

Is Knowledge Management Really An ‘Oxymoron’? Unraveling the Role of Organizational Controls in Knowledge Management

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Abstract

The mainstream concept of information technology enabled knowledge management suffers from the limitations embedded in the traditional organizational control model. Although importance of organization control is acknowledged by many authors as critical to the success of knowledge management implementations, however the concept of ‘control’ is often misinterpreted and misapplied. It is the thesis of this paper that most such assertions are based on incomplete, and often, fallacious understanding of ‘control’. Several authors have often suggested that knowledge management is an ‘oxymoron,’ however such observations are based upon inadequate and incomplete understanding of ‘control.’ Inadequate and incomplete understanding about organization controls may be often attributed for failure of knowledge management implementations in the new world of business. This paper sets forth two important goals: first, to develop a richer understanding of organizational controls as they relate to knowledge management; and, second, to propose an organic model of organizational controls that facilitates creation of new knowledge, renewal of existing knowledge and knowledge sharing.

Keywords

Knowledge Management, Organization Controls, Knowledge Creation, Knowledge Sharing, Information Systems Design

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1. Introduction

The mainstream concept of information technology enabled knowledge management suffers from the limitations embedded in the traditional organizational control model. Importance of organization control is deemed critical for the success of knowledge management implementations, however the concept of ‘control’ is often misinterpreted and misapplied. It is the thesis of this paper that most such assertions are based on incomplete, and often, fallacious understanding of ‘control’. Inadequate understanding of ‘control’ underlies the characterization of knowledge management as ‘oxymoron’ by many writers. Inadequate understanding of organization could cause failure of knowledge management implementations in the new world of business. This paper sets forth two important goals: first, to develop a richer understanding of organizational controls as they relate to knowledge management; and, second, to propose an organic model of organizational controls that facilitates creation of new knowledge, renewal of existing knowledge and knowledge sharing.

Section 2 provides a literature review about the concept of ‘organizational controls.’ Section 3 discusses the limitations inherent in the mainstream model of knowledge management. Discussion in this section also expounds how inadequate understanding and application of organizational controls may often lead to failure of knowledge management implementations. Section 4 proposes and illustrates an organic model of organizational controls that is better suited to creation of new knowledge, renewal of existing knowledge and sharing of knowledge between the organizational members. Based on the preceding discussion, section 5 underscores that ‘knowledge management’ is as much of an oxymoron as any other related notions such as information systems management, human resource management, business

management and so forth.

2. Review of Literature on Organizational Controls

Based on their review of the concept of organizational controls in diverse areas of management research and practice, Merchant and Simon (1986) had observed absence of any unifying view of control. Flamholtz et al. (1985) define organizational control refers to the process of influencing the behavior of people as members of a formal organization. Eisenhardt (1989) suggests that control can be accomplished through performance evaluation or by minimizing the divergence of preferences among organizational members. Performance evaluation refers to the cybernetic process of monitoring and rewarding performance and emphasizes the information aspects of control: *"namely to what degree the various aspects of performance can be assessed?" or measured.* In contrast, the minimization of divergence (goal congruence) is based on people policies and assumes that members understand and have internalized the organizational goals. The two control strategies are interrelated. An organization can tolerate a work force with highly diverse goals if a precise evaluation system exists. In contrast, a lack of precision in performance evaluation can be tolerated when goal incompatibility is minor, i.e. goal congruence is high (Ouchi 1979): "people must either be able to trust each other or to closely monitor each other if they are to engage in cooperative enterprise." Within this perspective, the performance evaluation strategy for control can be either behavior based or outcome based. Ouchi (1979) argues that the choice between the two criteria is based upon: (a) knowledge of the transformation process or task programmability (task knowledge), and, (b) the ability to measure outcomes. Task programmability implies that behaviors can be explicitly defined and readily measured. If the goals can be clearly stated, then outcomes can be measured and performance

evaluations of outcomes can be conducted. If both behaviors and outcomes can be measured, then either can be used (Ouchi 1979).

Despite lack of a commonly accepted framework or typology of organizational controls (Green & Welsh 1988, Simons 1990), invariably, most authors (cf.: Henderson & Lee 1992, Kirsch 1996, Orlikowski 1991b) have interpreted control in terms of the *influence* exerted on the subordinates to seek their *compliance* with organizational goals. For instance, Lawler (1976, pp. 1248) defined control as a process "to direct, to influence, or to determine the behavior of someone else." Similarly, Tannenbaum (1962, p. 238) defined control as "any process which a person or a group of persons or organization of persons determines, i.e., intentionally affects, what another person or group or organization will do."

Most such interpretations have compared organizational control with the thermostat analogy of the control system (cf.: Anthony 1988, Grant & Higgins 1991, Lawler & Rhode 1976). In most such 'thermostat' models, the performance level of the subordinate is measured and compared with a pre-set standard and the subordinate acts on the feedback received from the superior to decrease the variance between the measured performance and the pre-defined standard. This last element of the process in which the subordinate receives the feedback and tries to modify the measured performance variable is virtually treated like a black box. The alteration of the controllee's behavior (regulation) is assumed to be an intrinsic derivative of the communication (feedback) from the controller. In other words, it has been assumed that the controller seeks compliance by exerting control, say in terms of pre-specified performance criteria, and the desired organizational outcomes are achieved through compliance of the controllee.

Most conceptualizations of control exhibit two common concerns: focus on behavior and actions of organizational actors, and, second, focus on effect of such behaviors and actions on organizational goals or

outcomes. In the literature on knowledge management, such behavior and actions of organizational actors is understood in terms of their role in utilization, processing, creation, dissemination and sharing of knowledge. In subsequent discussion, organizational goals and outcomes will be interpreted in terms of not only achievement of such intermediate outcomes, but also in terms of how actors' knowledge behaviors and actions relate to the organizations' competitive advantage.

Existing research has implicitly assumed that the controllee would modify ones behavior to conform to the organizational outcome or performance measures specified by the controller. The implicit assumption in this model is that the controllee's regulation is governed by one's fear of punishment or anticipation of reward and the compliance of the controllee has been considered a *given*.

This framework of management has dominantly interpreted *knowledge management* in terms of *control by compliance* of those entrusted with utilization, processing, creation, dissemination and sharing of knowledge. Examples of operational measures often recommended for facilitating knowledge management, such as bonuses and incentives (cf: Davenport and Prusak, 1997), illustrate such enforcement of knowledge management by fiat.

The dominant model of knowledge management based on *control by compliance* assumes that because compliance is demanded from knowledge workers, it is somehow enforced and achieved. Also, this model has assumed that achievement of compliance of the knowledge workers will lead to positive outcomes for the organization.

More recent awareness about knowledge -- in particular tacit knowledge -- as being intrinsic to individual knowledge workers (cf: Davenport and Prusak, 1997; *CIO Enterprise* 1999; Malhotra 1997, 1999e), has often led writers (cf: *Information Week* 1999, *Computerworld* 1998, *Wall Street Journal*

1998, Sveiby 1998) to remark that knowledge management is an ‘oxymoron.’ The reasoning behind this description is often along the following lines: Knowledge is not a "thing" that can be "managed". People responsible for utilization, creation, processing, dissemination and sharing of knowledge cannot be “managed.” Our observation about such reasoning is that such reasoning is based on incomplete, and perhaps inaccurate, definition of management in terms of *control by compliance*.

3. Organizational Controls that Constrain Knowledge Management

The fallacious assumption of the dominant model of knowledge management in terms of *control by compliance* is that compliance is demanded and compliance is achieved. Furthermore, this model has also simplistically assumed that compliance should somehow lead to positive organizational outcomes.

First, the assumption of the passive and compliant knowledge workers is inaccurate given recognition of the *dialectic of control* in which the controllee can "choose to do otherwise" (Giddens 1979, 1984). Second, in the new business environment characterized as the “world of re-everything” (Arthur 1996), passive compliance of existing performance and outcome controls may be detrimental to the health of the organization.

Most conceptualizations of organizational control have assumed alteration of the controllee's behavior (regulation) to be a direct consequence of the communication (feedback) from the controller. Most research on organizational control has not focused on issues such as the knowledge worker's (controllee's) recognition of the feedback sent by the system champion (controller), the interpretation of this feedback, or the impetus of the knowledge worker to act on this feedback *in accordance with the controller's desire*. However, Giddens' (1984) notion of agency, known as the *dialectic of control*, recognizes that: "All forms of dependence offer some resources whereby those who are subordinate can influence the activities of their superiors." In other words, controllees can very well ‘game’ the process to influence the controller's behaviors

and actions. Orlikowski (1991a), too, reaffirmed the validity of the choice of the individual actor in choosing between compliance and non-compliance: "Discussions of organization control often tend to downplay the extent to which individuals retain the potential to act to change a particular situation or form of control" (p. 12). Manz et al. (1987, p. 5) acknowledges controllee's choice between compliance and non-compliance in his observation that: "Persons may exercise self-control even when they choose to acquiesce to external demands, as acquiescence still implies choice." The active role of controllee in choosing between compliance and non-compliance has also received empirical support from the field studies conducted by Malhotra and Kirsch (1996) and Malhotra (1999a, 199b).

Traditionally, organizational controls have been "built, *a priori*, on the principal of closure" (Landau & Stout 1979, p. 150) to seek compliance to, and convergence of, the organizational decision-making processes (Flamholtz et al. 1985). The fundamental assumption underlying such controls is that the goals have been pre-decided, *recipes* for achieving those goals have been pre-decided and translated into procedural guidelines that need to be *followed* by the employees. Such organizational control systems were designed to reinforce stability and maintain the status quo. However, the cycle of doing "more of the same" tends to result in locked-in behavior patterns that eventually sacrifice organizational performance at the altar of the organizational "death spiral" (Nadler & Shaw 1995, p. 12-13). *The result of this process may not be what is in the best interests of the organization; rather the emphasis of the model is on ensuring that the rules and procedures are meticulously followed.*

The knowledge management system structured as a 'core capability' for a stable business environment may become a 'core rigidity' in a discontinuously changing environment. The system that *ensures* conformity by ensuring task definition, measurement and control also *inhibits* creativity and initiative (Bartlett & Ghoshal

1995). With its key emphasis on the obedience of rules at the cost of correction of errors (Landau & Stout 1979), the traditional model of organizational control thus constrains creation of *new* knowledge and renewal of existing knowledge.

The problem is compounded by incorrect assumptions about human knowledge underlying the currently popular notion of knowledge management systems that are supposedly expected to “find useful knowledge, bottle it, and pass it around” (Hildebrand 1995; Stewart & Kaufman 1995). Incorrect representations of knowledge management and related control issues often underlie unrealistic expectations of knowledge management executives. Such representations often assume away the proactive role that knowledge workers need to play in the success of such systems (Newcombe 1999): “We have 316 years' worth of documents and data and thousands of employees with long years of practical experience. If we can take that knowledge, and place it into the hands of any person who needs it, whenever they need it, I can deliver services more quickly, more accurately and more consistently.”

Based on a model of knowledge management that relies upon pre-specification of ‘right knowledge’ to be provided to the ‘right person’ at ‘right time,’ this model is bound for failure (*CIO Enterprise* 1999). It is not only difficult, but improbable, to predict the validity of knowledge of past in a future that may not be computed based upon the past historical data. The assumption of archival of knowledge is also problematic given that information and bits are archived in data repositories, knowledge is not. Even procedural knowledge, when translated into symbols that are later processed by another human, does not ensure that the outcome of his knowledge will rival that of the original *carrier*. Knowledge needs to be understood as the *potential for action* that doesn’t only depend upon the stored information but also on the individual interacting with it.

The dominant conception of technology-based organizational knowledge systems is constrained by the

very nature of the knowledge creation processes: it ignores the dynamic and continuously evolving nature of knowledge; it ignores the tacit and explicit dimensions of knowledge creation; it ignores the subjective, interpretative and meaning making bases of knowledge construction; it ignores the constructive nature of knowledge creation; and it ignores the social interactive basis of knowledge creation (Malhotra *in press (b)*).

The model of organizational control embedded in such systems is also overwhelmed by the intense information flows required for (Bartlett & Ghoshal 1995):

- (a) keeping the centralized knowledge base and its custodians (managers) *continuously* current with the *discontinuously changing* external environment,
- (b) continually updating the employees on the latest changes in their outputs (goals) and changes in procedures to achieve those outputs.

Business environment characterized by rapid and discontinuous change is not conducive for the viability of the role of managers as custodians of organizational knowledge (Landau & Stout 1979, p. 148): "...control is a function of knowledge [of managers], and in uncertain environments knowledge [of managers] often does not exist." The knowledge management model of *control by compliance* perfectly suited the bureaucracies or markets within a stable and predictable business environment that allowed knowledge worker performance to be measured with reasonable precision. Being dependent upon explicit monitoring, evaluation, and correction of behavior, this model -- is also likely to offend knowledge worker's sense of autonomy and of self-control and, as a result, will probably result in an unenthusiastic, purely compliant response (Ouchi 1979).

However, the model of *control by compliance* is not suitable for organizations in the new world of business (Malhotra 1998b, 1998c, 1999c; Ouchi 1979). Under conditions of ambiguity, of loose coupling, and of uncertainty that characterizes the new business environment, measurement of knowledge worker's performance with reliability and with precision is not possible. A control system based on such measurements is likely to systematically reward a narrow range of maladaptive behavior, leading ultimately to organizational

decline.

The new business environments require new models of knowledge management and related organizational controls conducive to sustainable competitive advantage in the face of radical and unpredictable change. The knowledge management model enabled by self-control is discussed in the next section as one such model.

4. Organizational Controls for Successful Knowledge Management

Organizations in dynamically changing environments should behave experimentally. Since they will come across few lasting optima, they ought to gear themselves to impermanency and plan as if their decisions were temporary and probably imperfect solutions to changing problems. Knowledge management systems should be set up for experimenting, emphasize evaluations, and be easy to re-arrange and adapt with changing business environment. Decision makers should see themselves as experimenters, and they should keep challenging their findings. In short, organizations in changing environments should have knowledge management processes and systems that are driven by self-evaluation and self-design (Hedberg et al. 1976). Although dynamically changing business environment defies prediction, however, such organizations are more aware of the inadequacy of the forecasts based on historical data and are thus better prepared to adapt accordingly. The knowledge management processes need greater emphasis than specific products that often represent artifacts of partial knowledge management 'solutions'.

Successful implementation of knowledge management systems is driven by the simultaneously processes of ongoing learning and unlearning that I have elsewhere characterized as *loose-tight systems* (Malhotra *in press (a)*). Such systems are *loose* in the sense that they allow for continuous re-examination of the assumptions underlying best practices and reinterpretation of this information. Such systems are *tight* in the

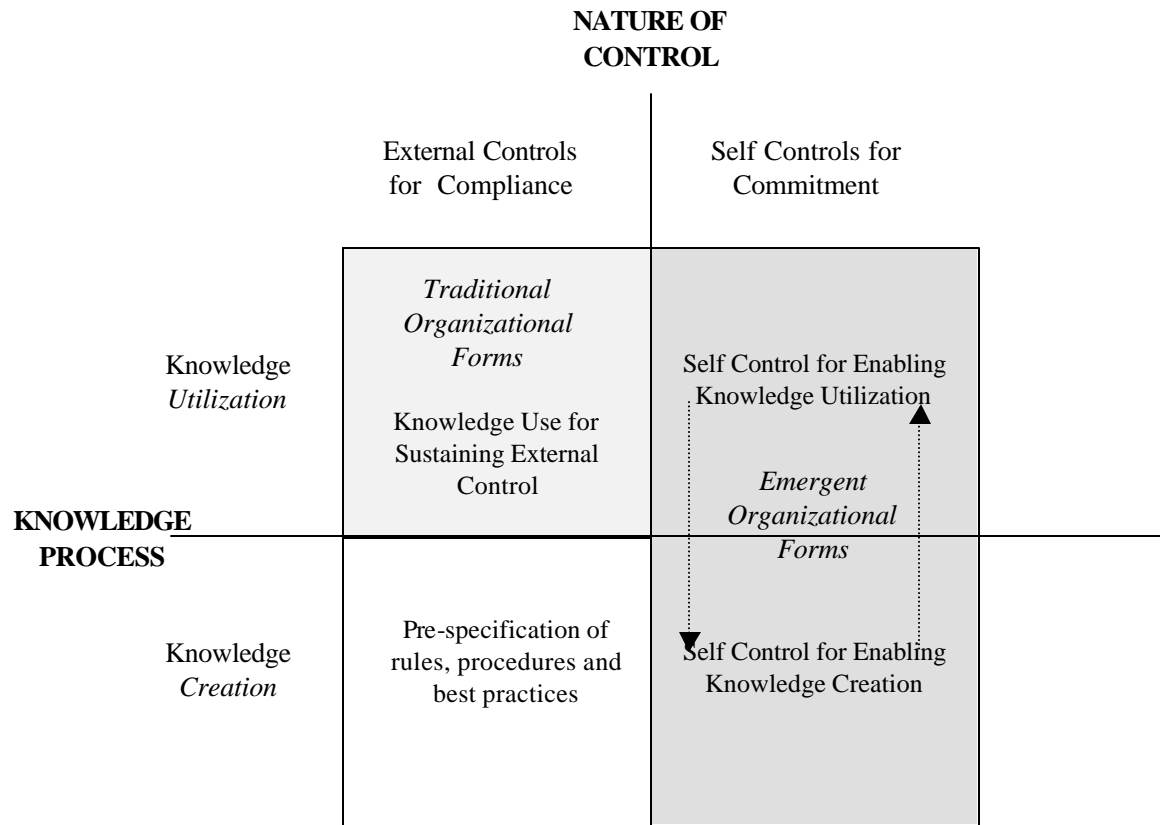
sense that they also allow for efficiencies based on propagation and dissemination of the best practices. Such *loose-tight knowledge management systems* (Malhotra 1998a, 1999d) would need to provide not only for identification and dissemination of best practices, but also for continuous re-examination of such practices. Specifically, they would need to also include a simultaneous process that continuously examines the best practices for their currency given the changing assumptions about the business environment. Such systems would need to contain *both* learning and unlearning processes. These simultaneous processes are needed for assuring the efficiency-oriented optimization based on the current best practices while ensuring that such practices are continuously re-examined for their currency.

All in all, this points toward knowledge management systems design principles that differ considerably from current design ideals, including many system characteristics that were previously considered as ‘liabilities.’ In addition to striving for order and clarity, consistency and rationality, designers of knowledge management systems for organizations in changing environments should also be concerned with nurturing processes that can counteract and balance these ‘old virtues.’ The proposed organizational control model “actually exploits benefits hidden within properties that designers have generally regarded as liabilities” (Hedberg & Jonsson 1978, p. 45). This suggestion seems important given that unclear objectives and ambiguous work roles have been suggested by some management scholars (cf: Burns and Stalker 1961) as *desirable* properties of organismic organizations for thriving in dynamic environments. Design of knowledge management systems thus needs to take into consideration ambiguity, inconsistency, multiple perspectives, and impermanency of existing information. Such systems need to be designed along the principles of *semi-confusing information systems* (Hedberg and Jonsson 1978) that facilitate exploitation of previous experiences and detected causalities, but ensure that experience of past doesn’t hinder ongoing adaptation for the discontinuous future.

The proposed model of organizational control recognizes self-control as the driver of human actors' behavior and actions across all organizational decision and task processes and acknowledges that control over employees is ultimately self-imposed. Instead of emphasizing unquestioning adherence to pre-specified goals or procedures, it encourages the use of intuition through 'playfulness' (Cooper et al. 1981, p. 179). The model of knowledge management through self-control also facilitates error detection and error correction (Stout 1980, p. 90) instead of compliance with pre-specified rules and procedures. Instead of emphasizing 'best practices,' it encourages development of a large repertoire of responses to suggest not only alternative (complementary and contradictory) solutions, but also different approaches for executing those solutions. In the emerging business world (Wheatley 1994, p. 151): "solutions...are a temporary event, specific to a context, developed through the relationship of persons and circumstances." The proposed model is based on the premise that (Landau & Stout 1979, p. 152): "solutions to problems cannot be commanded...[they] must be discovered: found on the basis of imagination, analysis, experiment, and criticism." Figure 1 illustrates the comparison between the model of knowledge management by compliance model for industrial organizations with the model of knowledge management by commitment for emergent organizational forms.

5. Is Knowledge Management Really an Oxymoron?

As noted earlier, several writers, based upon an inadequate interpretation of management in terms of *control by compliance* have asserted that 'knowledge management' is an oxymoron. They have argued that people responsible for utilization, creation, processing, dissemination and sharing of knowledge cannot be "managed." We contend that those writers are mistaken as they have incorrectly interpreted *control by compliance* as the be all and end all of "management."



Traditional Organizations

- Knowledge Utilization as the Antecedent
- External Control as the Consequent
- Stable Environment
- Incremental Change
- Continuous, Predictable Nature of Change
- Single Loop Learning
- Static View of Knowledge: Rules, Procedures & Policies
- Knowledge resides with the Management
- Complexity is removed from lower level jobs

Emergent Organizations

- Self Control as the Antecedent
- Knowledge Creation as the Consequent
- ‘Wicked Environment’
- Increasing Pace of Continual Change
- Discontinuous, Unpredictable Nature of Change
- Double Loop Learning with Self Adaptation
- Dynamic View of Knowledge
- More equitable distribution of knowledge
- Complexity is handled at grassroots level

Figure 1. Contrasting Knowledge Management for Traditional and Emergent Organizations

Perhaps, they are not alone culpable of such misinterpretations as the dominant paradigm of *control by compliance* has also occupied most management and business texts that were written for the industrial era. Given the same narrow interpretation, management of most organizational activities may qualify as ‘oxymoron,’ as activities and actors that were previously compliant becomes less compliant. Even when the activities and actors are compliant with pre-specified assumptions and rules, their compliance shows decreasing correlation with organizational performance and competitive advantage. The model of *control by compliance* yields increasingly diminishing returns in an economy driven by increasing returns of intangible assets and intellectual capital.

As the world economies transition from the traditional model of ‘workers’ to the new model of ‘knowledge intrapreneurs’ (Malhotra 1998a), we need to re-understand the notion of ‘management.’ Specifically, we need to understand ‘management’ in terms of ‘self-control.’ For effective knowledge performance, we need managers who can nurture the traits of self-leadership and self-regulation. Such managers would need to be adept at influence attempts that are aimed at building satisfaction and commitment of knowledge workers by seeking "proactive self-control" (Manz et al. 1987, p. 5).

The concept of self-control can be contrasted with the concept of external controls such as administrative control and social control (Hopwood 1974). Administrative control refers to the mechanisms designed to regulate the organizational behaviors of individuals toward the attainment of organizational objectives (Flamholtz et al. 1985). When administrative controls are consciously designed to influence individuals' preferences in order to intentionally pass on particular norms or values to them, such forms of administrative control may be called 'social controls' (Hopwood 1974, pp. 26-27). For social and administrative controls to be effective influences on individuals' organizational behavior, these controls must operate as 'self-controls,' controls people exert over their own behaviors (Hopwood 1974, p. 31). The norms embodied in the administrative or social controls must be "either directly or indirectly ... internalized by the members of the enterprise and operate as personal controls over attitudes and behavior" (p. 31). Self-control

is based on the premise that control can be exercised only through intrinsic individual motivation and the role of external influences is to facilitate the creation of appropriate self-controls (Manz & Sims 1980, 1987, 1989).

The primary distinction that needs to be drawn here is between the consequence of the control as being *compliance* or *commitment*. Compliance implies the conformity of the knowledge worker who is motivated by a desire of a reward or avoidance of punishment (Kelman 1961) and generally lasts only until the promise or threat of sanction exists. Control attempts that seek passive acceptance from knowledge workers may be best for achieving compliance. In contrast to *compliance*, *commitment* involves "the internalization of management-derived and sanctioned beliefs, norms and values, in the sense that they become part of the core of the individual's perceptual world" (Johnson & Gill 1993, p. 36). This is consistent with the view that *control over employees is ultimately self-imposed*, and that external controls are likely to lead only to minimal compliance unless they are designed to seek proactive self-control (Malhotra and Kirsch 1996, Hopwood 1974, Manz et al. 1987).

Under conditions of self-control if a certain behavior is motivated intrinsically (Argyris 1990a, Malhotra 1998c), the individual will engage in that behavior for intrinsic rewards. Argyris (1990b, p. 120-121) has referred to the transition from traditional external control mechanisms to the paradigm of self-control as "the current revolution in management theory."

6. Conclusion

This article was motivated by increasing recognition of critical relevance of 'organizational controls' in successful knowledge management implementation. A review of existing print and online literature on knowledge management suggests that the concept of organizational controls is often misunderstood and misapplied. Specifically, it was observed that the concept of 'management' has been interested in very narrow

terms of *control by compliance*. As a consequence of application of this very narrow interpretation of management, some writers have described 'knowledge management' as an oxymoron. This is understandable as control by compliance isn't very effective for facilitating knowledge utilization, new knowledge creation, knowledge dissemination and knowledge sharing by knowledge actors. However, a richer understanding of 'management' in terms of diverse types of control, and 'self-controls' in particular, contributed by this paper is expected to address this critical void. The framework of knowledge management based on self-controls discussed in this paper advances the managerial thinking from *compliance based knowledge management* to *commitment based knowledge management*. As discussed in the paper, the model of commitment based knowledge management is more conducive for effective knowledge performance in the new business environments characterized by radical and discontinuous change.

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