FE-rapport 1998-365

TOWARDS A COMPETENCE MANAGEMENT FRAMEWORK

- COST MANAGEMENT IN COMPETITIVE DYNAMICS

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Abstract:
How to design and make cost and management control systems work in today's empowered, learning organizations has become the subject of much debate. This essay sketches a Competence Management framework that can be used to inform case study work (as well as standard statistical studies) aimed at addressing the question of how to design and use cost management system in a learning organization.

Key-words: Competence management; framework; field study; cost management.

JEL-Code: M40

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Towards a Competence Management Framework - Cost Management in Competitive Dynamics

COMPETING FOR THE FUTURE

Discussing the core competence perspective, Hamel and Prahalad (1994) argue that a company must be viewed not only as a portfolio of products or services, but a portfolio of competencies as well. They conclude, from a deductive analytical reasoning, that for the core competence to take root in an organization managers have to fully understand and participate in five key competence management tasks. These tasks are (1) identifying existing core competencies; (2) establishing a core competence acquisition agenda; (3) building core competencies; (4) deploying core competencies; and (5) protecting and defending core competence leadership (ibid. p. 245).

How to design and make management control systems work in today's empowered, learning organizations has become the subject of much debate (Cooper, 1995; Simons, 1995; Ezzamel et al, 1993). Some authors argue that despite major changes in the severity of competition, the rapidly changing products and markets, new organizational forms, and the significance of learning and knowledge as a competitive asset, the management accounting systems have remained largely untouched (Bromwich and Bhimani, 1989 and 1994). Instead, managers seem to use management accounting reports in a more flexible way, and in conjunction with non-financial performance measurements -internal and external, qualitative as well as quantitative, and comparative as well as absolute measures (Kaplan and Norton, 1992; Bromwich and Bhimani, 1994; Fizgerald et al, 1991).

We have, on the one hand, traditional control means such as budget, which is based on extrapolated data, top-down strategy setting, standardization and efficiency, and, on the other, constantly updated performance indicators, that guide managers towards desired goals in a highly dynamic environment, customization, continuous improvement, and empowerment.

Cooper (1995) suggests that it is important to understand how to control empowered organizations (Johnson, 1992; Martin et al., 1992) in highly competitive markets (the customers have gained power at the expense of the manufacturers), and, that a theory of control has to recognize the need to balance the inherent tension between freedom and constraint, between empowerment and accountability, between top-down direction and bottom-up creativity, and between experimentation and efficiency (Simons, 1995). A competent manager, thus, can strike the proper balance between building a learning organization and maintaining a formal management control system. Traditionally, accounting information has been used as a surrogate measure by which operational activities have been monitored and controlled (Otley and Berry, 1994).

Consequently, traditional accounting measurements often failed to measure those things that are crucial to lean production (Dhavale, 1996; Turney and Anderson, 1989). In recent years there have been considerable advances in the field of information technology, which, among many other things have made it possible to exchange these surrogate measures for timely non-financial measurements. A distinctive feature of a lean enterprise is its ability to enhance competence, that is, those applied abilities and knowledge (including networks) that contribute to an increase in productivity (and effectiveness), given a constant workload, among its managers and employees.

Competence Management is directed at building learning (adapting) organizations that are responsive to customer needs, linking operations to the strategic level, and creating career paths for all employees. Competence Management transcends all the traditional phases of management control - planning, control, measurement, and evaluation - from a learning viewpoint. By analogy with Galbraith (1977) uncertainty, related to management control, may be defined as lack of competence, and, vice versa, certainty is equivalent to competence. The core of the concept of competence is the ability to apply knowledge and skills with understanding to a work activity in a competitive environment (Collin, 1989; Boyatzis, 1982). Further, competence integrates knowledge and skill that is assessed via performance, that is, through the management control system of which the cost management system is an integral part. Broadly speaking, cost

management is the set of actions that managers and employees take to satisfy customers while continuously reducing and controlling costs (c.f. Horngren et al, 1994).

Two of the main areas of controversy over the role and boundaries of cost and management accounting refer to what extent it should take responsibility and control over the total or integrated management control system, and to what extent the management accountant should extend beyond a purely advisory role towards participating in management decision-making (c.f. Glynn et al, 1994). In this connection, we should recall Johnson's (1992) suggestion that the decline in the competitiveness of American businesses was not caused by poor management accounting information but by poor management practices that caused businesses to ignore new foreign management initiatives, especially those emanating from Japan. In face of the rapidly changing technological and organizational environment in recent years, there is a growing awareness that cost management information today also has to enable and facilitate learning through out the entire organization. Given today's competitive dynamics, and the need to establish a balance between conflicting organizational forces the link between building a learning organization (flexibility) and maintaining a formal cost management system (stability) has to be visible and a manifested one.

This claim raises many questions concerning the design and use of cost management information, as well as cost and management accounting practices, or, differently put the roles (tasks) of cost management. How to design a cost management system that meets the learning organization's requirements? What measurements are to be included in a formal cost management system? What are the linkages between cost and management accounting and operations control, between cost and management accounting and strategic control, and between cost and management accounting and human resource management? How can cost and management systems play a proactive role in shaping new strategies? How to design a cost management system that facilitates the flow of information needed to institute organizational learning or change, or detects an organization's lack of fit with its environment and that suggests new possibilities? What are the new roles (if any) of cost management besides making visible certain aspects of organizations, measuring economic

"facts", and controlling activities? What is the proper balance between "proactive" cost management and its more traditional reactive role?

The aim of this paper is to discuss and raise issues concerning structural elements or dimensions of competence management from an inductive, empirical point of view. The paper is offered in a tentative spirit in that it sets out speculations on what dimensions are deemed to be more relevant important than others. However, the speculations are informed by observations in real life settings. But no claim to empirical rigour is made. Instead, the intention is to bring issues that have bearing on competence management on the research agenda.

LOGIC OF REPLICATION

Scapens (1990) suggests that the real potential of case studies will be realized when they are used in conjunction with the logic of replication, rather than sampling logic, to produce theoretical generalizations. The logic of replication, he maintains, can be used to generalize theories so that they explain the observations which have been made (c.f Llewellyn, 1992). The framework discussed in this essay is supposed to be applied in conjunction with the logic of replication.

Grounded theory method (Glaser and Strauss, 1967; Glaser, 1978; Glaser, 1992; Strauss, 1987; Strauss and Corbin, 1990, 1994) is a way of thinking about and conceptualizing data may be particularly suited (produce theoretical accounts) to the types of questions given above. In the view of Lye et al. (1997), "the grounded theory approach will enable the researcher to provide an interpretation of events derived from the participants' perspective that will be abstracted via coding at various levels to derive some core theoretical categories integrated into a theoretical framework" (p. 16). In recent years, there has been a divergence of opinion between the originators of grounded theory, in that Glaser (1992) emphasizes that a researcher should approach the research area with no predefined problem, while, on the other hand, Strauss and Corbin (1990) suggest that a research question should be predefined.

The latter hold the view that the paradigm model is crucial to research conducted because all categories discovered must be related to the constituent elements of the model. The rationale

behind the framework suggested in this paper, is that theory discovery studies typically produces the "building blocks" of theory, rather the fully specified theories (cf. Eckstein, 1975), and, to produce a "fully specified theory" these pieces of theory ought to be linked to a "paradigm model". This paper offers a tentative framework that hopefully will be subjected to criticism, and discussions, which, in turn, will lead to a generally accepted "paradigm model" within the field of Competence Management.

To conclude, this essay sketches a framework that can be used to inform case study work (as well as standard statistical studies) aimed at addressing the question of how to design cost management system in a learning organization. This framework has to address the question of how to balance contradictory forces, as well as how to link operational (local) activities to strategical (central) requirements, and vice verse. The remainder of the paper is organized as follows: first, the rationale for Competence Management in a global economy is briefly discussed, and then the key variables or distinctions are discussed in some detail. Next, an ideal model of Competence Management will be outlined. A concluding comment concludes the paper.

THE RATIONALE FOR MANAGEMENT COMPETENCE

The definitions of cost management and organizational learning suggest commonality of purpose in that both are concerned with adapting the organization to changing environment and conditions. From a rationalistic point of view the former emphasizes goal congruence (vertical fit), while the latter is directed at finding the best practice (horizontal fit). Hence, there is some inherent problems in integrating the two. However, some authors, (c.f. Hedberg and Jönsson (1978); Hopwood (1987); Dent (1990); Argyris, 1990; Cobb et al., 1995; Jönsson, 1996) argue that management accounting systems can be used in a proactive way in the management of organizational change or learning, by promoting curiosity and experimentation, and, thereby, opening up new possibilities for perceiving the organization and the way it interacts with its environment from a new (and more relevant) angle.

Continuous improvement (experimentation) and organizational learning are prerequisite of success in a global market. In Japanese firms, improvement is encouraged and supported through

the design of work structures and performance measurement systems (McMann and Nanni, 1995), and of implementing new management initiatives such as target costing, and value engineering (Tanaka et al., 1995). Learning (about cost levels, cost behaviour, cause and effect relationships) is largely accomplished in Western companies by management initiatives such as activity-based costing, strategic cost management, business process reengineering, and benchmarking. Further, Japanese management accounting appears to support the involvement and judgment of all employees at all levels and all functions in the strive to improve practice (c.f. Cost Management). As the Japanese believe that the sales price of a product will continually decline over time (Kato, 1993), new opportunities for saving, and/or increased functionality (through experimentation and organizational learning), must be sought continually (Howell and Sakurai, 1992; Cooper, 1995).

Hence, how to balance learning and experimentation (flexibility) and doing (stability) becomes an intricate and crucial question for those managing competence. That is, by introducing the "eyes of the market" (McMann and Nanni, 1995), as an overriding instrument for control Competence Management becomes a decisive means for managing people and their tasks in today's relentless changing environment. Further, the concept of Competence Management is compatible with and supportive of the value chain analysis in that competence is an output related concept (contrary to, e.g., the value-added concept). And, finally, the Competence Management framework supports learning strategies for change, that is driven by a vision, based on strategic dialogues between senior management and employees, and is pursued in a top-down/bottom-up approach that is broad in terms of employee involvement and interactive planning.

Interesting, a learning strategy for change, as shown by Norrgren et al (1996), correlates significantly with effectiveness, while programmatic strategy does not at all correlate with effectiveness. This implies that organizational change, driven by external examples, based on standardized concepts and methods, and is persuade by the way of formal projects involving experts and a narrow focus, has no or negligible effects. This is a very important lesson: if we want organizational change to be effective, we have to involve (all) employees as well as (all) managers! That is, we have to take advantage of the capacity to learn and to be competent of all

people in the organization, not just of a few (experts). Since change is about learning (by doing), and since traditional cost and management accounting systems mirror the theory behind programmatic change, we may conclude that similar systems in global organizations have to be designed in a top-down/bottom-up fashion that is broad enough in terms of employee involvement and interactive planning.

In short, Competence Management emphasizes substance over form in that it is based on a learning logic in contrast to the systems thinking logic of traditional management. Competence Management is directed at (1) setting up, continuously developing and nurturing a learning environment; (2) integrating, on a relentless basis, problem-solving with problem-identification; (3) making learning priorities from strategic considerations, and; (4) balancing, from an optimizing perspective, the determinants (change projects) of the financial result with one another.

KEY DEMANDS OR DISTINCTIONS TO BE BALANCED

The responsiveness and flexibility needed in today's global markets foregrounds the issue of how to balance the demand for assiduous adaptation and change (often to a dramatic degree) with claim for predictability and order. Or, differently put, how to (simultaneously) create adaptation and a dynamic equilibrium, given today's emphases on holism, integration and managing boundary relations? To arrive at a full synthesis of both negative and positive feedback within a Competence Management framework is too far-reaching. Obviously, there has to be a choice between either emphasizing structure (top-down orientation) or processes (a bottom-up course).

The basic tenet behind this Competence Management framework is, by pointing to an appropriate set of (relating) concepts, to facilitate a comparison between different case studies on cost and management accounting from a competence (or market) perspective. As the title of this paper indicates the outlined framework is a sketchy one, and, consequently, extensive case work has to be carried out in order to refine the concepts and linkages into a more coherent framework for understanding accounting in a Competence Management context.

However, we should always bear in mind that the term 'balance' is not to be interpreted in a strict sense when it comes to individual key demands or distinctions. In the view of Vickers (1965), every judgment encompasses a balancing and an optimizing element. The balancing judgment is a judgment of reality, whereas the optimizing judgment is a judgment of value. "Appreciative judgment ... applies both balancing and optimizing criteria" (ibid., p. 221). According to this line of reasoning, optimizing, say financial result, requires proper balance of the determinants of this results. The tricky management issue is how to strike the proper trade-off, or balance, given the other key variables and (continual changing) situational contingencies. The overriding aim of any Competent Management is to meet desired strategic goals; that is, achieving organizational and economic balance. Competence Management is admittedly but one of several applicable perspectives on management. But, as distinguished from other perspectives, Competence Management deliberately tries to reconcile the notion of Japanese management accounting with academic Western research in social sciences. Further, 'balance' is not to be perceived as a static concept, but rather as a dynamic one, which is quite evident, given today's rapidly changing environment.

The rationale of letting Japanese management accounting be one of the "tenets" behind this frame of reference is premised on several arguments, of which one is the enormous success of Japanese management in recent years. McMann and Nanni (1995) conclude, after reviewing the literature on Japanese management accounting, that it is not any one of the specific Japanese practices that have, in themselves contributed to this success. But rather, as they contend, "it is the ability of Japanese firms to apply these practices within the broad view of the strategic ends they are attempting to accomplish" (ibid. p. 334). That is, the cost management techniques and processes have to be applied in a holistic and intelligent way, so as to achieving desired strategic goals; which is also one of the prominent characteristics of Japanese management accounting.

The endless looking for better ways to do things and to eliminate waste (of all kind) and inefficiencies in operations (organizational learning and building up competence) are distinctive features of Japanese management; which, in turn, calls for involvement and support from employees at all levels and all functions. This leads us to the second argument, that Japanese

management accounting appears to be consistent with this effort (ibid. p. 330). An analogy can be drawn here to McMann and Nanni (1995, p. 330) by claiming that it is through the eyes of the market that quality is defined, and it is through the precepts of quality management that waste is defined. Further, it is through cost management that the market, quality and waste can be jointly understood, and it is through such understanding that improvement can be pursued. Hence, in this context cost management (along with work structures and non-financial performance measurement systems) is significant to the encouraging and supporting of continuous improvement; that is, organizational learning and competence.

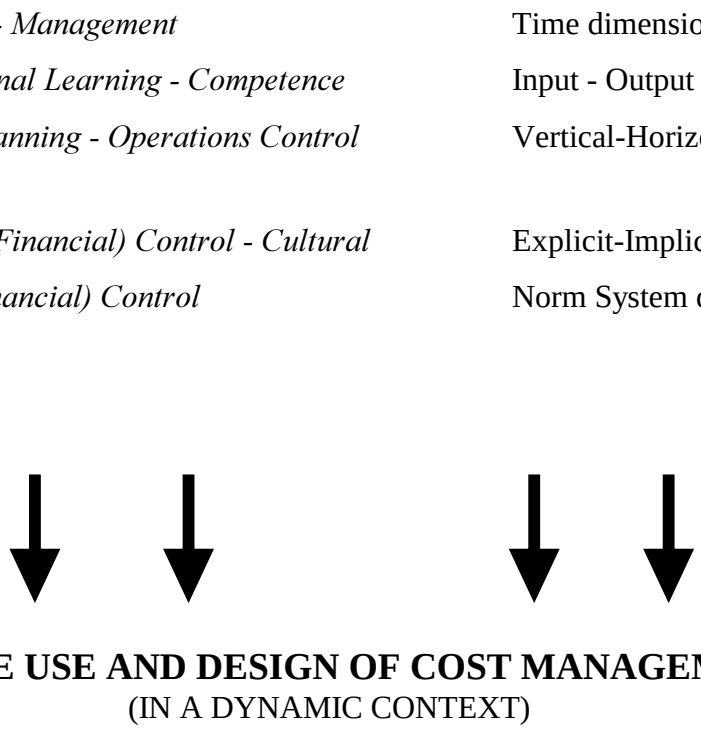

Figure 1.1 Competence Management and the use and design of cost management in a dynamic context - a multi-dimensional framework.

As to the 'Japanese-Western tenet', Kato and Hopper (1995) point to the fact that the Japanese emphasizes on holism, integration, and managing boundary relations, has much in common with the cybernetic and systems research that was carried out during the 1960s and 1970s. Subsequent research in this strand such as Beer's 'Brain of the Firm', Churchman's 'The Design of Inquiring Systems', and Argyris and Schon's 'Organizational Learning Systems' led, according to Kato and Hopper (1995, p. 311), 'to a greater emphasis upon designing effective processes for non-programmed decision-making, creativity, inter and intra group dynamics, and environmental adaptation'.

Further, while information for individual decision-making has tended to predominate Western accounting thought, Japanese intellectual thought seems to be drawing from a wider variety of social science approaches from various cultures outside Japan.

As mentioned, we are, within the framework outlined in this paper, trying to create firm linkages between theories explaining or, at least illuminating, the tensions that arise in attempting to align organizations, business strategy, operations, and human behaviour in terms of learning and competence, and Japanese management accounting techniques and processes.

Those distinctions that are deemed to be relevant to this Competence Management framework (as depicted in Figure 1.1 above) are: leadership - management, organizational learning - competence, strategic planning - operations control, and budget (or financial) control - cultural (or non-financial) control. The relative focus within each distinction, which is dependent upon contextual circumstances (such as market, technical, organizational and behavioural), influences how the actual Competence Management is designed and employed. Hence, Competence Management embraces both the structural and the behavioral view on control (c.f. Ansari, 1976).

LEADERSHIP - MANAGEMENT

Competence Management bears strongly on a new and emerging organizational form, the network, which is a consequence of the introduction of Japanese inspired management, or market oriented management. Originally, leadership stems from those ideas related to managerialism; and, managerialism, in the words of Macintosh (1994, p. 197), can be thought of as a package of ideas, beliefs, and values based on the premise that managers and managerial functions are the essential ingredients of today's organizations. Chester Barnard's influential book, The Functions of the Executive, written in 1938, manifested these ideas. Survival, he argued, must rest with maintaining a balance or an equilibrium of forces both inside and outside the organization, forces that constantly threaten the very existence of the organization.

The key factor for organizational survival is the willingness of people to put their effort into cooperative systems within the organization; and control, management, supervision, and administration exercised by those who are in a position of control of whatever degree are all instrumental in achieving the overall goal of survival. Leadership, the trick of gaining cooperation without stifling the individual freedom, becomes the strategic factor; and this is the function of the executive.

One decade later, when Herbert Simon in 1945 published his seminar book Administrative Behavior, that deals with management and decision making, the ideas of managerialism gained further legitimacy. The concept of leadership is one that has undergone rapid changes ever since lean production emerged through out the world as the new mode of manufacturing. We have started to move from the more traditional view of leadership as reflected in McGregor's Theory X, in which a senior individual directs and coordinates (in great details) the work of all his subordinates, to that of Theory Y, which advocates integration through the creation of conditions such that the members of the organization can achieve their own goals best by directing their efforts towards the success of the firm. A great deal of research articles and readings have been written about leadership.

However, leadership is not a unitary concept in that it has been defined in many ways following different approaches; for example, a task oriented approach and a learning oriented approach. According the task oriented approach leadership (c.f. Tannenbaum and Massarik, 1957; Hersey and Blanchard, 1988) is viewed as a tool to get things done, and it follows from the contingency theory, stating that human behavior adapts to the situation (Áa dÈpend). There is a specified goal to be achieved, and leadership is about making sure that the goal is met (goal congruence). How leadership should go about to achieve this goal varies greatly from author to author. By the time societies become more democratized, managers were forced to concern more about their subordinates. One leads people, not buildings or machines, as Carlsson (1991) put it.

A recent approach to leadership is to perceive it as a long-term relationship between leaders and a group of members that centers on learning, and, in its extension, competence. In a learning organization the leaders are designers, teachers and stewards: - they are responsible for building organizations where people continually expand their capabilities to understand complexity, clarify vision, and improve shared mental models - they are responsible for learning (Senge, 1990, p. 340). The productive managers provide the supportive (learning) environment, while the followers supply the competence (Hall, 1995). Unlike the task oriented approach, it is not the particular goal or task that motivates leadership, instead, under the learning oriented approach, it is the (perpetual) goal of enhancing learning among the individuals and groups within the organization that propels the leaders. Its ultimate goal is to build a learning organization, and, as Senge phrases it, superior performance depends on superior learning (Senge, 1990, p. 7).

The main difference among both approaches can be found in the scope of the perception of leadership. While the first approach has a more pragmatic view in which leadership's function is goal achievement, the second approach broadens the scope by enhancing continuous learning among the subordinates in order to get the best out of them, instead of getting just what it takes to achieve a particular goal. Under this orientation, (to some extent, at least) performance shortfalls are perceived as opportunities for learning (Nevis, DiBella and Gould, 1995). Naturally, the ultimate goal of any leadership is to achieve the highest possible efficiency level. And this, by it self, encompasses the problem of balancing short-term achievements with long-term efficiency;

that is, learning has to be conducted in such a way that it maximizes the accomplishment of long-term organizational goals.

Hence, leadership and management deal with striking the proper balance between conflicting forces, may it be external or internal, short-term goals or long-term goals, etc. As Kotter (1990) points out, the word 'leadership' is used in two different ways: sometimes it refers to a process that helps direct and mobilizes colleagues and subordinates, at other times it refers to a group of people in formal positions (c.f. Barnard, 1938). Management and leadership are to some extent similar; both involve deciding what needs to be done, establishing networks and relationships for particular purposes, and ensuring that they actually get the job done (Kotter, 1990). But, in terms of function leadership and management differ in a very distinct way, in that leadership can produce useful change, while management can create orderly results which keep something working efficiently (ibid.).

The author contrasts management with leadership from four aspects: creating an agenda, developing a human network for achieving the agenda, execution, and outcomes. As to "creating an agenda" management establishes detailed plans and budgets with time frames ranging from a few months to a few years, while leaders develop a vision of the future, along with strategies for producing the changes needed to meet that vision. Managers engaged in developing a human network for achieving the agenda are trying to get the right person into or trained for the job and compliance. Leaders, on the other hand, tend to focus on integration, getting the whole group lined up in the right direction, and commitment. While controlling and problem solving (management) focus on short term balance, and predictability, motivating and inspiring (leadership) focus on empowerment, and change, often to a dramatic degree (Kotter, 1990). In terms of Senge (1990) management is aiming at adoptive learning, while leadership is directed at generative learning; both essential to organizational learning, and in its extension competence. Responsiveness to customers and flexibility (reducing lead times and removing constraints) are, according to Johnson (1992), management oriented imperatives of global competition.

As a consequence, self-managing work teams have to be set up and they must own problem-solving information (cf. Reich, 1991) to reduce variation, delays, and excess in processes. Empowerment implies delegation (at least to some extent) of management activities, such as resource allocation, planning, organizing, and controlling; otherwise the employees will not be able to learn, bearing in mind that learning occurs only if the learner recognizes a problem (detects an error) and is motivated to learn (correct the error or solves the problem). Thus, employees can (and will) take on management activities, but for the time being they will not be allowed to exercise leadership activities.

New organizational arrangements signify new roles (relationships) among managers as well as between managers and employees. Given an empowered organization, a relevant research issue concerns the proper balance between a cost management system's proactive orientation, and the system's (from a cybernetic standpoint) necessary reactive dimension.

ORGANIZATIONAL LEARNING (OR INPUT) - COMPETENCE (OR OUTPUT)

Argyris' assertion that an "organisation may be said to learn to the extent that it identifies and correct errors," is based on cybernetic and systems theory thinking (control of the direction of an organization through feedback and learning mechanisms). Roughly, organizational learning is the process of changing the organization not only to match, through adaptive or single-loop learning, a relentless changing environment, but also to grow and prosper through generative or double-loop learning in the midst of environment disturbances. Further, organizational learning requires individual learning, but is more than the sum of individual learning, as it involves the sharing of knowledge, beliefs or assumptions among individuals.

Core competencies are, in the view of Prahalad and Hamel (1990, p. 82), "the collective learning in the organization, especially how to coordinate (manage) diverse production skills and integrate multiple streams of technologies". They are broading out the definition by claiming that "core competence is communication, involvement, and a deep commitment to working across organizational boundaries (ibid. p. 82)." Further, they assert that the skills that together constitute

core competence must coalesce around individuals with certain discretion, or differently put, empowerment. Usually, the concept of competence refers to the required bulk of knowledge and skills for meeting competitive advantage, or the market requirements (Boyatzis, 1982; Holmes, 1992; Townsend, 1992).

The concept of competence focuses on the relationship between the individual and the work from a market perspective (in a profit organization), and this relational nature of competence authors such as McClelland (1973), Boyatzis (1982), and Kolb (1984) draw on when they identify and discuss knowledge and skills at work.

As mentioned, the concept of competence combines knowledge and skills which are assessed by performance, and this brings us to the distinction between 'know-how' and 'know-that'. In the view of Gardner (1985) 'know-how' is the tacit (practical) knowledge how to do something, whereas 'know-that' refers to the explicit or propositional knowledge. Tacit knowledge is highly personal, and it is hard to formalize and communicate to others - it consists of mental models, beliefs, and perspectives so ingrained that we take them for granted, and therefore cannot easily articulate them (Nonaka, 1991, p. 98). And, importantly, it is exchange between tacit and explicit (formal) knowledge that Japanese companies are especially good at developing (Nonaka, 1991). This is achieved by continually improving the work at hand.

Morgan's (1986, 1988) discussion, from a cybernetic point of view, how an organization can become more intelligent, transcends the 'bounded rationality' of bureaucracy, learn to learn and challenge assumptions, has much in common with ideas underlying Japanese management. He identifies four interacting principles: redundant functions, requisite variety, learning to learn, and minimum critical specification. Redundancy, the conscious overlapping of company information, business activities, and managerial responsibilities, is important because it encourages frequent dialogue and communication; helps to create a common cognitive ground and facilitates the transfer of knowledge (c.f. Nonaka, 1991). Another interacting principle is 'requisite variety', which implies that all elements of an organization embody critical dimensions of the environment with which they have to deal; and this variety can be achieved through multifunctioned teams

(Morgan, 1986, pp. 100-101). To become and stay flexible (the opposition to bureaucracy), the roles should be left deliberately ambiguous and overlapping (minimum critical specification), while learning to learn implies that the organization needs double-loop learning.

The concept of competence is, by the way of its relational nature, useful from a training and development perspective, at the same time it has obvious control implications in that the concept mirrors the relation between the individual and the market requirements.

STRATEGIC PLANNING - OPERATIONAL CONTROL

Traditionally, there is a distinct, clear-cut relation between strategy formulation, management control, and operations control in that strategy formulation is the process of deciding on new strategies, whereas management control is the process of deciding how to implement strategies; and, operations control or operations management is the process of assuring that specific tasks are carried out effectively and efficiently (c.f. Anthony and Govindarajan, 1995, pp. 10-15; Anthony, 1965). The management control process involves three types of activities - communication, motivation, and evaluation. Contrasting Japanese management with Western management "a more formal, but open two-way channel of communication seems to exist between upper and lower levels in the Japanese organization" (McMann and Nanni, 1995, p. 331). As a consequence, Japanese employees appear to have a better understanding of organizational objectives and strategies and of how their own actions contribute to the achievement of the objectives (Howell and Sakurai, 1992). From a Competence Management perspective important aspect - both sides seem to be willing to learn from each other! Most of the operations control is accomplished through cross-functional teams.

Distinctive features of Japanese management are managers' and employees' individual commitment the organization and its multi-functionality (Kato and Hopper, 1995). The relating Japanese management control system rests on a well-balanced integration between a top-down, cybernetic or systems theory design and a vertical governed control, influenced by human relations and other social science approaches.

A proposed solution to the relevance lost critic is widening the scope and focus of management accounting systems (Sakurai, 1996), and the introduction of strategic cost management. Strategy has become a management control variable, in that managers have to consider the relationship between the firm's management accounting system and its strategy in the context of its performance. Simons (1995) finds that control as traditionally practiced, works well in small firms of several hundred people. He maintains that as firms become larger and more complex, and competitive environments grow increasingly turbulent, traditional control inhibits creativity, experimentation, and employee initiative.

In Japan, the team-based, consensus-seeking approach, and supported by information that is designed to align employee and corporate objectives and to influence and motivate behavior towards those ends (Hiromoto, 1988; Hariman, 1990; Martin et al., 1992; Jones et al., 1993) serves to strengthen the quality of communication and reinforce global purpose (McMann and Nanni, 1995).

That is, the Japanese companies set out from a specific organizational arrangement, and supplement this structure with an appropriate information system design and empowerment, in order to achieve goal congruence (vertical integration between the strategic and operational level). Horizontal integration includes upstream suppliers, downstream customers (using the 'eyes' of the market for control purpose), employees, banks, and government (Yoshikawa et al., 1992). Simons suggests a Western way to resolve the conflict in empowered organizations between top-down direction (encouraging accountability) and bottom-up creativity (allowing empowerment to flourish) from a systems theory perspective. The author outlines a comprehensive theory illustrating how competent managers control strategy by implementing and using four basic levers or information systems: beliefs systems, boundary systems, diagnostic control systems, and interactive control systems. He stresses that the solution to balancing the aforementioned tensions "lines not only in the technical design of these systems but, more important, in an understanding of how effective managers use these systems" (ibid. p. 4).

Control is discussed from the four key constructs that underpin the successful implementation of business strategy: core values, risks to be avoided, critical performance variables, and strategic uncertainties; and each construct is controlled by a different system. Two of these control systems create positive and inspirational forces: beliefs systems are used to inspire and direct the search for new opportunities, and interactive control systems are used to stimulate organizational learning and the emergence of new ideas and strategies. The other two systems create constraints and ensure compliance with orders: boundary systems are used to set limits on opportunity-seeking behavior, while diagnostic control systems are used to motivate, monitor, and reward achievement of specified goals.

By analogy with Chinese philosophy, where positive (yang) and negative (yin) forces are opposing principles that have to be balanced in order to create harmony, these "countervailing" control systems have to be equalized to achieve a dynamic tension that allows the effective control of strategy. In the view of Simons (1995, p. 29), control implies managing the inherent tension between creative innovation (discontinuous change), and predictable goal achievement so that both are transformed into profitable growth; and beliefs (broadening out) systems, boundary (closing in) systems, diagnostic control (single-loop) systems, and interactive control (double-loop) systems are the four basic levers used to manage this tension.

However, it is to be stressed that Simons primarily is concerned with the linkage between the strategic and tactical level (implementation of strategies), and not with control systems that are used for coordinating and regulating operating activities. Anyhow, this framework may be applicable, at least from an information systems approach, when leaching information-based management control systems with their corresponding operations management systems.

In other words, Simons adopts, or emphasizes a management, or top-down perspective at the expense of a broader employee, or bottom- up perspective; though he suggests that balancing control and (local) learning is critical to managing the tension between efficiency and innovation. What we can learn from this frame of reference is, among other things, that management is about creating and handling a dynamic tension between goal achievement (or goal congruence) and

creative innovation (experiential learning). Learning, and hence competence, is perceived as a positive force that has to be balanced to control. Management control systems have to be used selectively to open organizational debate and dialogue in order to trigger organizational learning. Further, Simons discusses management control in rather traditional terms (from a systems theory perspective), but he contributes to our understanding of control in that he deliberately and intentionally tries to apply this framework in a empowered organizational context that operates in highly competitive markets.

Maskell (1994) emphasizes that for performance measures to be relevant they must be expressed in terms that directly relate them to the business strategy. Several performance measurement models have been developed in the last years in an attempt to relate strategic thinking in terms of financial performance (result) to operational activities (determinants of results); notably the Balanced Scorecard (Kaplan and Norton, 1992, the Performance Pyramid (Lynch and Cross, 1991), Performance Measurement in Service Business (Fizgerald et al., 1991), and Integrated Performance Measurement (Nanni et al., 1992). Of these performance measurement models the Balanced Scorecard has probably gained the most attention, as it is widely quoted and many firms have adopted it.

In the section to follow we will discuss, or contrast, traditional (budget) control with (continuous) control of empowered organizations in highly competitive markets.

In a study of how the design and use of cost and management accounting systems have changed in reaction to how business operations have changed, Lind (1996) observes that these systems have become more powerful instruments for control than was previously the case. This is due to a better fit between the design of cost and management accounting systems and the underlying business operations; which implies that systems ability to promote learning has strengthened. Further, today managers tend more to focus on performance and processes, and lesser on costs and individual operations. A pertinent research issue is how to encourage and support involvement (learning) from employees (as well as managers) at all levels and functions through the means of a cost management system that promotes an understanding of organizational

objectives and strategy and how individual actions contribute to the achievement of those objectives.

BUDGET (OR MODERNISTIC) CONTROL - CULTURAL (OR POST-MODERNISTIC) CONTROL

The role of cost and management systems in organizational change, or organizational learning, is the subject of a growing debate. Management accounting systems may be reactive (promote single-loop, or adaptive learning) in that they change in a passive way to reflect environmental change. This is the traditional, budget or financial, control role where cost and management accounting systems are used as effective tools for implementing intended strategies. Some authors suggest that these systems can, by widen the scope and focus, play a proactive role in shaping change by making problems visible, in that they create, not communicate, reality (Hariman, 1990; Kawada and Johnson, 1993; Shank and Govindarajan, 1992). The idea of controlling organizations through plans, translated into budgets, which are used in monitoring that the operations are pursued in accordance with intentions, is a product of the modernist philosophy (Jönsson, 1996, p. 42). Further, as maintained by Birnberg and Snodgrass (1988), it is not until the culture fails to provide adequate implicit controls that management must institute explicit controls. Or put differently, first comes culture (informal control), than formal control systems, keeping in mind that financial control is mandatory for various reasons.

Cost management systems can be designed to promote double-loop, or generative learning, by increasing involvement and support from employees at all levels and all functions. Improvement, or organizational learning, is encouraged and supported in large Japanese firms through its work structures and performance measurement systems, of which cost management system is one (McMann and Nanni, 1995). That is, in order to overcome the lack of relevance of traditional management accounting systems, modern systems have widened the scope and focus by increasing the capacity of learning in two aspects: supporting strategic (value creating and competitive) thinking, and assisting continuous improvement (inductive learning) at an operational level, by reducing errors, matching customers' requirements, and eliminating waste.

Three features distinguish traditional management accounting systems: (1) the ability to measure the outputs of a process, (2) the existence of preset standards against which actual results can be compared, and (3) the ability to correct deviations from standards. In order to locally address and resolve specific problems, the management accounting system has to be leached (in terms of measurements) to a locally designed performance measurement system (e.g. Local economy system), that promotes direct and actionable feedback to employees. That is, in an empowered organization cost and management accounting does not just provide information and advice to managers, but to employees as well, to aid them in their work. Consequently, as firms today compete on many dimensions there is a need for multi-dimensional cost management system. These systems should then not only include financial as well as non-financial measurements, but internal and external information, as well as trend information, and comparative and absolute measures of performance (Fitzgerald et al., 1991; Bromwich and Bhimani, 1994). Further, the information have to be split into those measures showing the results, and the determinants (or causes) of those results.

Kaplan and Norton (1992) propose, along these lines, an explicit and systematic way of analyzing and balancing critical performance indicators and measures associated with strategies. In their analysis, performance measurements are grouped into four categories; financial measures; customer measures; internal business measures; and innovation and learning measures. The authors argue that financial measures inform the firm of the results of past actions, whereas the operational measures (customer, internal business, and innovation and learning measures) are the drivers of future financial performance. By using these measures (indicators) simultaneously, managers will be able to guide their business towards desired goals in a continuously changing environment;thereby making the traditional budget redundant, in that planning is pursued on an ongoing (monthly, for example) basis. And, further, in that the effect of one determinant is contingent upon the state of others, these have to be balanced in order to optimize the financial result.

However, the proposed performance model is modern (flexible) type of automatic feedback (single-loop learning) system that is not useful in the face of major changes in competitive

dynamics. This implies that this kind of follow-up system has to be complemented by information system that scan and report critical changes (double-loop learning). Simons (1995) terms these systems for senior managers "interactive control systems". He remarks that similar interactive processes may also occur at lower organizational levels, but, "interactive control system" is limited, by definition, to an agenda addressed by the highest levels of management. The inflow to the "interactive control system" may come from operational levels, besides other sources, which implies that empowered employees have to participate in double-loop, or generative learning as well.

What we have learnt so far, is that cost management systems, designed for learning organizations in competitive dynamics, have to support single-loop learning as well as supplement double-loop learning (c.f. Hopwood, 1987; Dent, 1990). This is achieved by, among other things, integrating, in a legible (separately) way, multiple dimensions, and thereby leaching the determinants (causes) of performance to the result (effect). Hence, an interesting research question is to uncover the preconditions for single- and double-loop learning in empowered organizations (c.f. McMann and Nanni, 1995; Cobb, Helliar and Innes, 1995; Jacobs, 1995). And, related to this query is the question of how to design cost management systems that facilitate different kinds of learning (use) in a relentless changing environment. From a technical point of view, one interested question is how to design the interface, in terms of measurements, accuracy, timely, and so forth, between, on the one hand, strategic and tactical level, and on the other tactical and operational level (c.f. Cobb et al., 1995). Or, differently put, how to establish an open two-way channel of communication between upper and lower levels by the means of, or within the restrict of, cost management systems. While from a behavioral (local) standpoint, the setups of the interface (interaction) between the cost management system and the users are of (more) direct importance.

The intricate nature of cost management systems may make organizational learning difficult, and some types of cost management systems may be more conducive to learning than others. As mentioned, in this paper it is suggested that differences in cost management systems may result in different types and amounts of learning, and, thus, in its extension, competence. How these systems may facilitate learning is open to debate. A relevant issue in this context is, however,

how to design an organizational structure that is prepared to change or learn and that facilitates ongoing change (organizational learning), and how to match this structure with a supporting (proactive) cost management system.

CONCLUDING COMMENT

To bridge the gap between (Japanese) management and (Western) research, it is our conjecture that this new theory on management control has to identify and elaborate on those conflicting demands that have to be balanced in today's competitive dynamics. Competence Management, grounded in a social (maneuverable) setting, focus on what type of knowledge various cost management techniques and practices yield, to what extent, and under what (social) circumstances. Given this knowledge and the long-term strategic considerations of the organization, the choice of appropriate cost management techniques and practices and their implementation and application may be set within an integral (holistic) management control frame. This framework does not just enhance the overall performance, but also support the introduction and the design, and the elaboration of a learning organization. Learning, then, is boost in situations that are characterized by discontinuous change was well as in a more stable environment that distinguishes continuous improvement. Importantly, the discussed framework is firmly rooted in the logic of replication; and, applying this framework will result in generalizations of theories that explain the observations that have been made.

As the previous discussion indicates, the predominate systems thinking has to give way for a logic based more on learning and competence than on systems logic. Accordingly, the fifth discipline is not systems thinking (c.f. Senge, 1990), but an ability to apply learning logic. Competence Management offers one way (of course not the only way) of viewing cost management in a learning setting. By discussing and questioning the framework sketched in this paper we might come out with a more coherent theoretical model, applicable both in the conduct of case study research (refine the theory), and in conjunction with standard statistical studies (test the theory in a positivist sense).

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