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Relationship Quality through Social Network: A Confirmatory Factor Analysis

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Abstract: This research aims to confirm the components of relationship quality of social network. The online survey was conducted with Thai Facebook users. The result confirms that the components of relationship quality of social network consist of trust in social network service providers, trust in social network users, commitment, conflict reduction, and satisfaction of social network usage.

Keywords: Social network, relationship quality

1. Introduction

Social network allows individuals to create their profiles and the name list of their acquaintances, and to establish their connections with their friends and their friends of friends. The popularity of Social network usage is widespread dramatically and expands to the development of their features. It enables social network users to create the web page and information integrating various media such as texts, graphs, artworks, voices, animations, and videos in their own space. Some social network systems can also search virtual groups based on common interests, add, or delete the links connected to other users.

Social network is one of the channels to share information, ask for help, or send information during the critical circumstances, which lead to relationship creation among people worldwide. Currently, social network sites grow. There are also new social network sites, which create the wider spread of social network rapidly. In 2011, there are 11,916,420 Facebook users out of 18.1 million Thai internet users (Facebook, 2011).

Moreover, Social network is developed and ex-

panded for business purposes such as communicating with customer, sharing creative perspectives to get feedback related to price, products, and customers, and promoting public relations for a good relationship between organizations and their customers.

Relationship quality among social network users may be created through trust and satisfaction of those social network users. Prior studies indicated that relationship quality is a concept for success factors of the organizations (Palmatier et al., 2006; Williams, 1998; Zhang et al., 2011). Williams (1998) stated that the relationship quality is comprised of not only trust and satisfaction but also the commitment which indicated relationships of the two parties. It can be either buyer and seller, or service provider relationships, or person to person relationships. Past studies used relationship quality approach to determine the intention to repurchase, or loyalty to the service providers.

In the social network context, there are both positive and negative aspects for the development of relationship quality. The first aspect is creating relationship quality through trust, commitment, and satisfaction of social network usage. The second aspect is conflict reduction of social network usage. This article aims to report the perspectives of social network users about the relationship quality and the components of relationship quality of Facebook, the most popular social network site in the world and in Thailand.

2. Literatures Review

Prior studies related to relationship quality found that there were different components reflected to relationship quality. For example, Dwyer et al. (1987)

explained that good relationship quality needs high levels of satisfaction and trust (Dwyer et al., 1987). Williams (1998) determined relationship quality using satisfaction, trust and commitment. Crosby et al. (1990) studied two dimensions of relationship quality which were trust and satisfaction. Findings from Morgan and Hunt (1994) showed that trust and commitment were key success factors for marketing that can build customer loyalty.

Roberts et al. (2003) studied the relationships

between service quality and relationship quality by analyzing and studying the concepts of the above researchers to find the components of relationship quality between service providers and customers in service industries. They found that there were 5 components as follows: trust in terms of integrity, trust in terms of benevolence, commitment, affective conflict, and satisfaction. Table 1 represents the examples of the past research about components of relationship quality.

Table 1: Examples of the past research about components of relationship quality

Researchers	Component
Dwyer et al. (1987)	Satisfaction, Trust, and Opportunism
Crosby et al. (1990)	Trust and Satisfaction
Williams (1998)	Satisfaction, Trust, and Commitment
Roberts et al. (2003)	Trust in terms of Integrity, Trust in terms of Benevolence, Commitment, Affective Conflict, and Satisfaction
Sanchez-Franco et al. (2009)	Trust and satisfaction influence to commitment
Cater and Cater (2010)	Trust, Positive Commitment, Negative Commitment
Zhang et al. (2011)	Trust and Satisfaction

Trust is one component of marketing relationship creation. Trust in relationship will occur when a person is ensured by the reliability, the benevolence, and the integrity of the other party. Trust in the organization that sell products or services will occur when customers or users gain good experiences and good attitudes to maintain the relationship with that specific organization (Morgan and Hunt, 1994; Foster and Cadogan, 2000). Further, trust plays an important role for information technology readiness. The capability to manage reliable systems, good service, and honesty to users helped to create trust in electronics service providers (Gefen et al., 2003; Rotchanakitumnuai and Speece, 2009). This research aims to study about relationship quality development of Facebook. There are 2 types of interactions, which are the interactions between social network service providers and social network users; and, between users and users or communities in social network. The scope of this research about relationship quality

components of social network is about the trust component. It is the users' needs to be responded and fulfilled by the service providers. The trust component can be considered from the integrity and reliability of the service providers or the partner who is going to respond. The users will be taking care of and concerned about their happiness, as well as will be given reasonable benefits even there was no agreement. This research covers both trust in Facebook service providers and trust in Facebook users (Carter and Carter, 2011; Gounaris, 2005; Moorman et al., 1992)

Commitment is the need to maintain the valuable relationship. Commitment has several dimensions, including the emotional/affective commitment which comes from the familiarity. This commitment may be unreasonable (Gilliland and Bello, 2002; Gounaris, 2005). Many researchers found that the emotional/affective commitment was a positive commitment (de Ruyter et al., 1996; Gounaris, 2005). The other

dimension of commitment was the calculative commitment or the negative commitment, which needed reasonable conditions (Farely and Quester, 2005; Cater and Cater, 2010)

Satisfaction is the overall feeling evaluation from which the customers use and their experiences from the services. Satisfaction will be compared from the service experiences and the service expectation. If the individual receives something that are not sufficient or lower than his/her expectation, that individual will be dissatisfied. If the service is similar to what the individual hopes, that individual will

be satisfied (Forenell, 1992; Giese and Cote, 2000; Zhang et. al., 2011). Customer satisfaction can occur before receiving the service. This will lead to actual service usage. Besides, satisfaction after using the service may lead the appreciation to repurchase. It is also important to reduce conflict from services, including conflict from unfriendly interaction, grievance, and antagonism which are threats for relationship quality development (Roberts et al., 2003). Good relationship will occur if there is conflict reduction among service users.

Table 2 : Respondents profile

	N.	%
Gender		
Female	205	67%
Male	97	32%
Age		
Below 25	95	31%
25 – 30	88	29%
Above 30 – 40	67	22%
Above 40 – 50	27	9%
Above 50- 60	19	6%
Above 60	6	2%
Education		
Below bachelor	48	16%
Bachelor	151	50%
Master	89	29%
PHD	14	5%
Occupations		
Students/ no work	86	28%
Private sector employee	112	37%
Government sector employee	38	13%
State own enterprise employee	5	2%
Non governmental organization's employee	12	4%
Self employment/ entrepreneur	38	13%
Housewife/ no salary	7	2%
Retirement from government agencies or other organizations	4	1%
Average of Facebook usage per week: 17 hours/ week		

3. Research Methodology

The online survey was conducted in this research. Online questionnaire was developed by Google Documents. Pre-testing had been done before conducting the online survey. The question-

naire was separated into 2 parts. The first part was the questions to measure the variables of the components of relationship quality in this research. The 5-level rating scales were used. Level 1 meant "strongly disagree" while Level 5 meant "strongly

agree". The second part was questions about general information of the respondents.

Samples of this research were Facebook users because the empirically statistical data illustrated that Facebook was the most popular social network site in Thailand. Compared with other social networks, Facebook users were a high proportion. Convenient Sampling was used by sending emails to samples via the online survey URL that was created by Google Documents. The online survey URL created by Google Documents was also sent to Thai popular websites, such as pantip.com and thaiticketmajor.com asking for their cooperation to promote their users to answer the questionnaire. Data collection period was approximately 2 months. Respondent backgrounds were presented in Table 2.

4. Analysis of Data

Program LISREL 8.5 was used for analyzing the confirmatory factor analysis in this research. This was to confirm that how much each exogenous variable was a good component to explain the relationship quality components of Facebook.

The confirmatory factor analysis of the exogenous variables in the relationship quality components found that all exogenous variables have their loadings greater than 0.5 (Table 3). Furthermore, all components have their average variance extracted (AVE) greater than 0.5. It showed that overall the measurement has the Discriminant Validity. In other words, each exogenous variable of each component can explain the details of that specific component. In addition, the Composite Reliability was also greater than 0.8, which represented the reliability of the measurement in each component.

Results from Table 3 presented that the mean scores of the exogenous variable in the component of trust in social network service providers were be-

tween 3.74–2.94. The variable with the lowest mean score were trust in the Facebook service providers that they have reliable safety systems (mean scores = 2.94).

Another component of trust was trust in social network users. The mean scores of this component were between 2.52 – 3.11. The only 1 variable with the mean score greater than 3 was Facebook social network users are benevolent (mean scores = 3.11). Variables with mean scores lower than 3 were Facebook social network users always have ability to solve other people's problems (mean scores = 2.69); Facebook social network users are trustable (mean scores = 2.60); and Facebook social network users provide true information (mean scores = 2.52).

The greatest mean score in the satisfaction component was the satisfaction when using Facebook social network. It had a high level of mean scores (mean scores = 3.83). Liking to use Facebook social network had mean scores of 3.80.

The greatest mean score in the commitment component was enjoyment when communicating with users in Facebook social network (mean scores = 3.74), feeling that communicating with users in Facebook social network can do something you are satisfied with (mean scores = 3.26), commitment to maintain the relationship with users in Facebook social network (mean scores = 3.20) and commitment to communicate with users in Facebook social network (mean scores = 3.09).

The mean scores of the component of conflict were between 3.20–3.89. The variable with the greatest mean scores was happiness to contact with users in Facebook social network (mean scores = 3.89). The second greatest mean scores was always no conflict with users in Facebook social network (mean scores = 3.87); and not serious to contact with

users in Facebook social network (mean scores = 3.20).

Table 3: Confirmatory factors of relationship quality enhancement through social network

Exogenous variable	Mean	Factor Loading	Average Variance Extracted	Composite Reliability
Factor 1: Trust in social network service providers			0.53	0.82
- You trust in the Facebook social network service providers that they have reliable safety system	2.94	0.68		
- You trust in the Facebook social network service providers that they can develop useful applications for users	3.75	0.75		
- You trust in the Facebook social network service providers that they are honest to comply with the agreements that they have made with users.	3.23	0.86		
- You trust in the Facebook social network service providers that they can provide quality service consistently	3.42	0.59		
Factor 2: trust in social network users			0.61	0.86
- Facebook social network users provide true information	2.25	0.69		
- Facebook social network users are trustable	2.60	0.99		
- Facebook social network users are benevolent	3.11	0.70		
- Facebook social network users always have ability to solve other people's problems	2.69	0.71		
Factor 3: Satisfaction			0.72	0.91
- You like to use Facebook social network	3.80	0.86		
- You are appreciated to contact with users via Facebook social network	3.51	0.78		
- You are satisfied using Facebook social network	3.83	0.86		
Factor 4: Commitment			0.51	0.80
- You are committed to communicate with users in Facebook social network	3.09	0.88		
- You enjoy communicating with users in Facebook social network	3.74	0.59		
- You feel that communicating with users in Facebook social network can do something you are satisfied with	3.26	0.57		
- You are committed to maintain the relationship with users in Facebook social network	3.20	0.76		
Factor 5: Non conflict			0.63	0.87
- You are not serious to contact with users in Facebook social network	3.20	0.84		
- You are happy to contact with users in Facebook social network	3.89	0.88		
- You don't have any conflicts with users in Facebook social network	3.87	0.56		

5. Conclusion

According to the confirmatory factor analysis, this research provides academic contribution in terms of the details about relationship quality component of social network. Trust is one component of relationship quality component of social network. Trust

consists of trust in Facebook social network service providers and trust in social network users. Trust in service providers consists of trust in the Facebook social network service providers that they have reliable safety system, trust in their abilities to develop useful applications for users, trust in their honest to

comply with the agreements that they have made with users, and consistent quality service provision. Trust in social network users comes from the trust that Facebook social network users provide true information, Facebook social network users are trustable and benevolent, as well as the ability to solve other people's problems.

Satisfaction is another important component for relationship quality, which is established from liking and satisfaction to use the social network, as well as the appreciation to contact with users via social network. Furthermore, relationship quality will be established when users are committed to use the social network. In other words, commitment is an important component, which establishes relationship quality and causes users to commit to communicate, to enjoy communicating, to satisfy when they communicate, and to want to maintain the relationship with users in Facebook social network. On the contrary, using the social network should not create the dissatisfaction or grievance to the social network users. Therefore, conflict reduction is also another important component for relationship quality.

Research findings can be applied to social network management. Trust is still an important issue to be concerned. Some problems should be dissolved to create more trust. For example, social network service providers should aware of trust creation in terms of more reliable safety systems. Trust in social network users is also another problem. These users still lack of other group of people in the social network. Moreover, there is a very low level of trust in the social network information. However, the results reflect that the relationship quality are satisfied as social network users are satisfied, committed, and neither worried nor conflicted with social network usage. Therefore, this should be an opportunity for the social network providers to concern about the relationship quality components on social net-

work and to develop their services to enhance continual relationship quality in long term. Future research can be expanded to the effects of relationship quality components on business value creation or the effects of relationship quality components on valuable knowledge sharing to the society.

References

- [1] Carter, T. and Cater, B. (2010), "Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships", *Industrial Marketing Management*, Vol. 39, pp.1321-1333.
- [2] Chow, W.S. and Chan, L.S. (2008), "Social network, social trust and shared goals in organizational knowledge sharing", *Information & Management*, Vol. 45, pp. 458-465.
- [3] Crosby, L. A., Evans K.R., and Cowles, D. (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective", *Journal of Marketing*, Vol. 24 No.1, pp. 3-16.
- [4] de Ruyter, K., Moorman, L. and Lemmink, J. (2001), "Antecedents of commitment and trust in customer-supplier relationships in high technology markets", *Industrial Marketing Management*, Vol. 30 No. 3, pp. 271-286.
- [5] Dorsch, M.J., Swanson, S.R. and Kelley, S.W. (1998), "The role of relationship quality in the stratification of vendors as perceived by customers", *Journal of the Academy of Marketing Science*, Vol.26 No. 2, pp. 128-142.
- [6] Dwyer, F. R., Schurr, P. H., and Oh, S. (1987), "Developing Buyer-Seller Relationships", *Journal of Marketing*, Vol.51 No. 2, pp. 11-27.
- [7] Farely, J.F. and Quester, G.P. (2005), "Examining important relationships quality components of the focal sponsorship exchange", *Industrial marketing Management*, Vol. 34 No. 3, pp. 211-219.

- [12] Fornell, S. (1992), "National Satisfaction barometer: the Swedish experience", *Journal of Marketing*, Vol. 56, January, pp. 6-21.
- [13] Foster, D.B. and Cadogan, W.J. (2000), "Relationship selling and customer loyalty: an empirical investigation", *Marketing Intelligence & Planning*, Vol. 18 No. 4, pp. 185-199.
- [14] Gefen, D., Karahanna, E. and Straub, D.W. (2003), "Trust and TAM in Online Shopping", *MIS Quarterly*, Vol. 27 No. 1, pp. 51-83.
- [15] Giese, J.L. and Cote, J.A. (2000), "Defining consumer satisfaction", *Academy of Marketing Science Review*, 1. Available at <http://www.amreview.org/articles/giese01-2000.pdf>
- [16] Gilliland, D. I. and Bello, D. C. (2002), "Two sides to attitudinal commitment: The effect of calculative and loyalty commitment on enforcement mechanisms in distribution channels", *Journal of the Academy of Marketing Science*, Vol. 30 No. 1, pp. 24-43.
- [17] Gounaris, S. P. (2005), "Trust and commitment influences on customer retention: Insights from business-to-business services", *Journal of Business Research*, Vol.58 No. 2, pp. 126-140.
- [18] Moorman, C., Zaltman, G., & Deshpandé, R. (1992), "Relationships between providers and users of market research: The dynamics of trust within and between organizations", *Journal of Marketing Research*, Vol.29 No. 3, pp. 314-329.
- [19] Morgan, R.M., Hunt, S.D. (1994), "The Commitment-Trust Theory of Relationship Marketing", *Journal of Marketing*, Vol.58 No. 3, pp. 20-38.
- [20] 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*, Vol.70 No. 4, pp. 136-153.
- [21] Roberts, K., Varki, S., and Brodi, R. (2003), "Measuring the Quality of Relationships in Consumer Services: An Empirical Study", *European Journal of Marketing*, Vol. 7 No. 1, pp. 169-196.
- [22] Rotchanakitumnuai, S. and Speece, M. (2009), "Modeling electronic service acceptance of an e- securities trading system", *Industrial Management and Data Systems*, Vol. 109 No. 8, pp. 1069-1084.
- [23] Sanchez-Franco, M.J., Ramos, A.F.V. and Velicia, F.M. (2009), "The moderating effect of gender on relationship quality and loyalty toward Internet service providers", *Information & Management*, Vol.46, pp. 196-202.
- [24] Williams, M.R. (1998), "The Influence of Salespersons' Customer Orientation on Buyer-Seller Relationship Development", *Journal of Business & Industrial Marketing*, Vol. 13 No. 3, pp. 271-287.
- [25] 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*, Vol.48 No. 16, pp. 192-200.
- [26] Facebook, Marketing Hub (2011), available at: http://www.facebook.com/note.php?note_id=240879792622696. Accessed 28 December, 2011.
- [27] The Nielsen company, (2011), available at: <http://blog.nielsen.com/nielsenwire/nielsen-news/online-global-landscape-0409/>. Accessed 26 November, 2011.