วารสารราชพฤกษ์
Rajapark Journal (ISSN: 1905-2243)
ปีที่ 16 ฉบับที่ 45 มีนาคม – เมษายน 2565 – TCI กลุ่มที่ 1 มนุษยศาสตร์และสังคมศาสตร์ ปี 2564–2567

Interaction between Management and Knowledge Workers in Knowledge Processes: An Integrated View Combining both Consensus–based Perspective and Dissensus–based Perspective

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Received February 24, 2022; **Revised** March 31, 2022; **Accepted** April 5, 2022

Abstract

This paper aimed to explore knowledge management activities used by organizations and knowledge workers' responses to these management activities based on an integrated view combining both consensus–based perspective and dissensus–based perspective. A total of 30 semi–structured interviews were conducted with software programmers and their managers. A thematic analysis approach was adopted to analyze the qualitative data. The findings reflected that management wished to remove the potentially risky exercise of initiative to secure the quality of work through directive procedures. However, knowledge workers needed to follow these directive procedures in order to smooth the completion of their work, at the same time, they occasionally conflicted with managers' proceduralising of their work by developing context–related solutions in order to better deal with possible unexpected situations. Thus, interaction between management and knowledge workers in knowledge processes was neither an outcome of unconditional consensus nor absolute dissensus but a consensus–based antagonism process.

Keywords: knowledge management activities; consensus–based perspective; dissensus–based perspective; qualitative research

Introduction

Dissensus arguably has a significant influence on the dynamics of knowledge processes in organizations, but the discussion of dissensus is typically marginalized in the mainstream knowledge management literature. This typical neglect is largely due to the premise assumption of goal congruence and shared value in business organizations, which assume that management and knowledge workers in knowledge processes share a common interest (Fox, 1985) . Such conceptualizations approach the relationship between management and knowledge workers in a way that tends to be harmony and consensus, but ignore the antagonism may also be an unavoidable element (Pfeffer, 1992; Hales, 1993; Kärreman, 2010). As Ezzamel et al. (2004) points out, organizations are essentially made up by group of people whose interests are not always consistent, in order to fully understand the impact of antagonism on the interaction between management and knowledge workers in knowledge processes, it is necessary to employ a dissensus–based perspective.

In regards to this emerging area of research, scholars have conducted significant inquires. For example, Schultze and Stabell (2004) discuss a dissensus–based perspective on social order in their framework of knowledge management research and assume that antagonistic relations are an inherent feature of social dynamics both in business organizations and in society more widely. Sewell (2005) draw on a dissensus–based perspective to articulate that workers and managers are likely to have competing interests, and that a key part of the struggle produced by the conflict is the process via which management attempt to control how workers think and act through discursive strategies. Scarbrough (2010) analyses the emergence and management of knowledge worker groups based on a dissensus– based view and reflects that the conflict is embodied in tension between occupational and administrative principles, professional and managerial norms, and long–run innovation and short–term efficiency. Kundi and Badar (2021) examine how interpersonal conflict at work might enhance employees' propensity to engage in counterproductive work behavior based on a dissensus– based view. Although considerable achievements have been made based on a dissensus– based perspective, many questions remain unanswered. For instance, " Can the dissensus– based perspective explains all the antagonistic phenomenon between management and

knowledge workers in knowledge processes?", "If not, how should we learn and understand the antagonism between management and knowledge workers?", and "Is there any mechanism embedded in these interactions we could follow?".

Objective

In order to answer these questions above, this paper is the first to employ an integrated theoretical view combining both the consensus–based perspective and the dissensus–based perspective, and conducts an in–depth analysis of the knowledge management activities used by the organizations and their knowledge workers' response to these knowledge management activities in their everyday working practices through the qualitative investigation of the selected research objects. Therefore, this study adds to the growing body of literature by focusing on the following question:

RQ: What are the knowledge management activities used by the organizations? And how do knowledge workers respond to these management activities in their everyday working practices?

The Scope of Research

The scope of the research is limited to conducting 30 semi–structured interviews with software programmers and their managers who 'hide' in the wider population via contacting them directly or via peers. This recruitment period lasted for 5 months. Each participants to this study have been asked to participate an interview lasted for an hour to 90 minutes in order to explore the meanings and contexts behind of phenomenon. The following sections cover literature review, methodology, data analysis of empirical results, and finally the conclusion, discussion, suggestion and new knowledge of the study.

Literature Review

Knowledge management

Knowledge management is a series of organized processes that aim at efficient and effective management of organization's most valuable resource – knowledge (Alavi and Leidner, 2001; Hislop,

2010). This goal requires systematic management on the establishment and maintenance of knowledge repositories, the facilitation of knowledge sharing and the optimization of knowledge application. This debate surrounding knowledge management characterized by two broad understandings of knowledge – the objective perspective and the practice–based perspective. The objective perspective considers knowledge as a separate entity that can be collected, codified and stored in repositories which allow people to access and re–use for further tasks or projects (Nonaka, 1994; McAdam and McCreedy, 2000; King and Marks Jr, 2008; Marabelli and Newell, 2014; Hartmann and Doree, 2015; Newell, 2015). Hence, this is a very technical perspective and focuses on the selection and deployment of the right knowledge management technologies to managing the organizational unique resource. By contrast, the practice–based perspective sees knowledge as a know–how which embodied in human beings or action and context–specific, cannot be fully externalized or codified. Therefore its management focuses on facilitating interpersonal knowledge sharing and interaction (Gherardi and Strati, 2012; Nicolini, 2013; Marshall, 2014; Orr et al., 2016; Tooman et al., 2016). This requires establishing a trusted organizational culture which facilitates knowledge sharing among organizational members and where employees' value is not only appreciated based on their financial productivity but also their contribution to enrich knowledge stock.

These two perspectives that have significant impact on how we understand knowledge and its management has however been criticized by some scholars due to their apparent deliberate focus on a consensus–based orientation to knowledge processes in organizations, which assume harmonious social relations and consensus, but ignore the antagonistic nature between management and workers in knowledge management practices (Pfeffer, 1992; Hales, 1993; Wenger, 1998; Contu and Willmott, 2003; Schultze and Stabell, 2004; Hislop et al., 2018). As a result, on the one hand, in order to serve managerial and shareholder own interest, organizations continually attempt to control all knowledge relevant to the labor process. On the other hand, knowledge workers tend to pursue a high degree of autonomy and professional freedom and thus almost ill–disposed to accept such control (Contu and Willmott, 2003). Thus, management and knowledge workers are regarded as two polarities of the antagonism. Their interests in knowledge processes is opposite and conflicting (Ezzamel et al., 2004).

Consensus–based perspective and dissensus–based perspective

Traditional understanding of the consensus–based perspective is based on the sociology of regulation which posits that society tends towards an ideal state of integration, equilibrium and order (Deetz, 1996). This perspective proposes harmonious, communal goals and shared value with regard to the social order, where existing social relationship is regarded as unproblematic and where challenging them is not considered (Alvesson and Deetz, 1996; Wenger, 1998). Following this perspective, a significant amount of works in the knowledge management literature regards the management and control of knowledge, knowledge work and knowledge workers through directive procedures and regulations has been considered as absolutely right, positive and progressive, and unquestioningly benefiting all organizational members. Knowledge database is exemplary of knowledge management endeavors in that it extracted workers' know–how to optimize standardized quality and facilitate further use.

However, some scholars argue that such perspective heavily bears a preference of management and shareholders, which ignores that knowledge workers' interests on keeping a high degree of autonomy and professional freedom, and the control is no longer the province of management alone (Ezzamel and Willmott, 1998; Sewell, 1998). While knowledge workers use their knowledge towards the achievement of organizational goals, what, when and how to use knowledge is fundamentally the knowledge workers' decision rather than their employer's, and what they decide and how they use may not always be in line with what the management expects.

Thus, different from the consensus–based perspective, a dissensus–based perspective argues that unanimous agreement between management and knowledge workers is very difficult to be achieved. It is because that knowledge is never neutral or value–free resource, in the hands of the powerful class, it is a tool of domination, whereas in the hands of the underprivileged, it is a tool of emancipation. Thus, knowledge workers and management as knowledge's holders are two polarities of the contradiction, and their interest in knowledge processes is not consensual but dissensual (Ezzamel et al., 2004; Schultze and Stabell, 2004). This argument highlights the potential tension between knowledge workers and the organization they work for over who owns and controls the knowledge, which implies that organizational knowledge processes partly produce conflict and

this conflict is unavoidable in such processes (Smith and Willmott, 1991; Ezzamel and Willmott, 1998; Sewell, 1998). Only when a dissensus–based perspective is employed to study the interaction between knowledge workers and management, we could learn and understand it better.

However, this does not mean an absolute antagonism between management and knowledge workers in knowledge process from the begin to the end. On the contrary, in order to maintain the job security and smooth the completion of work, most of the time the compromise between two parties is also very essential. Thus, this paper employs an integrated view combining both the consensus–based perspective and the dissensus–based perspective to investigate the knowledge management activities used by the organizations and their knowledge workers' response to these management activities in their everyday working practices to discover the 'puzzle' of how management and knowledge workers interact with each other in knowledge processes.

Methodology

Research method

When it comes to answering the questions of 'how' and 'what', a qualitative research approach possesses great advantages (Yin, 2014), allowing us to conduct an in–depth analysis of typical cases and explore the meanings and contexts behind of phenomenon (Eisenhardt and Graebner, 2007). In addition, the qualitative research approach allows the researchers to examine the contemporary phenomenon by collecting rich data from multiple sources to generate theory (Yin, 2014). Finally, in the existing literature, the qualitative research design is often used in the research on knowledge workers and their managers. As such, this study employs this method to collect and analyze the qualitative data.

Sample and data collection

This paper is based on the study of software programmers and their managers who work across a range of organizations. The reason that managers and knowledge workers in the software development industry were selected as the focus of this research is because that, firstly, software development job requires practitioners equips with high level of computing knowledge to develop

new products or services. Their daily works involve lots of knowledge application, sharing and creation. Secondly, software programmers as knowledge workers tend to pursue a high level of autonomy on their job. On the other side, management prefers to tighten the 'reins' to ensure their employees doing what their considered as 'necessary'. Thus, the tension between management and knowledge workers is the perfect case to explore the conflict between two parties. Finally, software development industry is one of the favoured research targets for knowledge management scholarship.

A mixture of sampling techniques including both purposive and snowball sampling were adopted to expand my network and trace software programmers and their managers who 'hide' in the wider population via contacting them directly or via peers (Biernacki and Waldorf, 1981; Eisenhardt and Graebner, 2007; Bryman, 2008). The use of multiple methods developed a comprehensive understanding of phenomena and increased the reliability and validity of the qualitative data analysis. A total of 30 semi–structured interviews were conducted. Interviews lasted for an hour to 90 minutes and were recorded with the consent of the participants and subsequently fully transcribed (Rubin and Rubin, 2011). The extracts presented in this paper are taken from the original transcripts and the names of the participants are all replaced with pseudonyms to preserve their anonymity.

Data analysis

A thematic analysis approach was adopted (Stake, 1995; Yin, 2014). All data was analyzed by reading the transcripts again and again to understand the meaning of data, generating initial codes, grouping component parts into different categories which seem to indicate potential thematic relationships, and then review, define and name the themes to produce a result (Rice and Ezzy, 1999; Braun and Clarke, 2006). The process of theory development and the process of data analysis were incremental and iterative, respectively (Eisenhardt, 1989; Miles and Huberman, 1994; Myers and Newman, 2007). In this way, the data can be displayed in a more clear and systematic form which helps my understanding of rich and complex points of view and addresses my research question. The next section presents the findings from the investigation, with regard to the knowledge

management activities used by the organizations and their knowledge workers' response to these management activities in their everyday working practices.

Empirical Results

In this study, through the sentence–by–sentence coding to achieve initial conceptualization of the raw data (Glaser and Strauss, 1967), a total of 31 sentences and 26 concepts were obtained; the 26 concepts appearing in the coding were then merged with concepts in the same category, and 9 sub–categories were eventually obtained. The coding analysis is presented in Table I, Table II, Table III and Table IV.

Through in–depth analysis of the relationships among the sub–categories, significant differences were discovered in the classification. Firstly, "Management practices of knowledge codification", "Formal knowledge sharing mechanisms" and "Strengthen the control on knowledge application", these three sub–categories in Table I clearly reflected that management actively set a series of rules and regulations in play to facilitate the implementation of knowledge work, control employees' action, accelerate project progress and avoid mistakes. This reflects a certain Taylorism in knowledge management which emphasizes that workers cannot be trusted to use their own know–how for the good of the organization (Taylor, 1912). Everything has to be standardized and under control in order to prevent the emergence of mistakes caused by critical subjectivity or individuals' capacity to act autonomously (Ezzamel and Willmott, 1998; Gratton and Ghoshal, 2005). Acquisition and codification of knowledge stemming from software development processes and packaged into the form of 'best practice' to guide further projects is exemplary of the knowledge management activity employed by the organization to optimize employees' operating processes and improve the productivity.

Secondly, "Follow management rules and support knowledge codification", "Actively participant in formal knowledge sharing mechanisms" and "Shorten product–to–customer time via the application of existing knowledge, which clearly follows a preference of management", these three sub–categories in Table II clearly reflected that employees are naturally uncomfortable with ambiguity and uncertainty and are therefore susceptible to control in organizations because they

need stability and security (Willmott, 1993). Facing complex situations in their everyday working practices, knowledge workers needed some kind of instructions to tell them what to do and how to do in order to prevent potential mistakes and ensure the quality of their works, otherwise, the security cannot be achieved. For example, following coding and commenting standards, using half-made technical frameworks and programs, and drawing on existing solutions and tricks in the knowledge database before developing a new one, it not only saves programmers' time and avoids 'reinventing the wheel', but also helps them to identify problems quickly and find appropriate solutions. Thus, keeping in line with management's demand and do not engage much in any form of explicit resistance can also be seen as beneficial for employees' own interest (Kärreman and Alvesson, 2009).

Thirdly, "Refuse to codify knowledge in database and keep their own competitiveness", "Distrust formal knowledge share mechanisms and develop better understanding through informal interaction" and "Keep autonomy and creativity in work", these three sub-categories in Table III clearly pointed out that just simply 'doing what is right' to fully comply with management's demand and straightly following the directive procedures, rules and regulations are not completely in line with knowledge workers' own interests. It is because knowledge work differs from other forms of work (Drucker, 1993). It needs professionals to draw upon their intellectual and cognitive abilities to read local contexts and make judgment in complex situations (Alvesson, 2004). Not all tasks are within the reach of explicit efforts to organize and control, and many unexpected problems in the software development process cannot be fully converted into standardized working procedures and regulations. They require knowledge workers to possess both technical expertise and problem-solving capabilities. Thus, in order to continually develop problem-solving capability and avoid complete loss of creativity, these knowledge workers had to and also wished to 'wrestle' with codes and algorithms, and continually try new techniques or methods in their job to retain their autonomy.

Based on the coding analysis above, 9 sub-categories were summarized, and subsequently 3 main categories, namely, control, cooperation and conflict, were finally developed and conceptualized in Table IV, which constituted a complete logical chain to articulate the process of interaction between management and knowledge workers in knowledge processes, which

characterized by iteratively interaction between control, cooperation and conflict. Control was in this case seen as the practices managers employed to assure that project-related knowledge are effectively collected, shared and applied in daily works to facilitate the achievement of organizational goal (Anthony, 1965; Otley et al., 1995). Cooperation was here conceptualized as software programmers' behaviors and attitudes that comply with the managerial rules and regulations and meet managers' expectation on knowledge management (Chen et al., 1998; Tauer and Harackiewiscz, 2004). And conflict reflected that how software programmers as knowledge workers kept their autonomy and creativity in their daily job and battled with the management control to maintain their competitive advantage (DeDreu and Gelfand, 2008; Korsgaard et al., 2008). The relationship between three of them laid the foundation for further discussion of the complete mechanism.

Conclusion

The purpose of this study is to investigate the knowledge management activities used by organizations and knowledge workers' responses to these management activities in their everyday working practices. This study takes software programmers and their managers as the research objects, introduces an integrated theoretical framework combining both the consensus-based perspective and the dissensus-based perspective, and proposes a new theoretical model explaining the consensus-based antagonism between management and knowledge workers in knowledge processes and expanding the applicable scenarios of the existing theory.

Table IV: Axial coding analysis

Definition	Main category	Sub-category
Control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives.	Control	Management practices of knowledge codification Formal knowledge sharing mechanisms Strengthen the control on knowledge application
Cooperation is through the shared goal lens with the emphasis being on working together towards a common goal.	Cooperation	Follow management rules and support knowledge codification Actively participate in formal knowledge sharing mechanisms Shorten product-to-customer time via the application of existing knowledge, which clearly follows a preference of management
Conflict as the experience between parties or among parties that their goals or interests are incompatible or in opposition.	Conflict	Refuse to codify knowledge in database and keep their own competitiveness Distrust formal knowledge sharing mechanisms and develop better understanding through informal interaction Keep autonomy and creativity in work

Table I: Open coding analysis of knowledge management activities used by the organizations (in brief)

	Typical Evidences	Initial Conceptualization	Sub-category
Management	'There were established practices of technical frameworks, rules, standards and methods, which represented some controlling 'tools' which organizations employed to instruct, facilitate and control how programmers conducted their work.' 'Product-related files are very important for subsequent maintenance and update of the product. A clear and complete set of documents can bring a huge help for subsequent work and save a lot of time for clients' technical workers to understand the fundamental design principle and function of each component.' 'Depending on one or two hours' training, you cannot get a lot. You need something you can take away, read and learn after the training session. These handouts are really helpful for freshers like me.' 'When you have these tips recorded, it can help a lot sometimes. It can save your time finding your own solutions or at least give you some clues on how others deal with this kind of problems.'	Codes in the form of databases, digital reports and documents. A part of a product involved project-related reports, comments and proposals. Handouts or digital files to offer some ground rules, business process information and instructions on frequently-used software tools. A range of frequently-met programming problems and/or their solutions.	Management practices of knowledge codification
	'If time allows, there is some training for newcomers or less experienced programmers. But these are not sufficient for us to handle all situations that we confront in the daily work. We have to learn a lot by ourselves.' 'Coaching is kind of on-job-training. It facilitates employees study based on real working life context.' 'After the completion of the project, each member of the project team would provide a short report in the reflection meeting about what we learnt, what problems we met, how we sorted them out, what knowledge we gained from this project and so on.' 'This weekly meeting gives you an opportunity to resolve problems which you cannot deal with by yourself. It is usually problems related to several people's work. You have to ask for their ideas. Sometimes you may even need to ask them to adjust their part of the work a bit so that you can do yours. This meeting is a good way for us to share our ideas as it holds everybody together.'	Formal training allows newcomers to familiarize themselves with job-related knowledge. Coaching provides an opportunity for newcomers to gain knowledge and skills through practical operation. Meetings before, during and after project facilitate the sharing of backward-looking insights, experiences and project-related knowledge.	Formal knowledge sharing mechanisms
	'My boss always tell me that be smart, boy, do not always develop a new one, develop a new one,, if the old one could use, then use it. This is business, not game.' 'We have coding standards and commenting standards which generally guide us on how to program and write comments.' 'If a programmer very carefully conducts manual testing for each single component and pays '100%' attention to it, the result of manual testing will be more convincing.'	Existing frameworks and solutions limit the application of knowledge. Directive rules and instructions guides programmers' knowledge activities. Testing and debugging processes further strengthen programmers' obedience.	Strengthen the control on knowledge application

Table II: Open coding analysis of knowledge workers' positive responses to organizational knowledge management activities (in brief)

	Typical Evidences	Initial Conceptualization	Sub-category
Knowledge workers	'Database is definitely necessary at least for our job.' 'We need that, that is why we do even though it makes us feel trouble, boring and (you know) time-consuming. But we do put what we got in the field, such as specific problem-solving solutions, personal experience summaries, programming tips or clarification of design philosophy and so forth, into the database here cos it is necessary. It really do.' 'Some of these previous codes, comments and methodologies may give you some ideas or clues for finding solutions for new problems.'	Knowledge base is necessary. It includes specific problem-solving solutions, personal experience summaries and programming tips and so on, which enrich knowledge stock and prevent reinvention of the wheel. Previous codes and comments give programmers some clues for dealing with new problems.	Follow management rules and support knowledge codification
	'Formal training not only pass knowledge on but also build confidence for programmers.' 'As newcomers, we have basically no clue where we to start and how to make things right. Thus, there is a coach who teaches us, helps us and answers our questions, which is a very good thing.' 'This weekly meeting gives you an opportunity to resolve problems which you cannot deal with by yourself. It is usually problems related to several people's work. You have to ask for their ideas. This meeting is a good way for us to share our ideas as it holds everybody together.'	Formal trainings for newcomers to familiarizes themselves with rules and learn necessary techniques and build confidence as well. Master-apprentice coaching offers practical instructions and timely feedback to newcomers on the job. Weekly meetings give programmers opportunity to interact with each other and resolve problems together.	Actively participate in formal knowledge sharing mechanisms
	'Many software systems have some things in common, especially those developed for those organizations that run similar kind of businesses. For example, technical frameworks, design philosophy or half-made programmes, and so on, which can be used repeatedly to avoid reinvention of the wheel and accelerate project progress.' 'Yes, one technical framework can be used to fit in different software products as long as these products are characterized by similar requirements and functions.' 'Frankly speaking, I have got mortgage loans I need to pay for and I have a family I need to take care of. Living in this big city, everything is very expensive. So, if I can make extra money by finishing work a bit early with acceptable quality of work, I do it. It is good for both the company and me.' 'Even if it's not for the money, we still have to finish our task as soon as possible and move on to the next one.'	The use of existing knowledge could maximize efficiency, avoid mistakes and earn bonus. The shorten product-to-customer time and high pressure on workload all requires programmers do things a bit quicker.	Shorten product-to-customer time via the application of existing knowledge, which clearly follows a preference of management

Table III: Open coding analysis of knowledge workers' negative responses to organizational knowledge management activities (in brief)

	Typical Evidences	Initial Conceptualization	Sub-category
Knowledge workers	'There is no need to codify everything here. We all work in this big room. If someone has some questions, they can just come to ask. I think that this way of sharing knowledge is much more convenient than codifying it into a system and then gaining the knowledge by reading those documents.' 'I get payment for coding, software designing, testing and maintaining, and so on, which directly relates to software development. I do not get payment for offering all my knowledge to the company.' 'There is some knowledge which cannot be codified in databases or documents. It cannot even be clearly expressed in oral language. It is gained from many years' experience of accumulation and is a kind of intuition or comprehensive ability of a person to see a big picture in the process of software development.'	Not necessary to codify everything. Get pay for making the job done rather than offering knowledge to the company. Some knowledge cannot even be codified in tangible forms.	Refuse to codify knowledge in database and keep their own competitiveness
	'There is some knowledge which cannot be clearly expressed in the oral language. It is gained from many years' experience of accumulation and is a kind of intuition or comprehensive ability of a person to see a big picture in the process of software development.' 'The tacitness of operators' knowledge was manifested when they were asked to describe how and why they tackled a particular problem in a particular way. To such questions, operators were at a loss for words; 'you feel it', 'you know so', 'I just knew it', were some of the most often repeated expressions they used.' 'It is impossible to share everything in one or two formal training seminars. There are too many things and some are very context-specific. In this case, learning by doing is probably more suitable way.' 'I think that this informal communication is very helpful. You more or less learn things when you talk with other programmers or when you work with other programmers. Knowledge is accumulated in this process over time.'	Some knowledge is context-specific and cannot clearly be in oral language. In order to protect their own interest, programmers attempted to blur the possibility of externalization of their valuable knowledge. Programmers develop a better understanding of their work through informal interaction and practice.	Distrust formal knowledge share mechanisms and develop better understanding through informal interaction
	'Even though adjusting an existing framework to fit in with the requirements of a new product is also challenging, it cannot compare with completely developing a new one. That is because working on the existing one is like working on something whose 'tone' has already been set. There is not too much room left for you to actually use judgement or creativity. But, in developing a brand new one, you have to work from the very beginning and think through every single detail which requires a lot of knowledge, energy, patience and creativity.' 'I like to play with my codes. Using different coding skills to try to optimize the programme execution speed if I have time. It makes me excited and polishes my skills.' 'The more you try, the more skills you gain. Even if you fail this time, you still learn a lesson and obtain a lot of valuable experience and knowledge from trial and error.'	Programmers have autonomy over how to achieve the functions of a piece of software in their own work. Avoid losing creativity and shaping skills.	Keep autonomy and creativity in work

Discussion and suggestion

Based on the in–depth analysis of the knowledge management activities used by the organizations and their knowledge workers' response to these management activities, this paper proposed a theoretical model explaining the consensus–based antagonism between management and knowledge workers in knowledge processes, as shown in Figure 1.

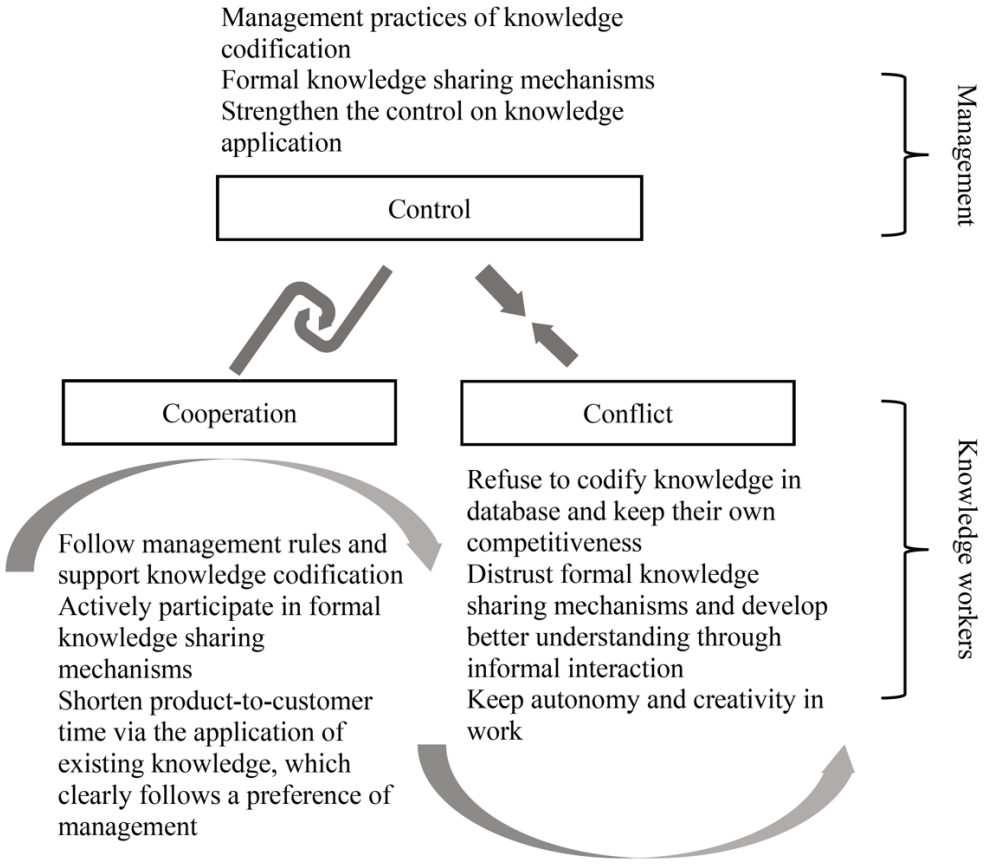

Figure 1: A theoretical model of the consensus–based antagonism between management and knowledge workers in knowledge processes

This model highlights that the key to successfully managing knowledge work is to keep a delicate balance between the high degree of formalization necessary for the completion of work and the lower levels of formalization required to facilitate creativity and autonomy. This delicate balance is difficult to maintain in knowledge processes, it is because that the tension between control, cooperation and conflict is a dynamic process and twists over time. To elaborate, management is

desire to eliminate the undisciplined exercise of initiative via a series of directive procedures and regulations, such as management practices of knowledge codification, formal knowledge sharing mechanisms and strengthen the control on knowledge application, to increase productivity and avoid mistakes. However, for knowledge workers, on the one hand, they are willing to follow the directive procedures and regulations set by the management, such as follow management rules and support knowledge codification, actively participant in formal knowledge sharing mechanisms and shorten product– to– customer time via the application of existing knowledge, which clearly follows a preference of management, to smooth the completion of their work and deliver the security. On the other hand, they have also to occasionally conflict with managers' proceduralising of their work through developing context– related solutions, such as refuse to codify knowledge in database to keep their own competitiveness, distrust formal knowledge share mechanisms and develop better understanding through informal interaction, and keep autonomy and creativity in work, in order to keep professional freedom and better deal with possible unexpected situations in everyday works. Thus, the interaction between management and knowledge workers in knowledge processes is neither an outcome of unconditional consensus nor absolute dissensus but a consensus– based antagonism process. In the course of this process, cooperation and conflict co–exist and take place iteratively.

New Knowledge

The new knowledge of this paper are as follows: (1). This study explores the knowledge management activities used by the organizations and their knowledge workers' response to these management activities in their everyday working practices. It reflects that the interaction between management and knowledge workers in knowledge processes is neither an outcome of unconditional consensus nor absolute dissensus but a complex consensus–based antagonism process. In the course of this process, cooperation and conflict co–exist and take place iteratively. (2). The existing literature studying the interaction between management and knowledge workers is either based on a consensus–based perspective or a dissensus–based perspective. An integrated view is few and far between. This study contributes to the existing knowledge management literature by first time bring an integrated theoretical view combining both the consensus–based perspective and the dissensus–

based perspective into the research on the interaction between management and knowledge workers in knowledge processes, extending the applicable scenarios of the existing theory, and interpreting the complex consensus–based antagonism mechanism. (3). This study also indicates that the dissensus is not only identified between management and knowledge workers but is also reflected within knowledge workers' own attitude and behaviors toward management control. To elaborate, on the one hand, knowledge workers wish to enrich their knowledge stock through engaging in organizational knowledge sharing practices, on the other hand, they are afraid of sharing too much knowledge which may lead to a threat to their own competitiveness in the organization. As a result, knowledge workers continually adjust their own attitude and behaviors toward management control in order to keep a delicate balance between what they can offer and what they cannot.

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