

COMPUTER-MEDIATED COMMUNICATION, ORGANIZATIONAL STRUCTURE AND CLIMATE TO INCREASE COMMITMENT IN KNOWLEDGE SHARING PROCESS: A RESEARCH FRAMEWORK

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Abstract: This research presented a research framework to study the computer mediated communication, organizational structure and climate to growth effective commitment as an attitude in knowledge sharing process. Its starting by the exploration of organization commitment and importance, following by putting the computer mediated communication, organizational structure, and climate and put this three components as independent variable. Then, continue by exploring the dependent variable in this research is organizational commitment in knowledge sharing process. The result is a research framework of this area which can be used to explore an actual case in an organization in various industries.

Keywords: commitment, computer mediated communication, organizational structure, organizational climate, research framework

Abstrak: Penelitian ini menyajikan tentang kerangka penelitian untuk menganalisis komunikasi yang dimediasi oleh perangkat komputer dan internet (CMC) dalam kegiatan sharing pengetahuan pada suatu organisasi. Tujuannya adalah bagaimana membuat satu kerangka penelitian yang efektif dengan menjadikan CMC, Struktur organisasi, dan Suasana organisasi sebagai variabel bebas, dan komitmen organisasi dalam kegiatan berbagi pengetahuan (knowledge sharing) sebagai variable terikat. Hasil dari penelitian ini adalah suatu kerangka penelitian yang bisa dimanfaatkan oleh peneliti selanjutnya untuk kasus-kasus aktual pada organisasi-organisasi tertentu

Kata Kunci: komitmen, CMC, struktur organisasi, suasana organisasi, kerangka penelitian

1. Introduction

Commitment is necessary factor to achieve the aims of an organization. Commitment is contemplation of feeling, mind, necessity, and hope of individual. Organizational commitment is the member loyalty toward organization through goal acceptance, organization value, willingness and desire to endeavor to be a part of an organization. There are three types in organizational commitment: Affective commitment, continuance and normative (Meyer and Allen, 1997), where affective commitment is more effective measurement, than continuance and normative. Naturally, to growth of affective commitment of individual in an organization is not a simple work, hence needed some strategy of an organization to actualize it.

In general, organizational commitment is considered a useful measure of organizational effectiveness (Steers, 1975). In particular, “organizational commitment is a “multidimensional construct” (Morrow, 1993). It has the potential to predict organizational outcomes such as performance, turnover, absenteeism, tenure, and organizational goals” (Meyer & Allen, 1997). In this research, the

aspect of organizational commitment, especially affective commitment of organization member will measured toward knowledge sharing process as one of organization goals.

Knowledge is the important resources of the property of organization in today's knowledge-intensive economy. It is intangible, and should be managed in special way (Xu, et al., 2006), in order the knowledge keep exists in an organization. Therefore, the organization gives the extra effort to carry out the process of knowledge management, such as the process of excavations, development, utilization, maintenance and sharing of knowledge for competitive advantages, where the knowledge sharing process is most complex and important.

The difficult thing in the knowledge sharing process is how to increase awareness and the willingness of workers to share their knowledge in the interpersonal context or in the organizational context. The result is an affective commitment of the members, where it is an attitude in knowledge sharing process. This condition affected by some factor. First, the factor which exists in individual: their background, psychology, motivation, intention, and so forth. Second, the factor of organizational structure: the less concern of managerial trustworthy behavior, the less concern to another member within organization, and so forth. Third, the factor of the organizational cultures: the less of time to communicate in face to face situation, the less facilitating to share of knowledge, and the less mediated to make relationships among different level of knowledge member. In the other hand the knowledge sharing process in face-to-face way will spend a lot of time and need a place, while it can't be sure that the result will effective and optimal.

Based on this view, the utilization of Computer-Mediated Communication (CMC) as tools of knowledge sharing process in the interpersonal context or in organizational context would seem necessary and interesting in an organization. By using of CMC the knowledge sharing process will taken place through virtual communication which cost-saving, time saved, wider range of, independent of time, and the information could be accessed anywhere and anytime. Likewise Organizational structure will influence to organizational effectiveness, and also its will impact to job satisfaction of organization member. The high of job satisfaction will effect to organizational commitment, especially the affective commitment of an organization member.

However, CMC use and Organizational structure couldn't identify the collective perceptions of member toward their organization respect to. Therefore, in this research will inquire whether the organizational climate fosters the affective commitment of member toward knowledge sharing process within an organization.

The main purpose of this research is to explore the relationships between CMC use, the organizational structures, the climate, and affective commitment of the organization members. In order to provide an answer to this research purpose, then the purpose divided into the following sub purposes:

1. To explore the relationship between CMC use and affective commitment in knowledge sharing process
2. To explore the relationship between Organizational structure and affective commitment of organization members in knowledge sharing process
3. To explore the relationship between organizational climate and affective commitment in knowledge sharing process

4. To explore the relationship between knowledge sharing process and affective commitment.
5. To examine whether the affective commitment will influence to knowledge sharing process in an organization.

2. Literature Review

2.1 Organizational Commitment

In an organization, the personal commitment toward organization is an important issue. Organizational commitment has been defined as an individual's dedication and loyalty to an organization (Cohen & Kirchmeyer, 1995; Meyer and Allen, 1997). It is viewed as an important variable in facilitating the understanding of a member workplace behavior (Bateman & Strasser, 1984). Organizational commitment will effect to top management goals and value (Reicher, 1986). Likewise, the quite a number of studies (for instance, Hislop, 2002; Jarvenpaa and Staples, 2001; Kelloway and Barling, 2000; Scarbrough, 1999; Smith and McKeen, 2002) point towards commitment to the organization as an important variable in explaining knowledge sharing. In this case the commitment substance is one of condition which needed in knowledge sharing process as an attitude of organization member. For deepen our understanding about the individual commitment toward an organization, and its impact in knowledge sharing process, will explained in this part.

Porter (Mowday et al., 1982) defined the organizational commitment as the relative strength of an individual's identification with, and involvement in a particular organization. It is will showed with: the acceptance toward and organization value and goals, the willingness and readiness to doing the great effort for organizational importance, and the desire to keep the membership in an organization (be a part of an organization).

In the other hand, Steers et al. (1985) proposed organizational commitment as an identification of feeling (the belief of organizational value), Involvement, loyalty. Steers argue that organizational commitment is the condition where an individual interest toward goals, values, and target of an organization. The commitment toward organization is more than formal membership. It is including an attitude which full concern to organization and the willingness to making the high effort to organization importance to reach of organization goal.

A useful distinction between different forms of commitment is presented by Meyer and Allen (1997) who distinguish three different kinds of commitment:

- Affective commitment is related to identification and involvement with the organization and the feeling of emotional attachment to the organization.
- Continuance commitment is created by the high costs associated with leaving the organization.
- Normative commitment is related to a feeling of obligation towards the organization, and creates a feeling that ought to continue employment.

As Meyer and Allen (1997) argue that affective commitment is positively related to individuals' willingness to commit extra effort to their work, this kind of commitment that can be expected to be related to willingness to donate and receive knowledge (Van Den Hoof & Leeuw van Weenen, 2004). According to Meyer and

Allen (1997), then in this research will explore the achievement process of affective commitment in knowledge sharing process with involve CMC, Organizational Structure, and Climate in knowledge sharing process, like showed by figure 1.

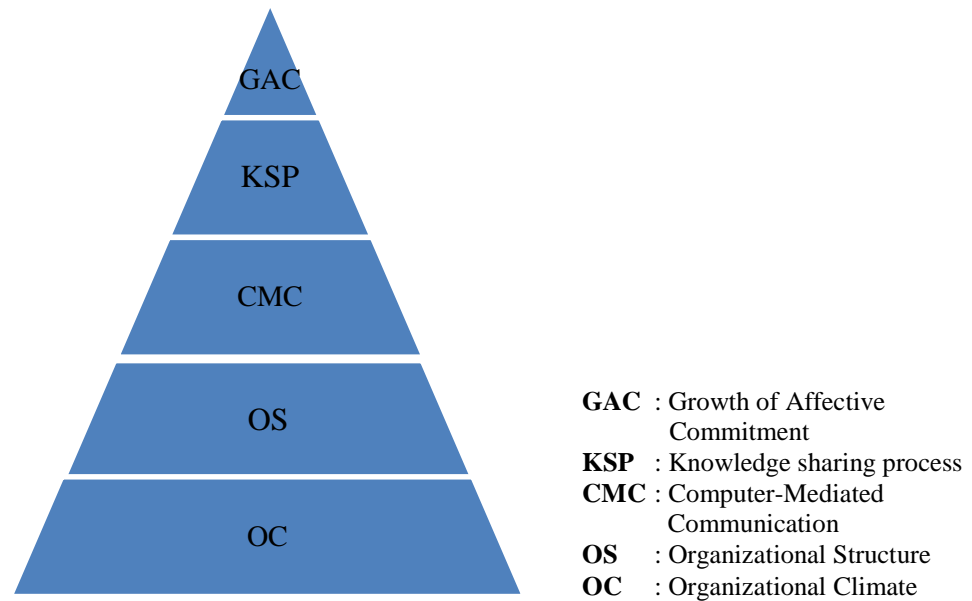


Figure 1. The Explanation Framework

2.2 The Knowledge Sharing Process

Knowledge sharing process is the behavior of communicating, disseminating, and assimilating process among individual or organizational members through face-to-face interaction or virtual interaction for acquiring knowledge from the other member within the organization. According to Weggeman (2000) and Van den Hoof & Van Weenen (2004) in Zheng and Bao (2000), there are two form of knowledge sharing process: donating knowledge (communicating to others what one's personal intellectual capital is) and collecting knowledge (consulting colleagues in order to get them to share their intellectual capital). But, some researcher points that knowledge sharing is one dimension (Fernie et al., 2003; Hendricks, 1999). In this research will consider knowledge sharing as one dimension and will focus on some factor which influential in process of knowledge sharing.

Knowledge sharing concerns the willingness of individuals in an organization to share with others the knowledge they have acquired or created (Gibbert and Krause 2002). The sharing can be done directly via communication or indirectly via some knowledge archive (Bock et al., 2005). The directly and indirectly the knowledge sharing process enable to share the explicit knowledge and the tacit knowledge, where directly communication to share the tacit knowledge and the indirectly via archive to share the explicit knowledge. Explicit knowledge refers to the knowledge that is transmittable in formal, systematic language. It can be shared by forms of data, scientific formulas, specifications, guide books, and etc, the tacit knowledge is highly personalize, which makes the harder to formalize, communicate or share with the others (Xu et al., 2006).

Davenport and Prusak (1999) define knowledge as a fluid mix of framed experience, values, contextual information, and expert insight that provides a

framework for evaluating and incorporating new experiences and information. They note that in organization, knowledge often becomes embedded not only in documents but also in organizational routines, processes, practices, and norms (quote by Kim and Lee, 2004). Therefore this research concerned to some factor to optimize the knowledge sharing process such as CMC use, organizational structure, and organization climate to growth an affective commitment of organization members.

With the existing of common share among organization member will impact to member's attitude which more concern to organization, and will emerge an awareness of member of organization advantage for them. Likewise, the organization member will more realize that the organization needs their existence within organization, with the result will growth an affective commitment of organizational members to share their knowledge continuously.

2.3 Computer Mediated-Communication

In interpersonal communication needed the arrangement process of information exchange based on the ability of member to understand the capabilities of another member to communicate within organization. This process can be influence by CMC which was design for supporting the interpersonal communication. CMC offers unique opportunities to overcome barriers of space and time (Hammer and Manguiran, 1987; Dimmick et. al., 2000). The influence of CMC on knowledge sharing has been the subject of much research, but the general view is that its value for knowledge sharing limited (Hinds and Pfeffer, 2003; Husyman and de Wit, 2002).

On the other hand, CMC has a number of characteristics, such as anonymity (Postmes et al., 1998), lack of social cues (Kiesler et al., 1984) and absence of status differences (Weisband, Schneider and Connolly, 1995), which have potentially interesting consequences for knowledge sharing process (Van den Hoof and Leeuw van Weenen, 2004).

In this research will used an asynchronous tools such as email and discussion forums, and synchronous tools such as text-based chat. Asynchronous tools have been viewed as affording greater opportunity for reflection on one's own ideas, as well as on comments made by others (Hough, Smithey, & Evertson, 2004; Meyer, 2003), although findings in this area are inconclusive (DeWert, Babinski, & Jones, 2003; Hough et al., 2004; Stephens & Hartmann, 2004). Asynchronous forums have some drawbacks, however. Posts may be lengthy and time-consuming to read. Conversations are slower than in real time and may involve hours or days of lag time, making it difficult for participants to remain engaged (Levin et al., 2004; Rourke & Anderson, 2002). Therefore, Synchronous text-based chat tools provided as an alternative to asynchronous discussion forums and email. Synchronous communication provides place-independent opportunities for conversation, although it is not time-independent because participants must be logged in at the same time. Text-based chat conversations can be more incoherent than those in asynchronous forums; there is no overt threading, and exchanges are often interleaved (Cox, Carr, & Hall, 2004; Herring, 1999; Pena-Shaef, Martin, & Gray, 2001). Chat tools are often used to engage in less formal, more interactive conversations and thus have been viewed as more appropriate for the social aspects

of distance courses, whereas asynchronous tools have been considered more useful for serious discussion (Davidson-Shivers et al., 2001; Im & Lee, 2003-2004; Ingram, Hathorn, & Evans, 2000; Motteram, 2001; Pena-Shaef et al., 2001).

The utilization of both CMC tools will leads to more collective behavior of organization members. As knowledge sharing is also collective behavior, in this sense that an individual who share their knowledge contribute to the collective intellectual capital of an organization (Van den Hooff & Leeuw van Weenen, 2004).

2.4 Organizational Structure

The organizational structure in this study according to Kim and Lee (2004) proposed that there are three dimension of the organizational structure such as centralization, formalization, and performance-based reward systems.

2.4.1 Centralization

Centralization refers to the extent to which the decision-making power is concentrated at the top management level in the organization (Alexander and Bauerschmidt, 1987; Hage and Aiken, 1967). Decision making power on knowledge issues is best delegated to the owner of the relevant knowledge (Jensen & Meckling, 1992). The centralization in knowledge sharing is the accumulation process of individual knowledge in the knowledge repository. Knowledge is produced and evaluated by individual. It is then contributed to a central repository of knowledge (Matteo et. al., 2006). For then forward it to the other members within organization.

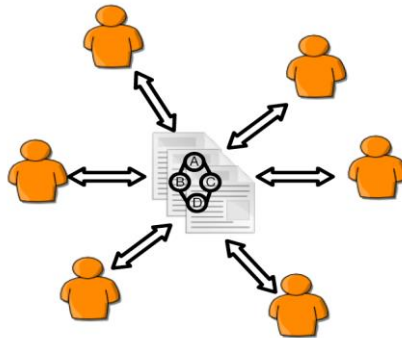


Figure 2. The Centralization in knowledge sharing process

2.4.2 Formalization

Formalization indicates the extent to which the rights and duties of the members of the organization are determined and the extent to which these are written down in rules, procedures, and instructions (Schminke et al., 2000). Formalization is again ineffective to reach integration from a knowledge sharing point of view (Van den Bosch, Volberda, & de Boer, 1999). In the formalization process, assembled knowledge will be systematically classified, grouped, indexed and stored by using the existing tools. In this case the CMC used as the tools.

2.4.3 Performance-based reward system

The reward system needed to growth the performance of worker in knowledge sharing process. Leonard (1995) argues that organizational reward systems can determine how knowledge is accessed and how it flows in organizations. Xu et. al. (2006) propose that an organization should be pay attention to the factors facilitating knowledge sharing, deeply understand members' attitudes toward knowledge sharing, and encourage them to share knowledge. The incentive systems should be in place to promote employees' motivation for taking the time to generate new knowledge (i.e., learn), share their knowledge, and help others outside their own divisions or functions (Argote & Eppele 1990; O'Dell & Grayson, 1998).

2.5 Organizational Climate

Sociologists see social action as largely governed by institutional structures, e.g., social norms, rules, and obligations (Cohelman 1988, quote by Bock et. al., 2005). According to McMurray, Scott & Wayne (2004) which they quote from the several research, Organizational climate may defined as "members' collective perceptions about their organization with respect to such dimensions as autonomy, trust, cohesiveness, support, recognition, innovation and fairness ..." (Moran & Volkwein, 1992; see also Koys & DeCotiis, 1991; De Cock, 1986; James & Jones, 1974).

The willingness and the awareness to share the knowledge in personal context or in organizational context will emerge from some dimension of organizational climate. The dimension of organizational climates in this research is adopted from Bock et al (2005). They propose that there are three organizational climate factors for knowledge sharing which have aligned well with the contextual factors in prior literature: Fairness (a trusting climate), innovativeness (a climate that is tolerant of failure and within which information freely flows), and affiliation (a climate characterized by pro-social norms).

3. Research Methodology

The exploration toward various literature and preliminary research was carry out to have better understanding regarding with organization commitment, computer mediated communication, organizational culture, organizational climate and also knowledge sharing process. Then, based on the research purpose, the result presented as a research framework to study the similar topic in actual cases.

4. Data Collection Methods

The data collection in this research using the documentation methods from the exploration result from various resources. Then the result studied and analyzed and used to support the research finding.

5. Result and Discussion

The Research Framework

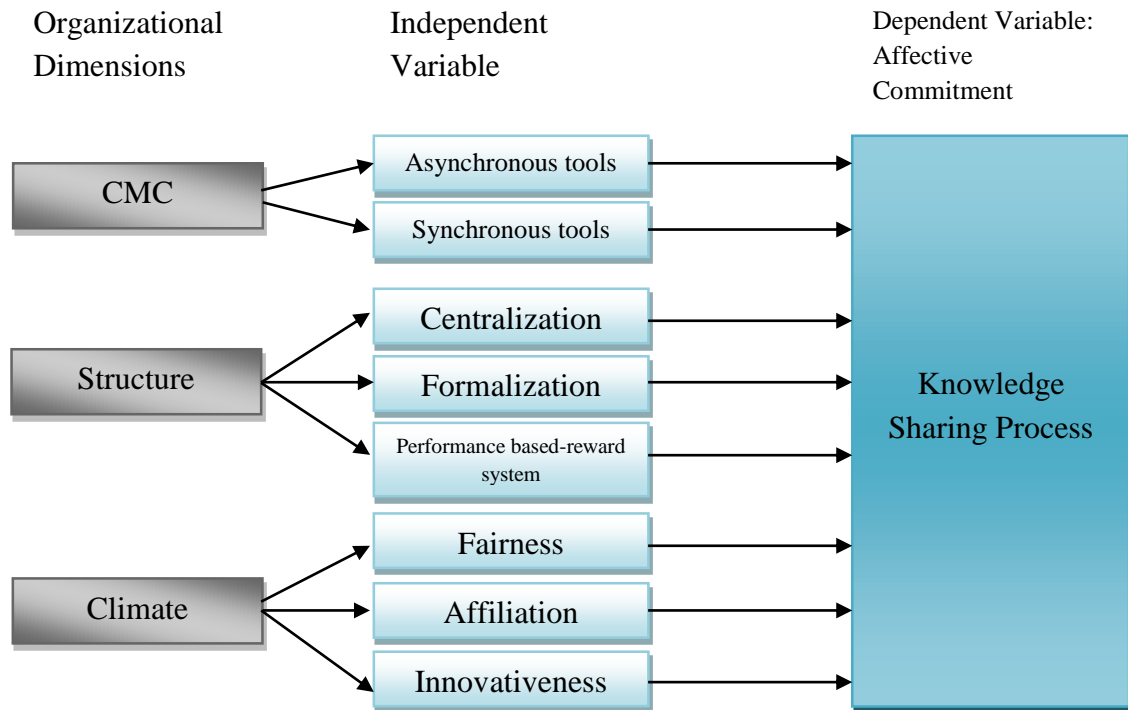


Figure 1. Research Framework

The result showed that the organizational dimensions that can be measured in the framework are computer mediated communication with two dimension such as asynchronous tools and synchronous tools. Then, three dimensions of organizational structure will effectively support the framework such as centralization, formalization, and performance-based reward system. For the organizational climate constructs will used three parameters such as fairness, affiliations, and innovativeness.

As dependent variable in this research is used the commitment in knowledge sharing process within the organization. This research will support effective commitment goal as shown in figure 2.

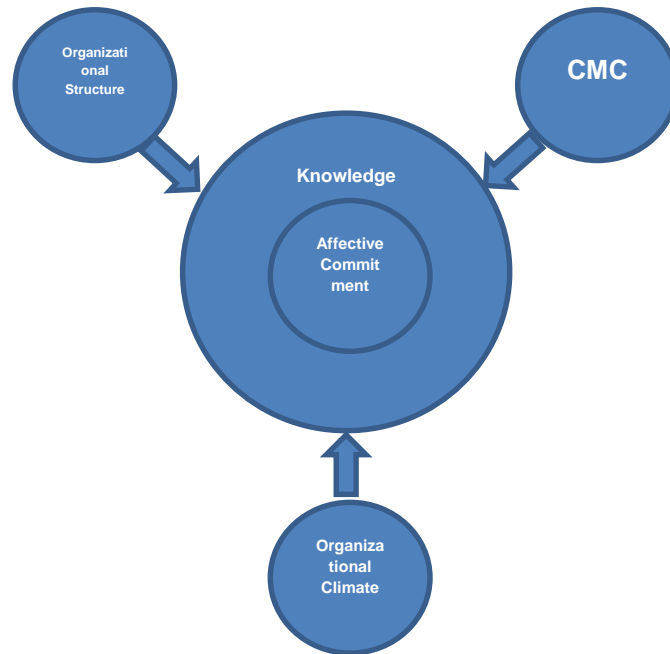


Figure 2 Research Goals
Source: Kim & Lee (2004)

Organizational goal to increase human commitment to share their knowledge and ability within the organization can be obtained by analyzing precisely such component such as organizational structure dimensions, computer mediated tools and methods, as well as organizational climate.

6. Conclusion and Recommendation

6.1 Conclusion

Organizational commitment in knowledge sharing process can be analyzed by using a research framework with three organizational dimensions such as computer mediated communication, organizational structure, and organizational climate as independent variable. The research framework can be used in various organization or industries.

6.2 Recommendation

This research framework carried out by using the literature and preliminary research toward related references only. The others research methods can be used to get similar or unsimilar result. Another proved methods is by determine an actual experiment in the organization.

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