# Association for Information Systems AIS Electronic Library (AISeL)

**AMCIS 2012 Proceedings** 

Proceedings

## Build Customer Loyalty Using Microblog – A Relationship Perspective

Shu-ming Wang

Graduate Institute of Information Management, Chinese Culture University, Taipei,, scottie.wang@gmail.com

Hueiju Yu

School of Continuing Education, Chinese Culture University, Taipei,, hjyu@sce.pccu.edu.tw

Follow this and additional works at: http://aisel.aisnet.org/amcis2012

## Recommended Citation

Wang, Shu-ming and Yu, Hueiju, "Build Customer Loyalty Using Microblog – A Relationship Perspective" (2012). AMCIS 2012 Proceedings. 7.

http://aisel.aisnet.org/amcis2012/proceedings/EBusiness/7

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

# Build Customer Loyalty Using Microblog – A Relationship Perspective

Shu-ming Wang
Graduate Institute of Information Management,
Chinese Culture University
scottie.wang@gmail.com

Hueiju Yu School of Continuing Education Chinese Culture University hjyu@sce.pccu.edu.tw

#### **ABSTRACT**

In recent years, micro-blog, a kind of social network service (SNS), has been adopted as a popular way for people to interact with their significant others. Nowadays, people can exchange short messages via various digital devices through micro-blog. Witnessing this trend, practitioners strive hard to seek opportunities in utilizing micro-blog for better customer reach. Numerous studies have also investigated this phenomenon. While previous studies primarily placed their focus on people's motivation to use SNS, usage pattern and potential applications in various fields, to our best knowledge, Research on micro-blog is still in its infancy and the core concept of SNS, i.e. social relationship, is rarely addressed. This study thus proposed a framework to investigate the effects that micro-blog is to exert on consumer's relationship with firms. Results suggested that system quality, interaction quality, and relationship benefits are influential to relationship quality, which contributes to loyalty. Implications of research findings are also discussed in this study.

#### **Keywords**

Micro-blog, social network service (SNS), relationship marketing, system quality.

#### **INTRODUCTION**

Among the various Web 2.0 applications, social networking services (SNS) has been taken as one of the most popular applications for the surging number of it users in recent years. According to Boyd and Ellison (2008), SNS is a web-based service that allows people to organize either public or semi-public personal information to exchange or communicate with other users in the same site. In other words, SNS create a social space. Using functions provided by SNS, users can create personal page, which contains information such as gender, age, hobbies etc. Using SNS, people can easily interact with each other, exchange information or share their thoughts on daily life. With the advances of information technology and maturity of networking environment, recently, SNS have lured millions of people joining the social networks. As a prominent example, the number of registered users of Facebook has exceeded 8 hundreds of millions according to statistics retrieved from checkfacebook.com\*.

Witnessing the explosive growth of SNS, both academics and practitioners have started paying attention in looking into this phenomenon. Numerous studies have explored people's attitude and intention toward using SNS (e.g. Kwon et al. 2010; Totterdell et al. 2008), users' behavior in using SNS (e.g. Rau et al. 2008; Wright et al. 2011) and potential applications of SNS (Casteleyn et al. 2009; Farmer et al. 2009; Roblyer et al. 2010). SNS not only allows people to socialize with each other, it provides a new way for corporations to directly communicate with their customers as well. At present, consumers can communicate, through the mediation of various digital devices such as smartphone, with their peers or selling firms for their thoughts, preferences and experience of products or services (Trusov et al. 2009).

SNS is used for building and maintaining relationship. In marketing literature, relationship between consumers and corporations has been a significant factor that affects customer loyalty. Crosby(1990) pointed out that the quality of relationship between salespeople and consumer is positively associate with their future purchase intention. Palmatier et al. (2006) conducted a meta-analysis and suggested that relationship quality significantly and positively contributes to consumers' word-of-mouth (WOM) and loyalty.

Micro-blog, a particular kind of SNS such as twitter and Plurk, is of great interest in recent years. As the term "micro-blog" suggested, it can be taken as a concise version of blog. Unlike social networking sites, micro-blog provides no sophisticated features such as photo album, calendar, mini games etc. Within less than 140 words, people document and share thoughts

<sup>\*:</sup> Retrieved on 26, February 2012.

even it was of a very little thing in their daily life in a quick and prompt fashion. Also, people can easily embed web links in their messages to share information such as web pages, pictures or online video with others. Besides, in comparison with blog, the concise text allows user easier to update status or access messages using mobile device. The characteristics mentioned above make people to engage with micro-blog in a more casual and frequent manner. Combining the ubiquitous networking access and micro-blog platform, the frequency of interaction between consumers and corporations could be significantly increased, which in turn, makes micro-blog be an exceptional tool for corporations to communicate, build and maintain relationship with their customers. For example, the computer manufacturer – Dell has been using twitter to offer exclusive discount (twitter account – Dell and Dell outlet) and generated millions of revenue\*. In the Dell case, micro-blog, i.e. twitter, provides not only an opportunity for corporation to build social relationship with their customer, but also creates a channel for distributing product information directly to their audience. Currently, more and more corporations (or brand) have allocated resources in maintaining their own micro-blog as a mean to reach their customers.

While there are many studies aiming at SNS as research subject, relatively little attention has been paid to the widely and frequently used SNS applications, i.e. micro-blog. Moreover, current micro-blog research primarily focus on the formation and distribution of e-WOM or analyze the content of users' messages (e.g. Jansen et al. 2009). Relatively, the relationship quality on micro-blog and benefits it may contribute are still less researched.

Concluding from above, in order to better understand the application of micro-blog in relationship marketing and address the literature gap, this study proposes research questions as follows:

- 1. What are factors that affect the relationship quality between consumer and corporation (or brand) in the context of microblog?
- 2. What is the association between users' perceived relationship quality with and their loyalty toward the corporation (or brand) in the context of micro-blog?

#### RESEARCH FRAMEWOK

Micro-blog is a web service, which can also be taken as an information system. To examine users' experience with and usage intention toward an information system, DeLone et al. (2004) proposed system quality as an influential factor to user's satisfaction. Moreover, system quality would affect user's perception of benefits derived from using the system (DeLone et al. 2003; DeLone et al. 2004). The primary function of micro-blog is facilitating social interaction. During the interaction process, people may feel a sense of joy when exchanging interesting information and thoughts on daily life. A stable and responsive system, i.e. high system quality, would facilitate people to socialize without interruption that may induced by system failure. Furthermore, A micro-blog of high system quality could allow people to easily interact with each other which may further increase users' evaluation of interaction quality of the micro-blog. Thus, this research proposed following hypotheses.

- H1: System quality is positively associated with perceived enjoyment.
- H2: System quality is positively associated with interaction quality.

Relationship marketing has been a critical approach in marketing strategies (Crosby et al. 1987). Maintaining better relationship quality helps creating positive word-of-mouth and loyalty (Palmatier et al. 2006). In the online world, consumer can easily switch among different service providers. Recently, in the context of e-commerce, researchers proposed relational view, which emphasize the relationship quality between corporations and consumers, to expand the transaction view to explain consumers' behavior (Zhang et al. 2011). Li et al. (2006) investigated factors that affect users' stickiness to website and found that commitment and trust are significant factors in affecting users' usage intention. Nonetheless, commitment and trust are important components of relationship quality (De Cannière et al. 2010; Palmatier et al. 2006). The relationship quality have numerous antecedents (Palmatier et al. 2006). The enjoyment that derived from the social interaction may make consumer feel pleasure when interacting with firms and thus be more committed to the corporation. This situation might result in better relationship quality perception. Moreover, in online relationship marketing, the interactivity of medium that corporation offers to their customers could affect customers' attitude and behavior. Yoon et al. (2008) pointed out the level of interactivity consumer perceived would positively associated with their perceived relationship quality.

Regarding the benefits of relationship, in the process of relationship building, conveying the benefits that derived from the relationship could increase consumers' evaluation of the relationship quality (Palmatier et al. 2006). The utilitarian

\_

<sup>\* :</sup> Dell Reports \$3 Million in Twitter Revenue (<a href="http://dealbook.nytimes.com/2009/06/15/dell-says-it-has-earned-3-million">http://dealbook.nytimes.com/2009/06/15/dell-says-it-has-earned-3-million</a> from-twitter/) , Retrieved on 20, February, 2012.

relationship benefits include saving time, building partnership and helping making decision etc. (Hennig-Thurau et al. 2002). For example, people may use micro-blog to retrieve information from the selling firms such as Dell's discount message mentioned earlier. Concluding from above, following hypotheses and a research framework are thus proposed as shown in Figure 1:

- H3: Perceived enjoyment is positively associated with relationship quality.
- H4: Interaction quality is positively associated with relationship quality.
- H5: Relational benefits is positively associated with relationship quality.
- H6: Relationship quality is positively associated with loyalty.

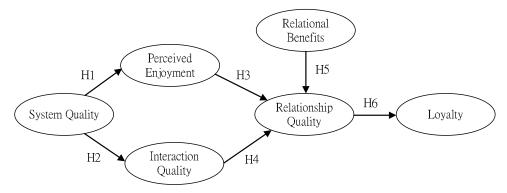


Figure 1: Research Framework

#### **RESEARCH METHOD**

#### Instrument

Survey measures for research variables of this study were primarily adapted from previously validated instruments. Minor modifications were made in order to fit the research context of this study. All research variables were measured using seven point likert scale. Operational definition and adapted sources of research variables are as shown in Table 1. Aside from the research variables, demographics and open question to collection qualitative user opinions are also included in the questionnaire.

Variables	Operational definition	References
Perceived Enjoyment	The extent of user's perception of the enjoyment in the process of social interaction using micro-blog.	Hsu et al. (2008)
System quality	The user's evaluation on the general performance and specific functionality of the micro-blog platform.	DeLone et al. ( 2004)
Interaction quality	The user's evaluation on the interaction performance of two-way communication, speed of response, synchronicity using micro-blog	Yadav et al. (2005)
Relationship Benefit	The extent of user's perception of the utilitarian benefits that derive from the relationship between user and corporation (or brand) built on the micro-blog.	Palmatier et al. (2006)
Relationship Quality	The extent of user's overall evaluation on the strength of relationship that user and corporation (or brand) built via micro-blog.	De Wulf et al. (2001); Palmatier et al. (2006)
Loyalty	The degree to which micro-blog users have positive attitude and purchase intention toward a specific corporation (or brand).	Anderson et al. (2003)

Table 1: Operational definition and adapted sources of research variable

In order to clarify the ambiguity that may exists in our questionnaire, experts who major and have research experience in e-commerce / Internet marketing were invited to review the early version of the questionnaire used in this study. Subsequently, a pilot sample collection is conducted to initially examine the reliability and validity of the questionnaire, also, to gain a preliminary understanding of how general users respond to the questionnaire before large-scale sample collection.

### Participants and data collection

Unlike the western world where twitter has been a widely adopted micro-blog platform, in Taiwan, Plurk has been the most popular micro-blog platform since its introduction on 2008. This situation may due to the better support of Plurk for Traditional Chinese character. Since participants in our study are primarily consumers in Taiwan, this study thus adopted Plurk as research subject.

A web survey is used to collection empirical data. Since this study seeks to investigate the interaction between users and corporations (or brand) on the micro-blog platform. Therefore, this study focus on micro-blog users who have experience in subscribing the micro-blog of corporation / brand. Message that convey the purpose of this study and link to the online questionnaire was posted on website or discussion forum with heavy traffic. Moreover, to improve the response rate, this study provided opportunities to win a lottery of cash vouchers for participant who completed the questionnaire. Snowball sampling was used to increase the sample size.

The collected data was analyzed using SmartPLS 2.0 (Ringle et. al., 2005) to examine the reliability and validity of measurements used in and test the hypotheses proposed by this study.

A preliminary data collection results in 78 responses before this manuscript was written. 58% (n=45) of the participants are female. Participants of this study generally hold college degree or above (94.87%) and of age higher than 23 (74.36%). Most of them have more than 5 years of Internet experience (85.90%, n=67). Regarding Plurk usage, nearly half of participants use Plurk everyday (47.44%). The time that research participants spend in Plurking per day is mostly less than 2 hours (50.00%). Nonetheless, around 24% of participants hook on Plurk all the time when they were online.

#### **DATA ANALYSIS**

SmartPLS 2.0 M3 (Ringle et. al., 2005) was employed to perform research model analysis using partial least squares (PLS) approach. For measurement model, composite reliability of research variables for this study are of range between 0.911 to 0.967, suggesting high reliability (Nunnally 1978). Average variance extracted (AVE) for each variables are of range between 0.675 (system quality) to 0.906 (loyalty) which suggesting satisfying convergent validity (Fornell et al. 1982). For discriminant validity, despite results showed adequate discriminant validity, i.e. each AVE of variables is larger than its squared correlation with other variables (Sanchez-Franco et al. 2005), relationship quality exhibits higher correlation with relationship benefits and loyalty.

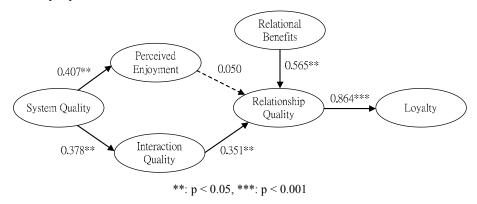


Figure 2: Results of structural model analysis

For structural model, path coefficient was assessed using bootstrapping technique. Results of analysis are as shown in figure 2. All hypotheses were supported except H3. In specific, system quality is significantly associated with perceived enjoyment ( $\beta$ =0.407, p < 0.01) and interaction quality ( $\beta$ =0.378, p < 0.01). Interaction quality (( $\beta$ =0.351, p < 0.01) and functional relationship benefits ( $\beta$ =0.565, p < 0.01) are two important factors that associated with relationship quality. Finally, relationship quality is a strong predictor for customer loyalty ( $\beta$ =0.864, p < 0.001). Nonetheless, due to the preliminary stage of this study is in and small sample size, these results should be taken as tentative. This study will further the data collection to increase the sample size and gain more stable results.

#### **DISCUSSION AND CONCLUSION**

With the nature of relationship building and maintaining of social media, this study adapted relationship view to investigate factors that contribute to customer loyalty toward corporation (or brand) in the context of micro-blog. Analysis of preliminarily collected data yields several research findings as follows:

First, system quality is positively associated with both perceived enjoyment and interactivity. Since micro-blog is used to facilitate social interaction, a stable, quick response and prompt updating system which suggest high system quality could allow user to freely communicate and interact with each other without unpleasant feel. Moreover, high system quality may be able to help users to get instant and up-to-date information for others, which in turn, forms higher perception of interaction quality.

Second, regarding influential factors of relationship quality, results suggest that interaction quality is positively associated with relationship quality. While high interaction quality suggests consumers' highly frequent and satisfying interaction with selling firms, consumers' satisfying perception might further turn to perception of higher relationship quality. Additionally, the utilitarian benefits that user derived from selling firms might make consumers feel they have good relationship quality with the firms; For example, consumers may acquire timely notification for limited discounts through subscribing selling firms' micro-blog. The benefit derived in the context may make them value the relationship quality in a more positive way. However, perceived enjoyment remained to be not significantly associated with relationship quality. One plausible explanation could be that consumers may value more in the utilitarian side of the relationship with selling firms but not social side. Since most micro-bloggers use the services to interact with their real world friends and gain information from selling firms. Thus, the pleasure comes from pure social interaction with individual friends might not affect their perception of the relationship quality with the selling firms.

Lastly, consistent with literature (e.g. De Cannière et al. 2010; Hennig-Thurau 2000; Palmatier et al. 2006), relationship quality remained to be a strong factor that influences customer loyalty toward the corporation.

Implications gained from research findings are two-fold. First, for providers of micro-blogging services, maintaining high system quality could help users to form both positive emotional perception, i.e. enjoyment, and functional perception, i.e. interaction quality. According to information system literature, users positive perceptions, whether emotional or functional, toward an IS are influential to their continuing usage intention (DeLone et al. 2004; Venkatesh et al. 2003). Secondly, relationship quality contributes to customer loyalty. By increasing promptness of and allowing two-way interaction could help corporations to build better relationship with their customers, in turn, contributes to better loyalty. In the age of web 2.0, micro-blog seems to provide a convenient avenue for selling firms to interact and deliver utilitarian value directly to their customers through the connection built in virtual world.

#### Research limitation

Apparently, the small sample size exposed limitation for interpreting results of this study. However, considering the very beginning stage of this study is in, this study address this issue by using bootstrapping sampling technique of SmartPLS 2.0 and provided preliminary yet tentative results of the investigation. The second limitation would be the micro-blogging services in focus of this study, i.e. Plurk. Plurk is the most popular micro-blogging service in Taiwan. However, unlike twitter or other services, Plurk is unique in its interface and every other similar service has their unique features or operating philosophy. The generalizability of results from this study should be taken with cautious. As a start point, future study is encouraged to employ the perspectives proposed by this study to examining other micro-blogging services.

#### **REFERENCES**

- 1. Anderson, R. E., and Srinivasan, S. S. (2003) E-satisfaction and e-loyalty: A Contingency Framework, *Psychology & Marketing*, 20, 2, 123-138.
- 2. Boyd, D. M., and Nicole B. Ellison (2008) Social Network Sites: Definition, History, and Scholarship, *Journal of Computer-Mediated Communication*, 13, 1, 210-230.
- 3. Casteleyn, J., Mottart, A., and Rutten, K. (2009) How to Use Facebook in Your Market Research, *International Journal of Market Research*, 51, 4, 439-447.
- 4. Crosby, L. A., and Stephens, N. (1987) Effects of Relationship Marketing on Satisfaction, Retention, and Prices in the Life Insurance Industry, *Journal of Marketing Research*, 24, 4, 404-411.
- 5. Crosby, L. A., Evans, K. A., and Cowles, D. (1990) Relationship quality in services selling: An interpersonal influence perspective, *Journal of Marketing*, 54, 3, 68-81.

- 6. De Cannière, M., De Pelsmacker, P., and Geuens, M. (2010) Relationship Quality and Purchase Intention and Behavior: The Moderating Impact of Relationship Strength, *Journal of Business and Psychology*, 25, 1, 87-98.
- 7. De Wulf, K., Odekerken-Schröder, G., and Iacobucci, D. (2001) Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration, *Journal of Marketing*, 65, 4, 33-50.
- 8. DeLone, W. H., and McLean, E. R. (2003) The DeLone and McLean Model of Information Systems Success: A Ten-Year Update, *Journal of Management Information Systems*, 19, 4, 9-30.
- 9. DeLone, W. H., and McLean, E. R. (2004) Measuring e-Commerce Success: Applying the DeLone & McLean Information Systems Success Model, *International Journal of Electronic Commerce*, 9, 1, 31-47.
- 10. Farmer, A. D., Bruckner Holt, C. E. M., Cook, M. J., and Hearing, S. D. (2009) Social Networking Sites: A Novel Portal For Communication, *Postgraduate Medical Journal*, 85, 1007, 455-459.
- 11. Fornell, C., and Bookstein, F. L. (1982) Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-Voice Theory, *Journal of Marketing Research*, 19, 4, 440-452.
- 12. Hennig-Thurau, T. (2000) Relationship Quality and Customer Retention through Strategic Communication of Customer Skills, *Journal of Marketing Management*, 16, 1-3, 55-79.
- 13. Hennig-Thurau, T., Gwinner, K. P., and Gremler, D. D. (2002) Understanding Relationship Marketing Outcomes: An Integration of Relational Benefits and Relationship Quality, *Journal of Service Research*, 4, 3, 230-247.
- 14. Hsu, C.-L., and Lin, J. C.-C. (2008) Acceptance of blog usage: The Roles of Technology Acceptance, Social Influence and Knowledge Sharing Motivation, *Information & Management*, 45, 1, 65-74.
- 15. Jansen, B. J., Zhang, M., Sobel, K., and Chowdury, A. (2009) Twitter Power: Tweets as Electronic Word of Mouth, *Journal of the American Society for Information Science and Technology*, 60, 11, 2169-2188.
- 16. Kwon, O., and Wen, Y. (2010) An Empirical Study of The Factors Affecting Social Network Service Use, *Computers in Human Behavior*, 26, 2, 254-263.
- 17. Li, D., Browne, G. J., and Wetherbe, J. C. (2006) Why Do Internet Users Stick with a Specific Web Site? A Relationship Perspective, *International Journal of Electronic Commerce*, 10, 4, 105-141.
- 18. Nunnally, J. C. (1978) Psychometric Theory (2nd ed.), McGraw-Hill, New York, 1978.
- 19. Palmatier, R. W., Dant, R. P., Grewal, D., and Evans, K. R. (2006) Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis, *Journal of Marketing*, 70, 4, 136-153.
- 20. Rau, P.-L. P., Gao, Q., and Ding, Y. (2008) Relationship Between The Level of Intimacy and Lurking in Online Social Network Services, *Computers in Human Behavior*, 24, 6, 2757-2770.
- 21. Ringle, C.M./Wende, S./Will, S. (2005) SmartPLS 2.0 (M3) Beta, Hamburg, http://www.smartpls.de.
- 22. Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., and Witty, J. V. (2010) Findings on Facebook in Higher Education: A Comparison of College Faculty and Student Uses and Perceptions of Social Networking Sites, *Internet and Higher Education*, 13, 3, 134-140.
- 23. Sanchez-Franco, M. J., and Roldan, J. L. (2005) Web Acceptance and Usage Model: A Comparison Between Goal-Directed and Experiential Web Users, *Internet Research*, 15, 1, 21-48.
- 24. Totterdell, P., Holman, D., and Hukin, A. (2008) Social Networkers: Measuring and Examining Individual Differences in Propensity to Connect With Others, *Social Networks*, 30, 4, 283-296.
- 25. Trusov, M., Bucklin, R. E., and Pauwels, K. (2009) Effects of Word-of-Mouth Versus Traditional Marketing: Findings from an Internet Social Networking Site, *Journal of Marketing*, 73, 5, 90-102.
- 26. Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. (2003) User Acceptance of Information Technology: Toward a Unified View, *MIS Quarterly*, 27, 3, 425-478.
- 27. Wright, M. F., and Li, Y. (2011) The Associations Between Young Adults' Face-To-Face Prosocial Behaviors and Their Online Prosocial Behaviors, *Computers in Human Behavior*, 27, 5, 1959-1962.
- 28. Yadav, M., and Varadarajan, R. (2005) Interactivity in the electronic marketplace: An Exposition of The Concept and Implications For Research, *Journal of The Academy of Marketing Science*, 33, 4, 585-603.
- 29. Yoon, D., Choi, S. M., and Sohn, D. (2008) Building Customer Relationships in an Electronic age: The Role of Interactivity of E-commerce Web Sites, *Psychology and Marketing*, 25, 7, 602-618.

30. Zhang, Y., Fang, Y., Wei, K.-K., Ramsey, E., McCole, P., and Chen, H. (2011) Repurchase Intention in B2C E-Commerce—A Relationship Quality Perspective, *Information & Management*, 48, 6, 192-200.