

Trust and commitment in social networking – Lessons learned from two empirical studies

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Abstract

This paper focuses on how to increase trust and commitment in networks. We present two empirical studies that highlight various mechanisms by which trust and commitment develop. The first study is a qualitative action research inquiry examining commitment building in selected health and social care development networks. The second study is a survey that focuses on the antecedents of trust-commitment relationship in collaborative online communities. We use these two studies to seek new perspectives on trust and commitment in networks. The mixed methods approach is reasoned, as the qualitative study provides insight into the underlying constructs related to trust and commitment in networks and the quantitative study further enables to establish and test hypotheses in a larger context.

Introduction

Wellman (1997) argues that an electronic group, such as an online community, is virtually a social network. Motivation to participate in such networks is the set of reasons that determines one to engage in a particular behavior. The term is generally used for human motivation but it can be used to describe the causes for organizational behavior as well. According to various theories, such as the Theory of Reasoned Action (Ajzen and Fishbein, 1980; Sheppard et al. 1998), Motivational Model (Davis et al. 1989) and Perceived Behavioral Control (Ajzen 1991; Taylor and Todd 1995), motivation may be rooted in the basic need to minimize physical pain and maximize pleasure, or it may include specific needs such as eating and resting, or a desired object, hobby, goal, state of being, ideal, or it may be attributed to less-apparent reasons such as altruism or morality.

Trust and commitment in a network setting have been studied quite extensively. However, these analyses have mainly used either quantitative or qualitative methodology. This study contributes to the research on trust and commitment by combining understanding from two studies with differing methodologies: a qualitative action research and a quantitative survey research. The focus is not in comparing the results of the two studies as such, but in combining the different understanding acquired through them. The sequential combination of two diverse empirical approaches is suggested by proponents of mixed-methods research (e.g. Houtz 1995; Tashakkori and Teddlie 2003). It arises from the concept of research triangulation and emerges from mixing different types of data; the results from one method can help develop, enrich or strengthen the results of the other method (Greene et al. 1989).

Action research as data collection method brings researchers to the source of understanding the social practices and processes in organizations and networks. This method allows researchers to investigate the dynamics of trust and commitment in social network development. The quantitative analyses embodies confirmatory factor analysis and structural equation modeling, which aim at testing hypotheses concerning the relationships between motives to engage in network activity, and trust and commitment as the antecedents for coping with networks. The former helps us to understand the dynamics and evolution of trust and commitment through time, and the latter models the antecedents of trust and commitment at a single point in time.

The paper is structured as follows. First, we discuss the essential aspects of trust and commitment in the context of networks. Then, we present our two empirical studies that investigate these aspects in different social network settings. One study employs qualitative research approach and the other study is based on a quantitative survey. Finally, we discuss the results and their implications.

Trust and commitment in networks

Prior literature identifies two essential aspects of network participation: trust in partners and commitment to mutual interest/objectives (Naude & Buttle, 2002).

Trust

Trust is an implicit set of beliefs that the other party will refrain from opportunistic behavior and will not take advantage of the situation (Moorman et al 1992; Gefen 2002). Researchers have looked at trust from different perspectives. These include the functional and instrumental value of trust (Lewis & Weigert 1985), economic and social trust (Miettinen et al 2006), sociological and psychological foundations of trust (McEvily et al 2003), interpersonal and inter-organizational trust (Gulati 1995; Laaksonen et al 2008), initial and evolved trust, and contractual, competence or goodwill based trust (Laaksonen et al 2008). Commitment is related to trust, and together they enable cooperation between organizations (Hunt & Morgan 1994b).

Understanding of trust and its role in organizational setting has been fragmented (McEvily et al 2003), but some general characteristics of trust can be identified and implemented to inter-organizational cooperation. First, trust is a shared belief that actors in a certain relationship have similar and compatible interests (Laaksonen et al 2008). Second, trusting actors make a conscious decision to depend on each other (Zand 1972; Inkpen & Curral 2004), and third, actors accept certain amount of uncertainty since the actors can never fully know each other or predict actions (Laaksonen et al 2008). Fourth, trusting actors are vulnerable to other actors behavior and dependent on others goodwill. Finally, trust can be defined as a social mechanism that reduces transactions costs in relationships (Ring & Van Den Ven 1992), and in a wider perspective, as a mechanism for reduction of social complexity (Luhmann 2000).

In the literature on trust, acceptance of uncertainty is often defined as adventurism or willingness to take risk (e.g. Koeszegi 2004). Therefore, risk and trust are closely related concepts, and several researchers have studied their interrelationships (Inkpen & Curral 2004; Mayer et al 1995). Trusting actors are aware of this risk, and some level of risk has to be always taken to engage in social action. However, not everything need to be risked, and similarly, trust is not always involved in risk-taking behavior. (Mayer et al 1995) The amounts of trust and risk vary according to the task and situation at hand, and on the other person or actor (Zand 1972).

In an environment where there is lack of trust, the actors avoid things that would expose them to others, thus also commitment is hindered. Zand (1972) has described the ways lack of trust appears in cooperation. An actor who does not trust another actor conceals and distorts relevant information from the actor and avoids stating and disguising facts, ideas, and conclusions. For example, trust is important in virtual communities where the absence of workable rules makes a reliance on the socially acceptable behavior of others, i.e. trust, essential for the continuity of the community (Butler & Cantrell 1994). The information passed is low in accuracy, comprehensiveness, and timeliness. The feeling of not being trusted leads to rejecting influence of others and simultaneously, to an attempt to control others. Lack of trust appears as suspiciousness and introversion and increases the likelihood of misunderstandings and misinterpretation. This is especially noteworthy in the case of virtual communities because research has shown that people in traditional communities work better with others they trust, while actively avoiding contact with those they do not trust.

Relying on trust as a binding mechanism in a relationship has some direct benefits (Gulati 1995). First, it enables actors in a partnership to adapt together to changing environments. Second, it saves money and effort in searching for new partners. Third, it enables actors to achieve openness and competitiveness (Möllering et al 2004). Finally, it protects actors from negative effects of mistrust (Zand 1972). These negative effects appear as increased social uncertainty through misunderstandings, misinterpretations, concealed information, and renunciation of common goals and values. Mistrust also has a negative effect on commitment. In a situation where there is lack of trust or low initial trust between two particular actors, a common third party can act as a mediator and enable the two actors to create trust between them.

Commitment

Trust and commitment can be seen as mediating factors for cooperation in networks. Usually, commitment is seen to follow trust. Hence, as trust increases, so does the willingness to take risk and commit to collaboration increases. (Inkpen & Currall 2004) Commitment can be defined as individual's willingness to accept organizations, or networks, goals and values, and willingness to cooperate with others to accomplish these goals. As trust, also commitment grows over time (Dwyer et al 1987; Hunt & Morgan 1994a).

Commitment can be cognitive or affective. Cognitive commitment is caused by a utilitarian motive, referring to an individual's concern with the cost and benefits of the product or service and interest in the functional performance of the product. Affective involvement is caused by a value-expressive motive, referring to an individual's interest in enhancing self-esteem or self-conception, and in projecting his/her desired self-image to the outside world through the use of the product or service (Park & Young 1983).

As trust and commitment mediate cooperation, there are factors that either prohibit or enable the creation and success of trust and commitment. The use of power has been noted to prohibit actors from developing mutual commitment (Inkpen & Currall 2004), and opportunistic behavior to decrease both trust and commitment. The cost of terminating a relationship increases willingness to create commitment and trust between actors, as do potential relationship benefits increase trust and commitment. Shared values increase the likeliness of success in creation of trust and commitment. Communication is an enabler of both trust and commitment. (Hunt and Morgan 1994b) On the other hand, communication has been seen as the direct benefit of commitment (McEvily et al 2003).

Study 1: Trust and commitment evolve dynamically in health care sector's social networks

In this study the concepts of initial and evolved trust (Laaksonen et al 2008; Inkpen & Currall (2004) are adopted to capture the dynamics of trust and the effect of selected managerial actions in the level of trust. Trust is seen as something that evolves over time between actors (Inkpen & Currall 2004; McEvily et al 2003), either increases or decreases the likelihood of commitment in joint activities (Håkansson & Snehota 1995), has an affect on the effectiveness of inter-organizational service development, and is a mechanism that reduces social complexity in inter-organizational service development (Luhmann 2000).

Methodology

This study has been conducted as action research which has provided the researcher with an insight into the practices of a networking process in a health and social care network. Action research is considered dynamic, cyclical, suffused with certain amount of uncertainty, and a process of development with limited duration (Lewin 1948 in Drummond & Themessl-Huber 2007). Researchers conduct the research in participation with the network that is being changed. The outcome of action research is change, which entails revealing subconscious ways of action, social structures and traditions, and power relations. (McNiff 1995; Morton 1999; Brydon-Miller et al 2003) Theory is the grounds for practical choices in action research (Gummesson 1991). Based on acquired paradigms and pre-understanding the action researcher adopts the role of a change agent and facilitates the change within the system by respecting its culture and practices. (Brydon-Miller et al 2003)

Through action research the researchers adopted the roles of network coordinators and managers. Researchers held workshops where they took the roles of a manager and a network specialist. By adopting these roles, the researchers were able to use themselves as "guinea-pigs" for network management. By experiencing the challenges of a networking process the researchers are ultimately able to define events that are likely to decrease or reset evolved trust back to the level of initial trust and to develop network management mechanisms for creating, maintaining, and increasing evolved trust.

Analysis and results

The network under study consists of elderly home care (HC) and disabled care (DC) units. The initial situation before the project started was that the participating units had been functionally separated for some time. This resulted in low initial trust between the organizations and enhanced the role of action researchers at the beginning of the networking process. At the beginning of the action research intervention, the social ties

between the employees from different units and coordination between the units were highly dysfunctional. Initial trust between these two organizations was low, nevertheless existing. The low level of trust came forth in lack of communication, seemingly different goals in customer care, and insufficient information flow between the actors.

The main arena for collaboration was workshops that were held monthly. The role of the workshops was to open communication and provide an arena for learning about each other, with the expectation that this would create trust and commitment between the parties. The practical goal of the networking was to find new, effective ways for joint service production to mutual customers.

The HC unit was the initiator of the development network. The role of researchers was to act as a mediating third party, including encouragement and mental support as well as practical assistance in presenting the idea of network process. The initiative to start the networking process was successful and the first networking workshop was held shortly after the mutual agreement of starting the process.

The findings show that trust and commitment within the network and towards the action researchers came forth in various ways and their level varied constantly as the collaboration and workshops continued. In the first workshop, for instance, the HC unit, the initiating actor in this cooperation, quite unexpectedly showed lack of commitment by showing up late. This was not a good start for the collaboration. The manager of the HC unit reacted to this by apologizing and reassuring that this will never again happen. Making oneself vulnerable and opening conversation about a negative issue however helped to reassure that the manager and the rest of the HC unit will be committed to this networking process.

The trust and commitment to participate in the workshops was fairly easy to establish initially, but required actions by the researchers to maintain. Even if the actors were committed to participate in the workshops and group work, there were difficulties to get them understand the importance of independent work to be performed in between workshops. In practice, trust and commitment to some parts of the collaboration can be in order while totally absent to some other aspects. This means that the level of trust is not high enough and commitment is somewhat superficial. The feedback and evidence of lowered level of trust and commitment made the researchers re-evaluate the structure of the workshops. There should be more room for “mingling” and free conversation since they are the elements for learning about each other, which develops trust and commitment. Coffee breaks, as means for informal communication, proved to be very important occasions for networking. The most important and successful parts of the workshops in terms of trust and commitment building were the ending conversations where groups presented their work and the participants commented on others suggestions. The comments were supportive and given in a light of new information and perspective. The increase in trust became evident in actors’ openness and willingness to share their opinions in these discussion sections.

Lack of trust towards own and others’ capabilities to contribute in the workshops proved also to challenge commitment. The participants in the workshops were not used to group work methods, and felt uncomfortable in the early workshops. The participants did not trust their own ability to this kind of development work in inter-organizational small groups. The participants were asking quite a lot of advice from the researchers, but were knowingly refrained from too detailed instructions, since collective creativeness to solve own problems is an important joint function in a network. As a method, group work also requires leaving one’s comfort zone and opening oneself to others. This is a risk that a person who does not trust tries to avoid. In a workshop it is easy to identify these persons since they are not participating in the discussion. Some opt themselves entirely out of the group work, some do not participate in the discussions, but are eager to give other orders and remind them about the schedule. In the situations where an individual participant shows low level of trust, the researcher placed more attention to this participant by asking questions and encouraging participation. As a management mechanism this means encouraging and listening to the actors. Gradually this seemed to start working; the participants solved the issues on their own and created their own solutions. Joint problem-solving increased participants’ togetherness, which again realized as higher level of evolved trust, which in turn increased the mutual commitment.

Lack of trust towards the researchers and their expertise was expressed at the early phase of the process. Both of the units seemed to have grown a doubt whether the workshops would have an impact. This doubt was redirected towards the researchers. In other words, frustration towards the pace of process decreased trust, and required revisiting the idea of the workshops again. This translates to recreation of shared values and goals,

and restating the mutual benefits of networking process. In this network these conversations restored the level of trust and again increased the commitment. The increase in trust and commitment showed in more open conversations, the willingness to share information about own experiences in elderly care services, and in eagerness to learn about other actors experiences. All of these seem to be enabled by evolved trust that is higher than initial trust.

The findings indicate that even low level of initial trust can maintain commitment in later stages of collaboration. The craving for results in the development of substance in care services raised up concerns like “these workshops are never useful, we get nothing concrete out of them.” From networking perspective the results were good, but it seemed difficult for the participants to comprehend that. The group of developers had learned about each other, started to form a shared vision about the development of mutual services, and clearly had increased the level of trust from initial trust. Without making the reasons for and the possible outcomes of the networking process, the actors lost some of their commitment and trust to the workshops as to the researchers. The initial, although low, trust kept the actors participating in the workshops, and disclosing and negotiating the purpose and results of the networking process helped to raise the level of trust.

What this study shows about trust and commitment is that creation of trust and commitment is a continuous effort. Furthermore, the level of trust can decrease for several, often unforeseen and seemingly remote, reasons. Whether this drop in trust breaks off collaboration or not seems to depend on initial trust. In case there has been initial trust, negative events regress the trust back to initial trust. In a situation of non-existent initial trust a negative event is more likely to disrupt the cooperation or at least requires extensive managerial effort. Managers in a network need continuously to both maintain and retain the level of trust as well as commitment that is dependent on the level of trust. There are numerous mechanisms that can be applied and included in managing a network. However, these mechanisms can only be used to create, maintain, or restore the level of evolved trust. The creation of initial trust is beyond network management in a sense that initial trust is the level of trust before the start of networking.

Study 2: Motives influence trust and commitment in online social communities

This study investigates members’ motivational antecedents of trust-commitment relationship in collaborative social networks. Concurrently, online communities form one of the largest types of social networks. Prior studies on the development of online communities (e.g. Miller et al. 2009) suggest hypotheses about the observed motives to join communities in single community-specific settings and provide a good basis for common metrics comparison of the interests, values, desires and motives for participation in diverse types of communities. Hence, this study examines how members’ extrinsic and intrinsic motives lead to the arousal of commitment in an organization-sponsored online community. The arousal of commitment is described through affection towards the community that is of interest to an individual.

Constructs and hypotheses

Motivation is the set of reasons that determines one to engage in a particular behavior. *Functional motivation* refers to expected functional, utilitarian or physical benefits of an action (Gupta and Kim, 2007). Gangadharbatla (2008) and Ridings and Gefen (2004) emphasize that virtual communities enable members to promote their careers (X_1), augment their professional reputation (X_2) and offer new career directions over the Internet. Lin (2008) points out that social influence in terms of *social motives* are also relevant to virtual community activities. For example, Wasko and Faraj (2000) emphasize that knowledge exchange with friends (X_3) is an essential social motivation for using virtual communities. Yoon et al. (2002) further add that communicating and keeping up-to-date with friends (X_4) are among the main motives to be online. Similarly, Ridings et al. (2002) suggest that the virtual community provides a mutual place for people with similar interests (X_5). Finally, *psychological motives* refer to the benefits related to the social standing one obtains in being part of the virtual community (Gupta and Kim, 2007). Thus, respect (X_6) and recognition from other members as an expert (X_7), as suggested by Gupta and Kim (2007) and Lin (2008), measure psychological motives to participate in virtual communities.

Trust is an implicit set of beliefs that the other party will refrain from opportunistic behavior and will not take advantage of the situation (Moorman et al., 1992; Gefen, 2002). According to Lin (2008), trust provides expectations of successful operation of virtual communities and its lack is a major barrier in establishing a community. Consistent with the suggestion by Ridings et al. (2007), trust is measured in this study as a

mediating variable in participant’s motivation-commitment relationship. As trust in virtual communities can be understood in the context of interpersonal relationships, i.e. trust between people, Jarvenpaa et al. (1998) and Ridings et al. (2002) suggest that it should be measured as trustworthiness of other members in the community (Y₁). Yoon et al. (2002) and Greenberg et al. (2008) emphasize that trust in the online service technology and administrators (Y₂) is a dimension of trust. In addition, according to Jarvenpaa (1998) and Lin (2008), fairness (Y₃) is a fundamental element of trust in virtual community members’ dealings with each other.

Commitment is a consequence of trust (Morgan and Hunt 1995; Garbarino and Johnson 1999). Moreover, following Ximena and Agnew (2001) and Gupta and Kim (2007), it includes cognitive and affective forms. *Cognitive commitment* was measured by participants’ perceived similarity of thoughts (Y₁) with other members (Ximena and Agnew, 2001). Moreover, Yoo et al. (2002) put forward the sense of community (Y₂) as a relevant measure of cognitive commitment. Conversely, *affective commitment*, as suggested by Lin (2008), includes the feelings of togetherness (Y₃) and the sense of belongingness (Y₄).

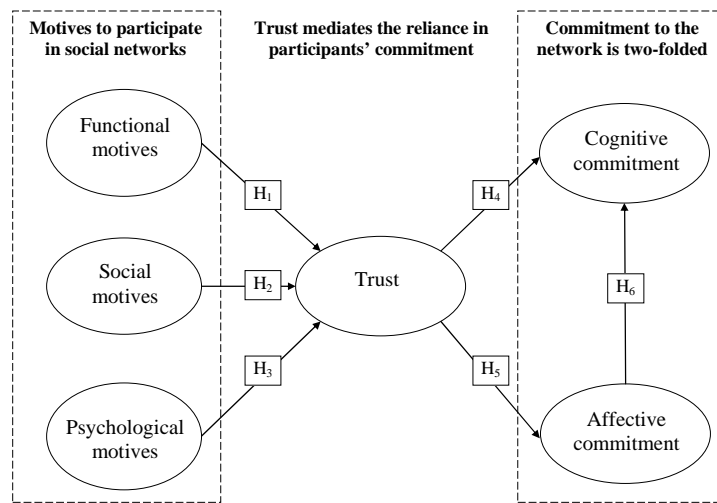


Figure 1 Conceptual model and hypotheses

We pose and empirically test a set of hypotheses (illustrated in Figure 1). The hypotheses concern how members’ extrinsic and intrinsic motives lead to the arousal of commitment in an organization-sponsored online community (H₁, H₂, and H₃), and, predict the arousal of commitment through participants’ cognitive (H₄) and affective commitment (H₅) towards the community. Finally, we predict that these diverse forms of commitment are interrelated (H₆).

Methodology

For the purposes of the study, an online survey was conducted among the members of the social networking community Facebook. The survey was conducted in 2008. An invitation to survey yielded 267 responses of which all were usable for the analysis. More than 80% of respondents were between 18 to 28 years of age, 44% being female and 56% male. The survey contained questions that addressed the members’ motivational factors as well as their perceived trust and commitment towards the community. Multi-item scales were used to measure all constructs. All items were measured on a five-point Likert-type scale (1=“strongly disagree” to 5=“strongly agree”).

To test our model we conducted a confirmatory factor analysis and structural equation modeling using LISREL 8.8. Confirmatory factor analysis was conducted to establish the discriminant validity among our perceptual variables. The fit indices for the measurement model were: $\chi^2=117.87$, $df=75$, $p<.001$, $GFI=.94$, $NNFI=.98$, $CFI=.99$, $IFI=.99$, and $RMSEA=.046$, indicating that the overall fit of the six construct confirmatory factor model to the data was acceptable. Furthermore, we assessed the discriminant validity of the construct measures using the criterion proposed by Fornell and Larcker (1981), which suggests that discriminant validity is supported if the average variance extracted exceeds the squared correlation between all pairs of constructs. All pairs of constructs met this criterion (see Table 1).

Table 1 Construct correlations and reliability measures (N=267)

Construct	1	2	3	4	5	6
1. Functional motives	1.00					
2. Social motives	.21**	1.00				
3. Psychological motives	.37**	-.02	1.00			
4. Trust	.33**	.19**	.28**	1.00		
5. Cognitive commitment	.32**	.36**	.18**	.43**	1.00	
6. Affective commitment	.36**	.40**	.37**	.48**	.47**	1.00
Mean	2.56	3.76	1.75	2.70	3.00	2.62
SD	1.15	1.13	.90	1.03	1.04	.94
V η	.81	.74	.82	.68	.66	.63
α	.92	.89	.90	.86	.79	.76
CR η	.93	.89	.90	.86	.79	.77

Note: SD = standard deviation, V η = average variance extracted [V η = $\sum \lambda_{\gamma i}^2 / (\sum \lambda_{\gamma i}^2 + \sum \epsilon_i)$], where V η = average variance extracted for η ; $\lambda_{\gamma i}$ = standardized loading for scale item γ_i , and ϵ_i = measurement error for scale item γ_i], α = coefficient alpha, CR η = composite reliability [CR η = $(\sum \lambda_{\gamma i})^2 / [(\sum \lambda_{\gamma i})^2 + (\sum \epsilon_i)]$], where CR η = composite reliability for scale η], ** p<0.01.

Analysis and results

The analysis is based on a structural equation modeling of 267 participants' motives and experiences in an online social networking community.

Table 2 Fit Indexes for Measurement Model and Structural Model (N=267)

Model	χ^2 (df)	RMSEA A	GFI	NNFI	CFI	IFI
Measurement model (CFA)	117.87 (75); p<.001	.046	.94	.98	.99	.99
Structural model	197.98 (81); p<.001	.074	.91	.96	.97	.97

RMSEA: root mean square error of approximation, GFI: goodness of fit index, NNFI: non-normed fit index, CFI: comparative fit index.

Table 3 Summary of the hypotheses testing (N=267)

H#	Relationship	Coefficient	t-value	p-value	Support
H1	Functional motives \rightarrow Trust	.28	4.00	<.001	Yes
H2	Social motives \rightarrow Trust	.19	2.92	<.01	Yes
H3	Psychological motives \rightarrow Trust	.23	3.26	<.01	Yes
H4	Trust \rightarrow Cognitive commitment	.27	2.87	<.01	Yes
H5	Trust \rightarrow Affective commitment	.62	8.16	<.001	Yes
H6	Affective commitment \rightarrow Cognitive commitment	.44	4.27	<.001	Yes

The confirmatory factor analysis (CFA) shows that functional, social, and psychological motives are valid antecedents of trust and commitment in the online social communities (Table 2). Functional motives has a direct positive relationship to trust ($\beta=.28$; $t=4.00$; $p<.001$). Similarly, social motives has a direct positive relationship to trust ($\beta=.19$; $t=2.92$; $p<.01$). Furthermore, psychological motives has a direct positive relationship to trust ($\beta=.23$; $t=3.26$; $p<.01$). Taken together, these elements explain 24% of the variance in the trust construct of the model. Moreover, trust, measured in terms of reliance towards stakeholders of the community, has positive effects on both cognitive commitment ($\beta=.27$; $t=2.87$; $p<.01$) and affective commitment ($\beta=.62$; $t=8.16$; $p<.001$) to the community. In addition, affective commitment has a direct positive relationship to cognitive commitment ($\beta=.44$; $t=4.27$; $p<.001$). These results are summarized in Table 3. The model explains 41% of the R² of cognitive commitment and 39% of that of affective commitment.

The results show that participants in communities evaluate the community through three distinct motivational dimensions: functional, social, and psychological. Moreover, the analysis suggests that trust has an important role in the members' cognitive and affective commitment to the community. A contribution of this finding to the extant literature on community development is that trust can be understood as a relationship of reliance on action towards a community. Furthermore, trust can be seen as an action that involves a voluntary transfer of resources (physical, financial, intellectual, or temporal) from the participant to the community. Finally, it should be noted that a time lag may exist between trust and commitment, which can be observed in the participants' behavior.

Conclusions: Lessons from the two studies

Study 1 and 2 together increase our understanding of the dynamics as well as the structure of trust and commitment building social networks (see Figure 2). The findings from Study 1 indicate that trust and commitment are multi-dimensional constructs and their evolution in a social network is dynamic and complex. There may be trust at the beginning, and this trust may erode or increase through specific events and due to various mechanisms. Based on Study 1 we divide trust into initial and evolved trust, and we suggest that evolved trust is needed for commitment building.

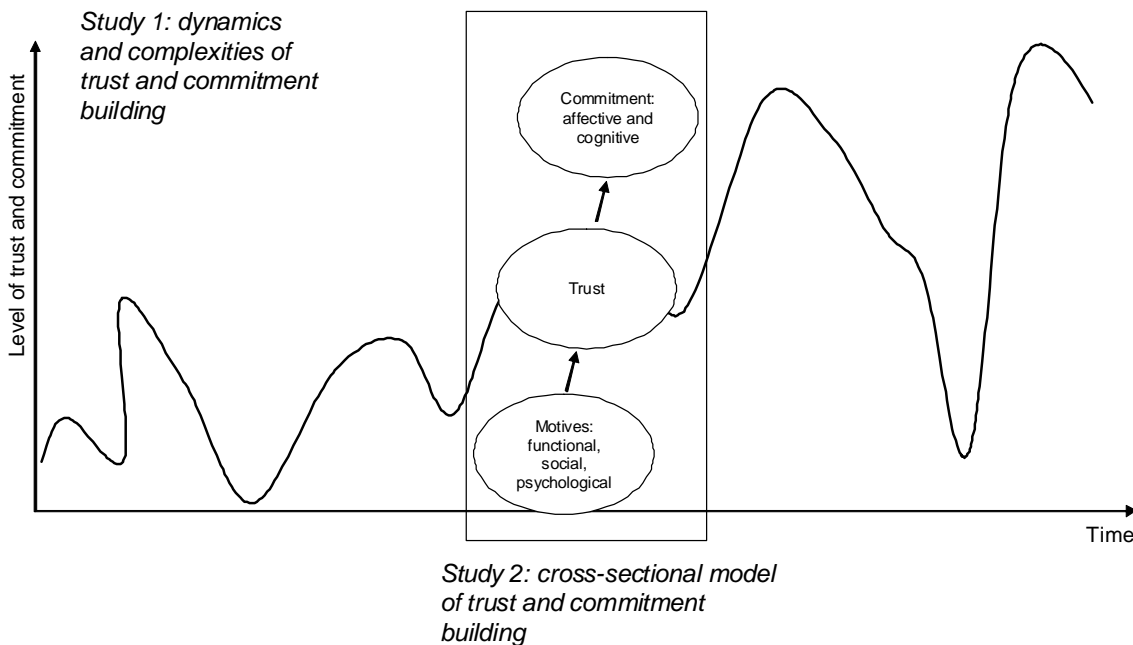


Figure 2 Modeling the dynamics of trust and commitment building

In Study 2 we investigated motives as the antecedents of arousal of trust and commitment. Congruent with studies by Ximena and Agnew (2001) and Gupta and Kim (2007), our results show that commitment in social networks is two-folded; cognitive and affective. Cognitive commitment is caused by utilitarian motives, whereas affective involvement is drawn upon emotional and value-expressive motives (Park and Young, 1983). Finally, the results show that the motives to participate in social networks consist of functional, social, and psychological elements. However, our quantitative survey was cross-sectional. Therefore, further research should investigate these antecedents through follow-up surveys to examine the possible dynamics of these motives.

The two studies strengthen the view of Hunt and Morgan (1994b) that trust and commitment are inseparable elements of network participation. Mixing two very different methodologies, we are able to simultaneously reveal both the structure and the dynamics of trust and commitment building. This reveals new avenues to deepen our insights into this research area. Cross-sectional modeling will help us to understand specific networking situations, but we need to understand also that these models change dynamically in time. A model that works in one situation may not work in others. We need further research on trust and commitment building in networks that combines explorative, processual research and series of cross-sectional quantitative modeling.

References

- Ajzen, I. & M. Fishbein, (1980). *Understanding Attitudes and Predicting Social Behavior*. New Jersey: Englewood Cliffs.
- Ajzen, I. (1991). "The Theory of Planned Behavior." *Organizational Behavior & Human Decision Processes*, 50, 179–211.
- Davis, F. D., Bagozzi, R. P., & Warshaw. P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982-1002.
- Fornell, C. & Larcker, D.F. (1981). "Evaluating structural equation models with unobservable variables and measurement error." *Journal of Marketing Research*, 18(1), 39-50.
- Gangadharbatla, H. (2008). "Facebook Me: Collective Self-Esteem, Need to Belong, and Internet Self-Efficacy as Predictors of the iGeneration's Attitudes toward Social Networking Sites", *Journal of Interactive Advertising*, Vol. 8 No 2.
- Gulati, R., (1995) Does familiarity breed trust? *The Implications of repeated Ties for Contractual Choice in Alliances*, *Academy of Management Journal*; 38,1; 85-112
- Gummesson, E., (1991) *Qualitative Methods in Management Research*. Sage Publications, Inc. Us
- Greenberg, R., Wong-on-Wing, B. & Lui, G. (2008). "Culture and consumer trust in online businesses", *Journal of Global Information Management*, Vol. 16 No. 3, pp. 26-44.
- Greene, J.C., Caracelli, V.J., and Graham, W.F. (1989) "Toward a conceptual framework for mixed-method evaluation designs" *Educational Evaluation and Policy Analysis*, Vol. 11, Iss. 3, pp. 255-274.
- Hunt, S., D. & Morgan, R., M., (1994a) Organizational Commitment: One of Many Commitments or Key Mediating Construct? *The Academy of Management Journal*, Vol. 37, No. 6 (1994), 1568-1587
- Hunt, S., D. & Morgan, R., M., (1994b) Relationship Marketing in the Era of Network Competition. *Marketing Management*, Vol. 3 Issue 1, p18-28
- Houtz, L.E. (1995) "Instructional strategy change and the attitude and achievement of seventh and eight grade science students" *Journal of Research in Science Teaching*, 32(6), pp. 629-648.
- Inkpen, A., C. & Currall, S., C., (2004) The Coevolution of Trust, Control, and Learning in Joint Ventures. *Organization Science*, Vol. 15, No. 5, pp. 586-599
- Jarvenpaa, S.L., Knoll, K., Leidner, D.E., (1998). "Is anybody out there? Antecedents of trust in global virtual teams." *Journal of Management Information Systems*, 14 (4), 29–64.
- Koeszegi, S. (2004), "Trust-building strategies in inter-organizational negotiations", *Journal of Managerial Psychology*, Vol. 19 No. 6, pp. 640-660.
- Laaksonen, T., Pajunen, K. & Kulmala, H., (2008) Co-evolution of trust and dependence in customer–supplier relationships. *Industrial Marketing Management*, Nov2008, Vol. 37 Issue 8, p910-920
- Luhmann, N., (2000) Familiarity, Confidence, Trust: Problems and Alternatives, in Gambetta, Diego (ed.) *Trust: Making and Breaking Cooperative Relations*, electronic edition, Department of Sociology, University of Oxford, chapter 6, pp. 94-107
- Lewin, K., (1948) *Resolving Social Conflicts: Selected Papers On Group Dynamics*. New York: Harper & Row. Cited in Drummond, J., S., & Themessl-Huber, M., (2007) *The Cyclical Process of Action Research: The Contribution of Gilles Deleuze*. *Action Research*. 5;430-448
- Lewis, J.D. and Weigert, A. (1985). "Trust as a social reality", *Social Forces*, Vol. 63 No. 4, pp. 967-985.
- Lin, H-F. (2008). "Determinants of successful virtual communities: Contributions from system characteristics and social factors." *Information & Management*, Vol. 45, pp. 522-527.
- Mayer, R., Davis, J., & Schoorman, D., (1995) An Integrative Model of Organizational Trust. *The Academy of Management Review*. Vol. 20, No3. 709-734
- McNiff, J. (1995). *Action research: principles and practice*. London: Routledge.
- McEvily, B., Perrone, V., & Zaheer, A.,(2003) Trust as an Organizational Principle. *Organizational Science*, Vol 14, No 1, pp. 91-103
- Miller, K. D., Fabian, F. and Lin, S.-J. (2009). "Strategies for Online Communities." *Strategic Management Journal*, Vol. 30, pp. 305-322.
- Morgan, R., M., & Hunt, S., D., (1994) The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, Jul94, Vol. 58 Issue 3, p20
- Morton, A., (1999) Ethics in Action Research. *Systemic Practice and Action Research*. Vol. 12, No, 2
- Möllering, G., Bachmann, R. & Lee, S.,(2004) Understanding Organizational Trust – Foundations, Constellations, and issues of Operationalisation. *Journal of Management Psychology*. Vol 18, No 6. 556-570

- Naude, P. and Buttle, F. (2000). "Assessing relationship Quality, *Industrial Marketing Management*, Vol. 29, pp. 351-361.
- Ridings, C. M. and Gefen, D. (2004). "Virtual Community Attraction: Why People Hang Out Online", *Journal of Computer-Mediated Communication*, Vol. 10, (1).
- Ridings, C. M., Gefen, D. and Arinze. B. (2002), Some antecedents and effects of trust in virtual communities, *Journal of Strategic Information Systems*, Vol. 11, (3-4), pp. 271-295.
- Ring, P., & Van Den Ven, A., (1992) Structuring Cooperative Relationships Between Organizations. *Strategic Management Journal*, Vol 13. 483-498
- Sarker, S., Valacich, J.S. and Sarker, S. (2003), "Virtual team trust: instrument development and validation in an IS educational environment", *Information Resources Management Journal*, Vol. 16 No. 2, pp. 35-55.
- Tashakkori, A., and Teddlie, C. (eds.)(2003) *Handbook of Mixed Methods in the Social and Behavioral Sciences*. Thousand Oaks, CA: Sage.
- Wellman, (1997) *An electronic group is virtually a social network*. In S. Kiesler Culture of the Internet. Lawrence Earlbaum Associates: Mahwah, NJ. 179-208
- Ximena, B.A. & Agnew, C.R. (2001). "Being Committed: Affective, Cognitive, and Conative Components of Relationship Commitment", *Personality and Social Psychology Bulletin*, Vol. 27, pp. 1190-1203.
- Yoo, W.S., Suh, K.-S. and Lee, M.B., (2002) Exploring the Factors Enhancing Member Participation in Virtual Communities, *Journal of Global Information Management*, Vol. 10, No. 3, pp. 55-71.
- Yoon, D., Cropp, F. and Cameron, G. (2002). "Building Relationships with Portal Users: The Interplay of Motivation and Relational Factors, *Journal of Interactive Advertising*, Vol. 3 (1), pp. 76-90.
- Zand, D., (1972) Trust and Managerial Problem Solving. *Administrative Science Quarterly*