DOI: 10.1057/bm.2010.6.
- [7] Bo Edvardsson, B. T. (2011). Expanding Understanding of Service Exchange and Value Co-creation: A Social Construction Approach. *Journal of the Academy of Marketing Science*, 39 (2) pp. 327–339, DOI: 10.1007/s11747-010-0200-y.
- [8] Chetna Kudesia, P. S. (2016). Spreading love through fan page liking: A perspective on small scale entrepreneurs. *Computers in Human Behavior*, 54 .257-270.
- [9] Cheung, C. M. (2009). Understanding the Sustainability of a Virtual Community: Model Development and Empirical Test., *Journal of Information Science*, , 35, 3, 279–98.
- [10] Costello, A. B. (2005). Best practices in exploratory factor analysis four recommendations for getting the most from your analysis. Retrieved 2016, from Practical Assessment Research and Evaluation.: <http://pareonline.net/pdf/v10n7a.pdf>.
- [11] George, D. &. (2003). SPSS for Windows step by step: A simple guide and reference. Boston: Allyn & Bacon.: 11.0 update (4th Ed.).
- [12] Grabner, K. S. (2002). The Role of Consumers' Trust in Online-Shopping. *Journal of Business Ethics*, 39: 43.
- [13] Guadagnoli, E. &. (1988). Relation to sample size to the stability of component patterns. *Psychological Bulletin*, 103(2), 265e275.
- [14] Hair, J. F. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- [15] Hair, J. F. (2010). *Multivariate data analysis (7th ed)*. Upper Saddle River (NJ): Prentice Hall Inc.
- [16] Hargittai, E. &-L. (2010). Predictors and consequences of differentiated practices on social network sites. *Information, Communication, & Society*, 13(4), 515–536.
- [17] He'ia Goncalves Pereira, M. d. (2014). Say yes to Facebook and get your customers involved! Relationships in a world of social networks. *Business Horizons*, 57, 695—702.
- [18] Hoffman E., N. T. (1999). Building consumer trust online. *Communication of the ACM*, 42 (4), 80-86.
- [19] Hsin, C. A.-K.-W. (2014). Exploring the commercial value of social networks". *Journal of Enterprise Information Management*, Vol. 27 Iss 5 pp. 576-598 Doi: <http://dx.doi.org/10.1108/JEIM-05-2013-0019>.
- [20] Hsu, S. C. (1987). *English of Management*. Tunghua Publishing Co., LTD. Retrieved from <http://www.amsreview.org/articles/mcquitty102000.pdf>.
- [21] Irena Pletikosa, F. M. (2013). *Online engagement factors on Facebook brand pages*. Springer-Verlag Wien, 3,844-861.
- [22] Jahn, B. &. (2014, November). A brand like a friend: The influence of customer engagement with social media brand pages on brand relationships and loyalty intentions Accessed. Retrieved April 5, 2016, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=42413909
- [23] Kang, J. T. (2014). Enhancing consumer-brand relationship on restaurant Facebook fan pages: maximizing consumer benefits and increasing active participation. *International Journal of Hospitality Management*, 36,145-145. 10. . . .
- [24] Kang, M. (2014). Understanding public engagement: Conceptualizing and measuring its influence on supportive behavioral intentions. *Journal of Public Relations Research*, 26, 399–416.
- [25] LiI, R. K. (2007). The effects of internet shoppers' trust on their purchasing intention in China. *JISTEM - Journal of Information Systems and Technology Management*, vol.4 no.3.
- [26] Linjuan Rita Men, W.-H. S. (2013). Beyond liking or following: Understanding public engagement on social networking sites in China. *Public Relations Review*, 39, 13– 22.
- [27] Maik Eisenbeiss, B. B. (2012). The (Real) World Is Not Enough: Motivational Drivers and User Behavior in Virtual Worlds. *Journal of Interactive Marketing*, 26 (1), pp. 4–20, DOI: 10.1016/j.intmar.2011.06.002.
- [28] Matista, S. (2015, March). Facebook at work: Should small business owners care? Retrieved April 2016, from <http://www.pagemodo.com/blog/facebook-at-work-should-smallbusiness->.
- [29] Moss, S. (2016, 6 27). Fit indices for structural equation modeling. Retrieved 7 1, 2016, from <http://www.sicotests.com/psyarticle.asp?id=277>
- [30] Nunnally, J. C. (1979). *Psychometric theory*. New York: McGraw Hill.
- [31] O'Leary, K. S. (1998). Empirical assessment of construct validity. *Journal of Operations Management*, 16(4), 387-405.
- [32] Oliver, R. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. Boston, MA. McGraw-Hill,
- [33] R.Mariani, D. (2014). "Like" a global endorsement: how clicking "like" influences Facebook users brand recall and future purchasing intentions. *J.Manag.Policy Pract.*, 15(4), 51.
- [34] Reicheld, F. (1996). *The Loyalty Effect: The Hidden Force behind Growth, Profits, and Lasting Value*. Boston, MA. Harvard Business School Press.
- [35] Ridings, C. M. (2002). "Some antecedents and effects of trust in virtual communities." *Journal of Strategic Information Systems*. 11, 271-295.
- [36] Rogers, E. M. (1962). *Diffusion of innovations (1st Ed.)*. (Vols. <https://www.worldcat.org/title/diffusion-of-innovations/oclc/254636>). New York:: Free Press of Glencoe. OCLC 254636.
- [37] Sarkar, A. &. (2014). Examination of the roles played by brand love and jealousy in shaping customer engagement. *Journal of Product & Brand Management*, 23(1), 24-32.
- [38] Schultza, C. D. (2016). Insights from consumer interactions on a social networking site: Findings from six apparel retail brands. *Electron Markets*, DOI 10.1007/s12525-015-0209-7.
- [39] Seraj, M. (2012). We Create, We Connect, We Respect, And Therefore We Are: Intellectual, Social, and Cultural Value in Online Communications. *Journal of Interactive Marketing*, 26 (4) , pp. 209–222, DOI: 10.1016/j.intmar.2012.03.002.
- [40] Solutions, S. (2013). *Confirmatory Factor Analysis*. Retrieved May 28, 2016, from Retrieved from <http://www.statisticssolutions.com/academic-solutions/resources/directory-of-statistical-analyses/confirmatory-factor-analysis/>
- [41] Úblová, T. (2014). Degree of Master in Textile Management with specialization in Fashion Management. Sweden: The swedish School of Textile.
- [42] Zoha, R. K. (2016). SNS METRICS ANALYSIS "A STUDY ON FANPAGE INTERACTIVE CONTENTS". *I J A B E R*, Vol. 14, No. 2, 1405-1415 Doi: <http://www.serialsjournals.com/serialjournalmanager/pdf/1462531482.pdf>
- [43] Zoha, R. K. (2016). Social Media Engagement metrics analysis: "study on Fan-page Contents". *Journal of Telecommunication, Electronic and Computer Engineering*, Vol. 8 No. 8, 71-75 Doi: <http://journal.utem.edu.my/index.php/jtec/article/view/1322/802>.
- [44] Zoha Rahman, K. S. (2016). Effectiveness of Building Brand Image through Facebook Fan-pages. *Journal of Advances in Information Technology*, Vol: 7 , No 3 DOI: 10.12720/jait.7.3.171-176
- [45] Zoha Rahman, K. S. (2016). DETERMINING THE RELATIONSHIP BETWEEN FANPAGE CONTENTS AND PTA METRICS. *International Journal of Management and Applied Science*, Vol: 2, Issue: 6. Doi: http://www.iraj.in/journal/journal_file/journal_pdf/14-267-146856248826-31.pdf