

Social Network Management Enhances Customer Relationship

Srisawas, Siriporn and Rotchanakitumnuai, Siriluck

Abstract—The study aims to develop a framework of social network management to enhance customer relationship. Social network management of this research is derived from social network site management, individual and organization social network usage motivation. The survey was conducted with organization employees who have used social network to interact with customers. The results reveal that content, link, privacy and security, page design and interactivity are the major issues of social network site management. Content, link, privacy and security, individual and organization motivation have major impacts on encouraging business knowledge sharing among employees. Moreover, Page design and interactivity, content, organization motivation and knowledge sharing can improve customer relationships.

Keywords—Social network management, social network site, motivation, knowledge sharing, customer relationship

I. INTRODUCTION

RECENTLY, people use social network to interact with customers [29]. Social network have many benefits which include knowledge sharing, improved feedback/service, improved market and sales [5]. From the organizations' viewpoint, use of social network channel can enhance relationship to customers [12, 13, 39]. Social network is used to gather information from customers, analyze customer information, and respond to customer faster. Prior research on social network has mainly focused on individual perspectives such as the impact of social influence, social presence [12, 13], behavior and benefits [38]. Social network sites provide an opportunity to enhance relationship between customer and business [29]. Therefore, it's important to know how to manage social network site in details so that organization can use as the framework to manage social network site more effectively. The better social network site management can make customers feel impression and intention to use the site. Only effective social network site management cannot enhance knowledge sharing among employees. Behavior of employees who deal with customer is a major factor of creating business knowledge sharing. The use and gratification theory mentions that individual motivation of social network usage can enhance knowledge sharing [1, 30]. Moreover, organization motivation is another management

aspect that can assist social network usage of employees to interact with customer and create business knowledge sharing. Relatively little research has integrated social network site management, individual and organization social network usage motivation with knowledge sharing and customer relationship. This research aims to develop social network management component that can enhance knowledge sharing and customer relationship.

II. LITERATURE REVIEW

Business knowledge sharing

Social network can increase business knowledge sharing. Tacit knowledge is one result of using social network [22]. Tacit knowledge is deeply rooted in action, commitment, and involvement in a specific context [21]. Most organization found that knowledge sharing influences the willingness of an individual to share his/her knowledge [8]. Knowledge from customers is mainly generated within business processes. For example, when marketing personnel collects complaint from customer via the social network channel, data can be used to discuss and set the better service requirements to customers [20].

Social network sites management

Social networks focused on building online social network or communities of people who wanted to share interests and interact with others [24]. There were many components in social network that needs to be managed properly such as page design [31], interactivity [1, 35, 36, 38], content [36], privacy [10, 29, 33, 38], security [10] and linkage [7, 36]. The better site management can enhance knowledge sharing [22]. The first hypothesis with four sub hypotheses was as the following:

H₁: The higher level of social network site management, the higher level of business knowledge sharing among employees.

H_{1a}: The higher level of privacy and security policy, the higher level of business knowledge sharing among employees.

H_{1b}: The higher level of page design and interaction, the higher level of business knowledge sharing among employees.

H_{1c}: The higher level of linkage, the higher level of business knowledge sharing among employees.

H_{1d}: The higher level of content, the higher level of business knowledge sharing among employees.

Srisawas S. is currently a master student of Management Information Systems, Faculty of Commerce and Accountancy, Thammasat University, Bangkok 10200, Thailand (e-mail: srisawas.siri@gmail.com).

Rotchanakitumnuai S., corresponding author, is now the professor of Department of Management Information Systems, Faculty of Commerce and Accountancy, Thammasat University, Bangkok 10200, Thailand (siriluck@tu.ac.th).

A. Individual social network usage motivation

One factor that has an influence on social network management is individual motivation to use social network. The use and gratification theory explained that factors influencing motivations for using different media consisted of a large number of values: purposive value, self-discovery, maintaining interpersonal connectivity, social enhancement, entertainment value. Purposive value derived from accomplishing including and giving or receiving information/knowledge, learning through social network participation [12, 13, 17, 30]. Self-discovery was learning of individual from self-interaction through society. Maintaining interpersonal connectivity was one social benefit derived from establishing and maintaining contact with other people and keeping track with other members. Social enhancement was the value from obtaining acceptance and approval from other members through social network. Finally entertainment value derived from fun and relaxation through interacting with others [12, 13]. The previous work revealed that individual motivation can enhance business knowledge sharing among employees [1, 11]. Therefore,

H₂: The higher level of individual social network usage motivation, the higher level of business knowledge sharing.

B. Organization social network usage motivation

Employees' empowerment from the organization can motivate individuals to participate and perform the work effectively [35]. Organization needed to support resources to employees so that specific task can be performed successfully [33]. Specific to this context, the clear policy of employee empowerment to interact with online customers can motivate employees to participate in responding to customers more frequently [26]. The decision-making and problem solving power was an important empowerment that allowing employees to use social network channel to respond and solve customers' problem immediately [22, 25]. Finally, the positive of empowerment management of the organization was the encouragement of allowing employees to do something more creatively with the reward system [6, 14, 15, 22].

H₃: The higher level of organization social network usage motivation, the higher level of business knowledge sharing.

C. Customer relationship

Many organizations wanted to build long-term relationships with the customers. Integrated customer knowledge can build close cooperation with their customers [3]. The social network management provided potential value of enhancing customer relationship which can create customer satisfaction and retention [5]. Abed Abedniya & Sahar Sabbaghi Mahmouei, 2010) indicated that many companies start to use social network to build relationship with customers. The social network site management had an impact on enhancing customer relationship [1, 29]. Therefore, the next hypothesis was:

H₄: The higher level of social network site management, the higher level of customer relationship.

H_{4a}: The higher level of privacy and security policy, the

higher level of customer relationship.

H_{4b}: The higher level of page design and interaction, the higher level of customer relationship.

H_{4c}: The higher level of linkage, the higher level of customer relationship.

H_{4d}: The higher level of content, the higher level of customer relationship.

In addition, both individual and organization social network usage motivation can create relationship with customers [1, 10, 27, 22, 23].

H₅: The higher level of individual social network usage motivation, the higher level of customer relationship.

H₆: The higher level of organization social network usage motivation, the higher level of customer relationship.

Finally, business knowledge sharing led to enhance customer relationship [22].

H₇: The higher level of business knowledge sharing, the higher level of customer relationship.

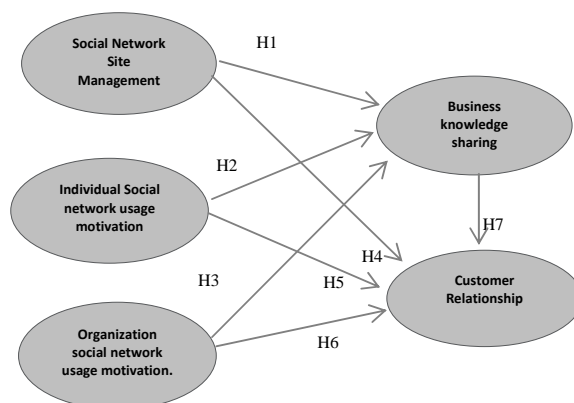


Fig. 1 The research framework of social network management to enhance customer relationship was illustrated

III. METHODOLOGY

Survey research was conducted with organizations using social network to interact with their customers. The target respondents were employees who have ever used social network to contact with the customers. Questionnaire was developed to ask the five constructs of the framework. Data were collected through online social network channel to ask the employees' perspectives about social network management. The total of 287 employees responded to the questionnaire. The profile of respondents was shown in Table I

TABLE I
RESPONDENTS PROFILE

Characteristics	N	%
Type of social network site (Could chooses more than one choice)		
Facebook	287	68.82
Hi 5	115	27.58
Twitter	14	3.36
Myspace	1	0.24
Period of social network sites (Year)		
Less than 1	63	21.72
1-2	213	74.22
3	10	3.45
4	1	0.34
Department that uses social network sites (Could chooses more than one choice)		
Sales	222	23.59
Marketing	218	23.17
Advertising	188	16.15
Services	161	17.11
Public Relations	152	16.15
Type of business		
Consumer Goods	115	40.07
Services /Tourism & Recreation	91	31.71
Technology	40	13.94
Property & Construction	16	5.57
Industrial Products	10	3.48
Agriculture & Food Industry	6	2.09
Others	5	1.74
Finance	4	1.39

IV. RESULTS

Exploratory factor analysis was used to explore the components of social network management which consisted of social network site management, individual and organization motivation to use social network. The social network site management consisted of four factors: privacy and security, page design and interaction, linkage and content (Table II).

TABLE II
THE RESULT OF FACTOR ANALYSIS AND RELIABILITY TESTING

Factor	No. of items	Composite Reliability	% Variance Explained
Social network site management			
Privacy and Security	5	0.818	36.798%
Page design and interaction	5	0.815	
Linkage	3	0.916	
Content	3	0.755	
Individual motivation	5	0.851	64.949%
Organization motivation	7	0.918	67.352%
Business knowledge sharing	3	0.796	71.625%
Customer relationship	3	0.822	74.441%

Table II presented the Cronbach's alpha of each factor ranging from 0.755– 0.918 which is acceptable (> 0.7) and have adequate items reliability.

TABLE III
THE IMPACT OF SOCIAL NETWORK MANAGEMENT ON KNOWLEDGE SHARING

Variable	B	Sig
Privacy and Security	0.443	0.000*
Page design and interaction	0.066	0.267
Linkage	0.497	0.000*
Content	0.318	0.000*
Individual motivation	0.169	0.025*
Organization motivation	-0.330	0.000*

Dependent: Business knowledge sharing $R^2 = 0.548$ *Sig. $p < .05$

The regression analysis showed that privacy and security, linkage, content, individual motivation, and organization motivation had positive influences on business knowledge sharing. Moreover, the result illustrated that the organization motivation component had negative impact on knowledge sharing. Page design and interaction factor had no impact on knowledge sharing (H_{1b} is rejected) (See Table III).

TABLE IV
THE IMPACT OF FACTORS THAT ENHANCE CUSTOMER RELATIONSHIP

Variable	B	Sig
Privacy and Security	0.104	0.067
Page design and interaction	0.297	0.000*
Linkage	0.036	0.524
Content	0.234	0.000*
Individual motivation	0.047	0.549
Organization motivation	0.280	0.000*
Business knowledge sharing	0.210	0.001*

Dependent: Customer relationship $R^2 = 0.511$ *Sig. $p < .05$

Table IV showed that page design and interaction, content, organization motivation, and knowledge sharing had positive influence on customer relationship. Moreover, the result illustrated that page design and interaction component had the most influence on customer relationship. Therefore, H_{4b} , H_{4d} , H_6 and H_7 were accepted.

V. CONCLUSION

This study aimed to examine the components of social network management which can create customer relationships. The survey results showed that the enhancement of the customer relationships between customers and organization greatly relied on how organization managed the social network site with their customers. To manage the social network site, organization needs to concern about webpage design, privacy and security policy, linkage, and content management. Individual and organizational social network usage motivations were very important antecedents of social network management. The two components of social network site management that having impact on encouraging business knowledge sharing within the organization were privacy and security policy, and linkage of the social network to the related information. Quality of content on the social network site has major impacts on both business knowledge sharing and customer relationship. Page design and interactivity had only major impact on enhancing customer relationship.

Moreover, individual usage motivation had positive impact on business knowledge sharing whereas organization motivation had negative impact on encouraging business sharing. This was an important indicator that employees felt that organization has less motivation to let them share knowledge through social network. On the other hand, employees perceived that organization motivation of using social network and business knowledge sharing can enhance customer relationships. This research focused on studying the determinants of social network management that had the influence on creating customer relationships from the employees' perspective. The future researches can extend the study by measuring the customers' perspective on using firm social network to interact with the organization.

REFERENCES

- [1] Abed Abedniya & Sahar Sabbaghi Mahmoudi, (2010). The Impact of Social Networking Websites to Facilitate the Effectiveness of Viral Marketing. *International Journal of Advanced Computer Science and Applications*, Vol. 1, No.6.
- [2] Alexander Ardichvili, Vaughn Page & Tim Wentling. (2003). Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of knowledge Management*. Vol.7 No.1, pp64-77.
- [3] Atul Parvatiyar & Jagdish N. Sheth, (2001). Customer Relationship Management: Emerging Practice, Process, and Discipline. *Journal of Economic and Social Research* 3(2), 1-34
- [4] Auh, S., Johnson, M.D. (2005). Compatibility effects in evaluation of satisfaction and loyalty", *Journal of Economic Psychology*, Vol. 26, pp.35-57.
- [5] AvanaDe Whitepaper. (2008). A business technology services provider; CRM and social media: Maximizing Deeper Customer Relationships.
- [6] Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive view*. Englewood Cliffs, NJ: Prentice-Hall.
- [7] Benjamin Yen, Paul Jen-Hwa Hu & May Wang. (2007). Toward an analytical approach for effective Web site design: A framework for modeling, evaluation and enhancement. *Electronic Commerce Research and Applications*. 159-170.
- [8] Bock, G., & Kim, Y. (2002). Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing. *Information Resources Management Journal*, 15(2), 14-21.
- [9] Bodet, G. (2008). Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships, *Journal of Retailing and Consumer Service*, Vol. 15, pp. 156-162.
- [10] Boyd, D. M. & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1).
- [11] Chao-Min Chiu, Eric T.G. Wang, Fu-Jong Shih & Yi-Wen Fan. (2010). Understanding knowledge sharing in virtual communities: An integration of expectancy disconfirmation and justice theories. *Online Information Review*.
- [12] Cheung, C. M. K., Chiu, Pui-Yee. & Lee, Matthew. (2010). Online social networks: Why do students use facebook?. *Computers in Human Behavior*.
- [13] Cheung, C.M.K. & Lee, M.K.O. (2009). Understanding the sustainability of virtual community: Model development and empirical test. *Journal of Information Science*, 25(3), 279-298.
- [14] Conger, J.A. & Kanungo, R.N. (1988). The empowerment process: integrating theory and practice. *Academy of Management Review*, 13(3), 471- 82.
- [15] Conger, J. (1986). *Empowering leadership*. Working paper, McGill University, Montreal.
- [16] Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum.
- [17] Flanagin, A. J. & Metzger, M. J. (2001). Internet use in the contemporary media environment. *Human Communication Research*, 27, 153-181.
- [18] Hallowell, R. (1996). The relationship of customer satisfaction, customer loyalty, and profitability: an empirical study, *International Journal of Service Industry Management*, Vol. 7, pp. 27-42.
- [19] Heatner A. Smith & James D. McKeen. (2007). Developments in practice xxvi: Social network : Knowledge management's "Killer App"? Communication of the Association for information system Volume 19, 611-621.
- [20] Gebert H. Geib M. Kolbe L & Brenner W. (2003). Knowledge-enable customer relationship management: integrating customer relationship management and knowledge management concepts [1]. *Journal of Knowledge Management*.
- [21] Ikujiro Nonaka & Hirotaka Takeuchi. (1995). *The knowledge creating company*. New York Oxford. Oxford University Press.
- [22] Iris Reyachav & Jacob Weisberg. (2009). Going beyond technology: Knowledge sharing as a tool for enhancing customer-oriented attitudes, *International Journal of Information Management*. 353-361.
- [23] Isabelle Szmigin, Louise Canning & Alexander E. Reppel, (2005). Online community: enhancing the relationship marketing concept through customer bonding. *International Journal of Service Industry Management* Vol. 16 No. 5, pp. 480-496.
- [24] Jennifer Uhrig, Carla Bann, Peyton Williams & W. Douglas Evans. (2010). Social network websites as a platform for Disseminating social marketing intervention: An exploratory pilot study. Vol XVI No.1.
- [25] Kanter, R. M. (1983). *The change masters*. New York: Simon & Schuster.
- [26] Kim, K. J., Jeong, I. J., Park, J. C., Park, Y. J., Kim, C. G. & Kim, T.H. (2007). The impact of network service performance on customer satisfaction and loyalty: High-speed internet service case in Korea", *Expert System with Application*, Vol. 32, pp. 822-831.
- [27] J. Wiemann, S. Pingree. (1988). *Advancing Communication Science: Merging Mass and Interpersonal Processes*, Sage, Beverly Hills, CA, pp. 110-134.
- [28] Mallak, L.A. & Kurstedt, H.A., Jr., (1996). Understanding and using empowerment to change organizational culture. *Industrial Management*, pp. 8-10.
- [29] Mary K. Foster, Anthony Francescucci & Bettina C. West. (2010). Why user participate in online social network. *International Journal of e-Business Management*. Vol.4.no.1, pp.3-19.
- [30] McQuail, D., J. G. Blumler, & J. R. Brown. (1972). The television audience: a revised perspective. In *Sociology of mass communications*, ed. D. McQuail. Harmondsworth, Penguin.
- [31] Moustakis, V., Tsironis, L. & Litos, C. (2006). A model of website quality assessment. *The Quality Management Journal*, 13(2), 22-37.
- [32] Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science* (5:1), pp. 14-37.
- [33] Rotchanakitumnuai S, Speece M. (2004). Balancing Business Value of Thai Internet Banking Services: The Corporate Customers' Perspectives. *PACIS 2004 Proceedings*. Paper 4.
- [34] Seeman, N. (2008). Web 2.0 and chronic illness: New horizons, new opportunities. *Electronic Healthcare*, 6(3).
- [35] S. Rafaeli. (1988). Interactivity from new media to communication, in: R.P. Hawkins, J. Wiemann, S. Pingree (Eds.), *Advancing Communication Science: Merging Mass and Interpersonal Processes*, Sage, Beverly Hills, CA, pp. 110-134.
- [36] Sue Manuel, James Dearnley, Graham Walton. (2009). Library website management and maintenance: a study of the UK 1994 group, *New Review of Academic Librarianship*, 15:68-96.
- [37] Thomas, K.W. & Velthouse, B.A. (1990). Cognitive element of empowerment: an interpretive model of intrinsic task motivation, *Academy of management review*, Vol.15 No.4, pp.666-81.
- [38] Wesley Shu & Yu-Hao Chuang. (2001). The perceived benefits of six-degree-separation social networks, *Internet Research* Vol. 21 No. 1, 2011 pp. 26-45.
- [39] Wing S. Chow & Lai Sheung Chan. (2008). Social network, social trust and shared goals in organizational knowledge sharing, *Information & Management* 458-465.