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Employee acceptance and routinization in management control systems implementation: lessons from a Japanese organization

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Abstract

The implementation of management control systems (MCS) in an organization is aimed at its employees. Indeed, it is employee behavior that ensures the proper MCS implementation for achievement of organizational goals. Significantly, this suggests that the factors influencing employee behavior are crucial to the success of any MCS implementation. Using participant observation in a Japanese organization through a structural approach to MCS implementation, the interactions between employees and MCS were analyzed to identify intrinsic factors that influence employees and MCS implementation at the different stages of the implementation process. The analysis findings indicate that MCS have two distinctive aspects, namely legislated and contextual elements, and that Japanese employees are inclined to the contextual element under the influence of the perception process. These findings provide useful insight into the intrinsic nature of MCS from the employee point of view. Combining the findings with the geographically different patterns of perception, the results suggest that MCS should be implemented by means of a framework for analysis that balances the two elements of MCS under the influence of the perception process.

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1 Introduction

The increasing globalization of the world economy both provides opportunities for and represents threats to companies that previously focused only on domestic competition. In the changing global environment, international competition requires those companies to expand abroad in order to exploit management resources and gain new markets. In this international context, one of the most challenging issues facing multinational companies is how to manage overseas operations geographically distant from the home country. In developing coordination and control for global activities and employees, the question of whether and how management control systems (MCS) should be transferred has come to be significantly raised. In addition, MCS transfer outcomes are influenced by employees' willingness to accept the MCS. The increasing importance of MCS implementation in a different environment has been widely recognized both by business practitioners and academics, a fact to which the large body of MCS research on MCS design and use certainly attests. The preponderance of MCS research, however, has taken the implementer's point of view in investigating the factors influencing the success of MCS implementation. In examining the influence of those factors, the dynamics of the employee response to MCS implementation, typically attributed to something called "culture," have been much less systematically explored. Although extant research offers some suggestions for successful MCS implementation, the lack of any multifaceted view limits the usefulness of any such implementation in a new environment.

This study sought to answer the question: How can multinational companies successfully implement MCS in overseas subsidiaries? In so doing, the specific focus of research was a participant-observation-based analysis of the changes of employee behavior and thought toward MCS during the implementation period. This approach advances the understanding of how employees accept new MCS and how the MCS are settled and developed into daily practices in an organization. Employee involvement and cooperation are indispensable to MCS implementation. In addition, MCS represent a cooperative system between managers and employees in a formal organization.

Because the choice of a control attribute has a significant influence on MCS implementation, much of the earlier research attention was devoted to efforts to find which control forms or concepts provide the best remedy under various conditions. Furthermore, in contrast with other systems which require company-wide involvement and resources, the influence of MCS is limited in scope, and entails more flexibility in the processes of selection and implementation. Therefore, it is not surprising that MCS research has been inclined to contingency-based study to develop a best-fit framework in the specific-organizational context.

This study employs the ethnographic research method to explore behavioral aspects of employees. Employment-tenure data enabled the author to investigate the intrinsic nature of MCS and its hidden mechanisms in a Japanese organization. A case study draws on two comparative situations captured in the process of MCS implementations through changes in equity ownership. The MCS implementation process in a new organization is similar to that with respect to information systems. Therefore, the literature on information technology (IT) system implementation (Cooper and Zmud, 1990), which has been widely applied to activity-based costing (ABC) implementation, provided a basis for the separation of implementation stages in this study. This study, in developing an understanding of employee behavior toward MCS, found that the perception process theory proposed by Nisbett (2003) for cognitive science offers the most relevant data analysis framework.

This study, through qualitative field research, makes three contributions to the body of MCS research. First, participant observation provides the opportunity to consider the intrinsic nature of MCS, which is composed of two distinctive elements. Describing supporting evidence with an explanation of element characteristics, cases with an interpretative approach identify the two elements of MCS. Second, analysis based on the system implementation process model clarifies factors and interactions between MCS and employees at different stages of implementation. Applying perception theory to the understanding of interactions, this study presents a sequential process in which employees shape their awareness of MCS throughout MCS implementation. Finally, the author's proposed framework, based on his research findings, focuses on the balancing

of the influences of both MCS elements and employee perception. Indeed, this framework is developed to guide future research in the design and use of MCS.

This dissertation is organized as follows. First, it provides a brief review of prior studies on IT implementation models and their application to ABC implementation. Keeping the focus on employee behavior in MCS implementation, the patterns of perception process and MCS definitions are discussed before cases studies are introduced. In the next two sections, the research design and method, respectively, are explained. Observed facts with interpretation are described next for discussion. In the following sections, the findings are summarized and analyzed, and the factors respecting the relationship between employees and MCS elements that should be considered when MCS are implemented in overseas subsidiaries are suggested. Finally, conclusions are drawn.

2 Literature review

2.1 System implementation model

Management accounting, which involves the processing of internal accounting information, has been studied and developed to improve its concepts, methods and uses by management accountants inside organizations. Traditionally accounting systems were managed solely by accountants, with no interface between accounting systems and other information systems. However, after the publication of *Relevance Lost* (1987) by Johnson and Kaplan, new management accounting practices based on different perspectives have been implemented to provide relevant information for decision-making and control processes. In the wake of advances in IT industry, accounting systems were integrated into enterprise resource planning (ERP) systems that allow for holistic management of all company information. In these circumstances, early ABC researchers (Anderson, 1995; Krumwiede, 1998) examining the influence of contextual factors on the different stages of the ABC implementation process had no choice but to rely on the IT implementation models, due to lack of s sufficient number of relevant studies in the management accounting field.

Considerable research on the system implementation processes has been undertaken by management information system (MIS) scholars. As an innovation diffusion theory, adoption of IT has been studied and developed by examining individuals and organizational environments. Kwon and Zmud (1987), realizing the lack of integrating frameworks in IT implementation research, proposed an IT implementation process model consisting of six stages. This multi-stage model, which identifies the sequence of system implementation events, is based on the fact that adoption of innovation in an organization typically is phased in over time from its introduction. Cooper and Zmud (1990) modified this model by incorporating some behavioral definitions, and applied it to their research of material requirements planning (MRP) implementation. The initiation stage is the very beginning of the implementation process, where organizations recognize problems and look for possible improvements. System planners or users are not involved at this stage. The adoption stage includes approval for implementation. Therein, necessary resources are secured. In the adaptation stage, system becomes available for use in the organization. From this point, the participation of system users begins, and so management support is important. From the next, acceptance stage, users really start to use the system and to evaluate its characteristics from experience. It is at and from the routinization stage that the organization takes it for granted that the system is used for daily activities, replacing other practices and systems. At the final, infusion stage, the system contributes to the increase of organizational effectiveness (Cooper and Zmud, 1990). Exhibit 2.1 summarizes the stage definitions.

Exhibit 2.1 Six-stage IT implementation model

Stage	*Definition*
1. Initiation	Active and/or passive scanning of organizational problems/ opportunities and IT solutions are undertaken. Pressure to change evolves from either organizational need (pull), technical innovation (push), or both.
2. Adoption	Rational and political negotiations ensue to get organizational backing for implementation of the IT application.
3. Adaptation	IT application is developed, installed, and maintained. Organizational procedures are revised and developed. Organizational members are trained both in the new procedures and in the IT application.
4. Acceptance	Organizational members are induced to commit to IT application usage.
5. Routinization	Usage of the IT application is encouraged as a normal activity.
6. Infusion	Increased organizational effectiveness is obtained by using IT application.

Source: Adapted from Cooper & Zmud, 1990

Kwon and Zmud (1987) also identified five major contextual factors that influence IT implementation throughout the stages of implementation: individuals, the organization, technology, tasks, and the environment. Exhibit 2.2 provides a list of these five factors, each of which comprises minor factors. Concluding that prior studies had focused only on a relatively few factors and narrowly conceived implementation stages, Kwon and Zmud argued that various factors associated with the different stages of the implementation process should be considered in future research. The findings of Cooper and Zmud (1990)'s MRP study suggest that some other factors such as organizational environment or political motives might serve as dominant drivers of the IT implementation process. However, the six-stage IT implementation model has provided a basis for analyzing the process of cost system implementation. ABC researchers have introduced IT implementation theory to test the effects of various factors on the different stages of ABC implementation process.

Exhibit 2.2 Contextual factors in IT implementation model

Major contextual factors	*Minor factors*
1. Characteristics of individuals associated with implantation	Disposition toward change Education Job tenure Role involvement with IT solution
2. Organizational factors	Degree of centralized of decision-making Degree of functional specialization Existence of informal communication networks
3. Technological factors	Complexity experienced by users Compatibility with existing organizational structures and systems Technical improvement relative to existing practices Determinants of implementation success
4. The task to which the technology is applied	Task uncertainty Task variety Worker autonomy and responsibility
5. Environmental factors	Heterogeneity of external demands on the organization Uncertainty caused by external turbulence External communication networks

Source: Kwon & Zmud, 1987

Anderson (1995) conducted case study research on ABC implementation at General Motors Corporation (GM), specifically applying a six-stage model of IT implementation. Due to the limited time frame, she considered only the first four stages of the model. Her evidence indicated that contextual and organizational factors influence the different stages of implementation in different ways. For example, the attitudes of individuals such as project champions and ABC designers are critical to the initial three stages, though from the stage of acceptance, individual personalities fade and bureaucracy emerges as the dominant factor. This change reflects the fact that informal networks or groups are organized at the acceptance stage, suppressing the individual's role and opinions and searching for cooperation to achieve ABC implementation. Cases also suggest that, at the acceptance stage, organizational routines replace individual initiative as the driving force behind ABC implementation.

Another study that applied the IT implementation model to ABC implementation was Krumwiede's (1998) survey research of management accountants. His tested whether Anderson (1995)'s results are applicable to other firms with extended implementation process stages. However, for the last

three stages of the six-stage IT implementation model, he applied the measure of information use to classify ABC implementation into each of the stages of acceptance, routinization and infusion. Krumwiede's definitions are as follows (1998, p. 248).

- *Acceptance* is achieved when ABC is used at least somewhat by non-accounting management for decision making (Anderson, 1995)
- *Routinization* is achieved when ABC is commonly used by non-accounting management for decision making and is considered a normal part of the information system
- *Infusion* is defined as not only using ABC extensively but also integrating it with the primary financial system (Kaplan, 1990)

This quantitative research clarified the relationship between independent and dependent variables, suggesting that the influences of contextual and organizational factors and two control variables vary according to the stages of the implementation process. However, the survey targets were controllers and accounting managers, who are in managerial positions. Therefore, the IT quality of contextual factors, for example, are positively related to the ABC implementation stages with the explanation that managers with higher-quality IT might favor ABC implementation more than those with lower-quality IT. By contrast, in other study of Anderson and Young (1999), IT, according to stakeholders, had only mixed impacts on ABC implementation.

Application of the IT implementation processes has clarified the influence of the contextual and organizational environments on ABC implementation by segmenting ABC implementation into sequential stages. However, there have been few findings on changes of employee behavior or how employees have accepted and followed new systems. Fortunately, Anderson (1995) identified employee factors that precede group activity in an organization at the acceptance stage of ABC implementation. These results provide a useful research direction in defining the factors critical to the analysis of employees who accept and use a new system. Other ABC researchers, who have sought to identify the factors leading to successful ABC adoption and implementation without

separating the process into sequential stages, have examined behavioral factors related to employee resistance, proposing distinctive behavioral models (Argyris & Kaplan 1994; Shields 1995). The investigation of employee behavior and thought provides an alternative viewpoint for the analysis of system implementation. System designers and implementers are held responsible for successful system implementation; employees, on the other hand, are not. However, a great deal of responsibility lies with employees for receiving training and accepting changed practices and environments throughout the implementation process.

MCS are a system without regard to control characteristics. Therefore, the results of ABC implementation that applied a system implementation model imply that MCS implementation can also have various factors that influence the different stages of the implementation process. MCS are planned and implemented between two parties: managers and employees. Prior MCS research has collected data excessively from groups of managers in assessing the factors determining successful implementation; by shifting the research focus back to the employee side through participant observation, this study explores the types of data and factors neglected in prior studies. In this study, the observation and analysis focused on two particular stages of the six-stage implementation process—acceptance and routinization—in order to understand the pertinent employee-related factors. The reason is that MCS have to be accepted by employees in order to be implemented in an organization. Ever afterward, MCS are implemented for routine purposes of control between managers and employees within the organization. Explaining these issues further from the perspective of ownership and authority in the MCS implementation process, Exhibit 2.3 presents the rationale for why a specific stage is adopted or rejected.

Exhibit 2.3 Application of six-stage IT implementation model to MCS

Stage (Cooper & Zmud, 1990)	***Ownership for implementation***	***Authority or duty within each stage***	***Adoption / Rejection for this study***
1. Initiation	Managers	Managers consider whether to implement MCS or not	Rejected
2. Adoption	Managers	Managers approve MCS implementation	Rejected
3. Adaptation	Managers, employees	Managers develop procedures. Employees receive training with limited involvement	Rejected
4. Acceptance	Employees	Employees decide whether and how to accept MCS	**Adopted** ✓
5. Routinization	Employees, managers	Employees perform routine activity of MCS. Managers use MCS for ordinary control process	**Adopted** ✓
6. Infusion	All members within the organization	MCS are used strategically to achieve organization's objectives	Rejected

Ownership establishes a clear line of primary responsibility for the implementation of each stage. In addition, authority or duty explains the assigned and expected behaviors by stage. At the initiation stage, managers consider MCS implementation or reject the plan. Likewise, at the adoption stage, managers determine whether to adopt MCS and approve MCS implementation. From this, adaptation stage, employees begin to become involved in the MCS implementation process by participating in procedures and applications training (Cooper and Zmud, 1990). However, managers develop those procedures and determine their scopes. The acceptance stage, at which employees decide to accept or resist MCS, requires researchers to investigate employee-behavioral factors. In Anderson's (1995) research of GM, employees routinized the accepted ABC system at the acceptance stage. If the acceptance stage is not implemented or completed by employees, the next stage, routinization, cannot be properly implemented or achieved as planned. Lastly, at the infusion stage, MCS are in place for strategic control and empowerment purpose. As prior process studies have hypothesized about particular implementation stages with associated factors, the present study also assigned employee factors to two significant stages of the MCS implementation process in order to explore the interactions between employees and MCS during the MCS implementation period. Those two stages were determined to be acceptance and routinization, wherein employees would be expected to

play a pivotal role in the implementation process. However, employee behavior vis-à-vis system acceptance can be influenced by the way employees actually perceive the system.

2.2 Patterns of attention in perception process

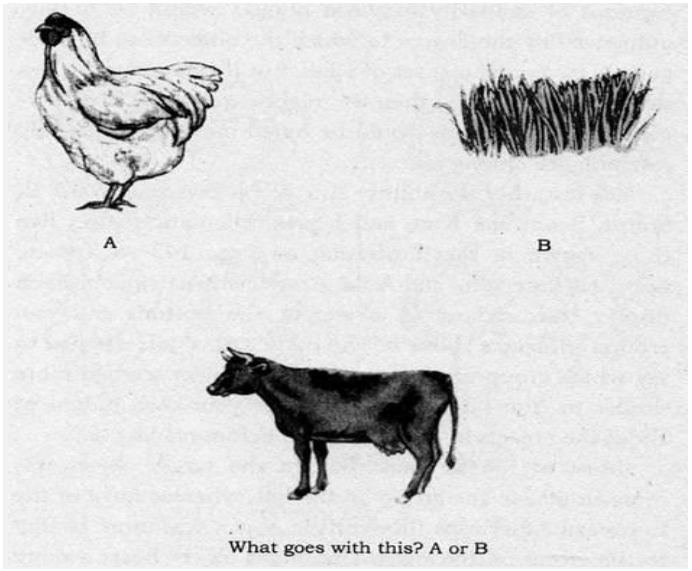
Human perception is one of the core constructs of personal behavior. Prior to taking a certain action, previous experience influences our decision-making process, either consciously or unconsciously. In recognition of the fact that all experience cannot be memorized and recalled in the same way, the perception process has been highlighted with factors that influence perception. Intriguingly, recent research in cognitive psychology provides substantial evidence that considerable differences in the perception process exist between East Asian and Western cultures. It is obvious that East Asian countries such as China, Japan, and Korea have lifestyles, beliefs, foods and languages distinct from those of Western countries. Empirical research based on geographical differences has examined certain propositions and suggested that cultural differences might influence the ways in which the world is perceived. In turn, these findings provide a foundation for the prediction of geographical differences in the perception of MCS that are critical factors influencing MCS implementation.

Nisbett et al. (Ji, Peng, & Nisbett, 2000; Nisbett, 2003; Nisbett, Peng, Choi, & Norenzayan, 2001) suggested that East Asians pay more attention to the entire field, whereas Westerners attend more to salient objects. They accordingly proposed that cultural and social factors affect the perception process, presenting, as examples, ancient Greece and China. They argued that the Greeks' strong sense of personal agency developed their individualism and curiosity, which led to the pursuit of knowledge, but that, contrastingly, the Chinese, a rice-cultivating society, developed a sense of collective agency which nourished harmony within social-group members, the sharing of responsibilities, and the diminishing of confrontation. These two different social characteristics developed into distinctive social philosophies undergirding social existences. Therefore, the Greeks developed methods to analyze an object's attributes, according to which they categorized it. The Greeks sought to analyze, and to understand, a discrete object in isolation, because its attributes do

not change. The Chinese, on the other hand, endeavored to understand an object as a part of a larger substance, emphasizing inseparable relations, continuity and complexity. Also, Greek economic activities such as hunting and trading, and their associated social structures, enhanced the attention to objects and their attributes, with little cooperation from others. Chinese agricultural society by contrast, required interdependent relations among neighbors, attending to social relations and assigning causality to them.

Empirical data supports their argument. The relevant experiment had been conducted around 40 years ago but it was not until the 1990s that it finally due to the advent of globalization, received attention. Chiu (1972) tested hundreds of Chinese and American children to find how they grouped items together. He showed them a number of pictures, and asked them to identify which two belong together (Figure 2.1). The majority of American children picked the chicken and cow, explaining that the two belong to the same category, that of animals; the Chinese children grouped the cow not with the chicken but with grass, based on the relationship, "cows eat grass."

Figure 2.1 Example of item measuring preference for grouping by categories vs. relationships



Source: Adapted from Nisbett 2003, p.141

Through a variety of experiments testing differences in the process of perception between East Asians and Westerners, Japanese as East Asians have shown similar tendencies with respect to objects and environments. Masuda and Nisbett (2001), examining the context sensibilities of participants, showed Japanese and American college students animated vignettes depicting underwater scenes with fish, rocks and plants. The participants were then asked to report what they had seen. The Americans referred to the focal and salient objects in the animated vignettes, noting fish with putative species, and showing a general tendency to attend to larger, brighter and more rapidly moving objects. The Japanese reported non-moving background features such as rocks, plants and environments. That is to say, the Japanese participants reported more contextual information than did the Americans. Also in another study, objects were shown with various backgrounds, and subjects again were asked to report whether they had seen the objects. The ability of the Americans to see the objects was not influenced by the change of the background. But that of the Japanese to perceive the objects was weakened by new backgrounds that differed from the original. Kitayama et al. (2003) developed the Framed-Line Test to measure perceptual difference. They showed a square frame with a vertical line inside to both American and Japanese subjects. Then, a new square frame of a different size was shown to them, and they were instructed to draw the identical line inside, which was to be either absolutely the same length of the original line or only relatively the same length. The results showed that the Americans were more accurate in the absolute task, which required that the original length of line be redrawn and the size of the new square frame be ignored. By contrast, the Japanese were more capable of performing the relative task where the original proportion of the line inside the square frame had to be maintained, which required that more attention be paid to the frame. Nisbett and Miyamoto (2005) reconfirmed that Americans tend to organize objects by means of rules and categories, focusing on objects irrespective of context, whereas Japanese typically attend to context and its relationship with objects. On this basis, they concluded that the process of human perception is not fixed and universal but rather is influenced by social and physical environments. In another Japan-related experiment, Masuda and Nisbett (2006) compared change blindness between American and Japanese university students. Showing both still photos and animated vignettes, they asked their participants to indicate any changes that they had

noticed in either focal-object information or contextual information. The results, in the form of the number of detections, indicated that Japanese participants are more responsive to the changes in contextual information than to those in focal-object information, whereas Americans are more likely to detect focal-object changes.

Growing evidence strongly suggests that culture has an influence on the process of perception. Although the mechanisms explaining these cultural differences in perception are still under investigation (e.g. Miyamoto et al., 2006), the different patterns of perception may still be applied to predict or interpret the influence of employee perception on MCS implementation. In this same context, one of possible assumptions about MCS is that Japanese employees will be inclined to attend to MCS context as a whole as well as the relationship between it and the various MCS elements, and that Westerners will take the more analytic approach, perceiving as a series of discrete and unconnected objects, and focusing on those objects and their attributes. This extended assumption establishes a new relationship between geographical region and perception of MCS, thus providing a basis for understanding the influences of different perception processes on MCS implementation. In addition, the distinctive perception process of the same control characteristic may lead to different contexts in which an action occurs as a result of perceived control.

Perception also has been a critical issue in management accounting. In a report for the US National Association of Accountants (currently the Institute of Management Accountants) and the Society of Industrial Accountants of Canada (currently the Society of Management Accountants of Canada), Mintzberg (1975) reviewed the reasons managers fail to use management information appropriately, identifying one of them as "individual cognitive limitations." Indeed, the brain's systematic filtering of information according to its predetermined patterns of experience is known to be a cognitive factor affecting information use. In identifying informal factors that influence MCS, perception is defined by saying "the messages (about the goals of the organization and the actions to take in order to achieve them) may be subject to differing interpretations" (Anthony & Govindarajan, 2001, p. 63).

Perception, as it influences the ways in which we sense the world, affects MCS implementation measures through information processing.

2.3 **Management Control Systems**

MCS have gained prominence in the sphere of management accounting since Anthony (1965) first introduced the concept of management control as an academic subject fifty years ago by distinguishing it from strategic planning and operational control. He defined management control as "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives" (p. 27). With the focus on middle managers and the controls around them, performance measurement based on finance and accounting information became significant. This definition regards MCS as a management tool supporting middle managers' supervisory duties. Thus, Anthony believed social psychology to be the basic source discipline for management control. However, this classic concept over the years has changed to embrace broad roles of MCS in various contexts beyond the scope of middle management. Such research has emphasized the behavioral, motivational and social aspects of management controls. Ouchi (1977) moved the focus of control to employee behavior, introducing three types of controls: behavior control, input control and output control. Accounting controls used to be input and output controls to monitor what is consumed and what is produced. With his three types of controls, the complimentary use of both accounting and non-accounting controls became important in a given organizational environment.

Machin (1983) applied a new approach to defining MCS by separating the three words: *management*, *control*, and *system*. According to Machin's definition, *management* is a subset of activities that go on in an organization; *control* is a subset of the total range of managerial activities such as planning, motivating, coordinating, staffing, directing, and controlling; *system* is the subset of organizational systems that includes only formal, systematically developed, data-handling systems. Machin's

definition clearly indicates the boundary between *control* and *system* without confining MCS to either human behavior or technical systems.

A movement to include non-financial elements proposed balanced scorecard (BSC) as a framework to provide a conceptual and practical management system within the MCS domain (Kaplan & Norton, 1992, 1996). BSC was devised to make up for the weak points of traditional performance measures based on financial indicators. Thus, BSC was designed to translate organizational vision and strategy into four measurable performances: financial, customer, internal business process, and learning and growth. The financial perspective measures an organization's profitability to succeed financially; the customer perspective clarifies the customer's viewpoints with respect, for example, to customer satisfaction and on-time delivery, to achieve the organization's vision as well as to secure future profitability through customer loyalty; the internal business perspective emphasizes the excellence of internal operations through internal business measures such as cycle time and yield; the learning and growth perspective identifies an organization's capability to improve and create value. Combining the financial and non-financial performance measures, BSC enables management to control organizational activities in line with company strategy. As such, BSC has an aligning role, which is to ultimately build goal congruence within an organization. With the coming of uncertain times, formalized MCS needed informal structures to manage uncertainties with flexibility. Simons (1995) proposed four levers of control with the introduction of beliefs systems and interactive control systems as MCS elements. Contrary to the other two conventional controls (boundary systems and diagnostic control systems) which suppress and monitor any exceptional deviations, beliefs systems and interactive control systems are used to motivate employees for the creation of positive behavioral outcomes in an organization. Beliefs systems carry organizational value and direction that managers want their subordinates to use in searching for new opportunities. Boundary systems establish limits to avoid risks in the opportunity-seeking activities. Diagnostic control systems are the formal information systems that managers use to monitor organizational outcomes and correct deviations from preset standards of performance (p. 59). Interactive control systems are formal information systems managers use to involve themselves regularly and personally in the

decision activities of their subordinates (p. 95). Simons argued that these four levers of control should be used to balance organizational tensions for the successful implementation of business strategy.

Anthony and Govindarajan (2001, p. 6) described management control as "the process by which managers influence other members of the organization to implement the organization's strategies." This influencing role includes informal and non-financial controls such as social controls. They also emphasized the importance of the informal organization which is not depicted on the formal organization chart. The MCS definitions and characteristics have evolved to encompass all kinds of control mechanisms and practices that assist managers to achieve their objectives. In addition to the broad definitions, MCS researchers have added newly-defined types of control to the MCS concept over time or have regrouped the categories of existing controls based on control characteristics. Behavior-focused MCS research has also introduced different MCS functions to cope with uncertain environments (Chapman, 1998; Ahrens & Chapman, 2004). The basic logic is that earlier formal control systems that deal with certainties are not suitable for changing environments. The necessity and usefulness of informal communication along with formal control systems were thus argued.

Amid overflowing definitions and conceptualizations, Chenhall (2003) clarified the meaning of MCS by broadening its concept while differentiating it from other terms such as management accounting systems (MAS) and organizational controls (OC). First, management accounting (MA) was defined as a collection of practices such as budgeting and costing. On that basis, MAS were explained as the systematic use of MA in order to attain a certain goal. To differentiate OC from MAS, OC were specified as referring to internal activities or processes that include control functions for managerial purposes. While the term MCS is maintained as the broadest conception of control, behavioral and social controls are excluded from MAS and OC. The broad control concept and its applications enrich MCS research by considering non-accounting controls as well as psychological factors. Merchant and Otley (2007) have tested the broad MCS concept and domain by taking a holistic view of various control concepts and systems, concluding that the MCS field, due to its

complexity and interdisciplinary nature, is underdeveloped. Without an attempt to define a new concept of control or to rearrange MCS characteristics, this study uses a similarly broad and extended definition of MCS to analyze control activities and systems implemented by managers in organizations.

Simultaneously with the MCS definition, the MCS taxonomy and framework, based on control form or function have been developed by MCS researchers (see review by Chenhall, 2003; Harrison & McKinnon, 1999). Chenhall (2003) divided controls into two groups based on the nature of the control: mechanic or organic. According to this taxonomy, mechanical controls are more formal and procedural in operations; organic controls, on the other hand, are more flexible in use and abundant in data. Other studies based on the holistic approach proposed that a control system does not operate in isolation, and that therefore, a comprehensive framework is appropriate for understanding complex control systems within an organization (Abernethy & Brownell, 1997; Chenhall, 2003; Malmi & Brown, 2008). Malmi and Brown (2008) proposed a conceptual framework of an MCS package (Abernethy & Chua, 1996) constituting five distinctive natures: planning, cybernetic, reward and compensation, administrative, and cultural controls. Planning controls set organizational goals and coordinate all activities to align with those goals. Two approaches exist for planning controls. Action planning is for a one-year period or less, and long-range planning is for a longer-period of time and a more strategic focus. Cybernetic controls are close to the conventional concept of control with the detecting and feedback functions. Cybernetic controls are again composed of four distinctive systems: budgets, financial measurement systems, non-financial measurement systems and hybrid measurement systems. Both financial and non-financial measurement systems coexist in hybrid measurement systems such as BSC. Reward and compensation controls are related to the enhancement of employee motivation toward organizational goals. Administrative controls direct employee behavior, and consist of three types: organization design and structure, governance structure, and procedures and policies. Finally, cultural controls create an overall organizational environment, and include three types: value-based controls, symbol-based controls, and clan controls. The MCS package is also one of the more powerful frameworks for use in analyzing entire MCS

with defined categorization of control elements. These approaches from the taxonomic view of control are useful in identifying the relationship between preset control of MCS and independent variables. However, the contextual influence on MCS, for example, becomes obscured under such an MCS package framework, because culture is defined as a control system. Such broad concepts of taxonomy or framework in controls make distinguishing between "object to be controlled" and "independent variable" in the MCS implementation difficult.

The fundamental goal of the implementation of MCS, as a control system contributing to the achievement of an organization's objectives, has not changed. MCS research under changing environments has constantly updated the concepts, methods, and uses of MCS to meet the requirements of the times. However, effective MCS should help managers plan and control future events rather than analyze past events or events at a particular moment in time within an organization. Therefore, case study encompassing a broader environment and taking a long-term perspective could provide more useful insight into MCS implementation.

3 Research design

3.1 Research setting

Research of an American manufacturing company (AC) that had been a Europe-Japan joint venture (EJV) was undertaken retroactively. Data were collected while the author was a full-time employee in the company for three years in the late 2000s. As the author was a member of the controlling team, all of the financial data as well as qualitative information were available for research preparation and analysis. From the moment of the author's joining the EJV, distinctive work environments between the European managers and Japanese employees were apparent. Along with expatriate managers and corporate policies, a new corporate culture was introduced to EJV organization, which had been a traditional Japanese manufacturing company (JC). Minor conflicts between the European managers and Japanese employees were readily observed both inside and outside the office, but ended in

European victory over the Japanese according to the organizational hierarchy, regardless of seniority. Japanese employees adapted themselves to the new environment under European management, and conflicts based on cultural differences always provided fodder for gossip within the EJV organization. Nonetheless, the European managers showed a strong sense of responsibility toward their work and company. Their work attitude and professional mind impressed the Japanese employees. Gradually, all of the employees in the EJV, concerned about its financial condition, were motivated to share the same organizational goals and encouraged to pursue the organization's objectives under new European management.

Five years after the EJV's establishment, it was acquired by the AC, and the management team was replaced accordingly. Accounting standards were transformed from International Financial Reporting Standards to US Generally Accepted Accounting Principles. Internal reports were also changed to the new AC protocols, and were submitted to new superiors defined within the newly introduced functional organization. To prevent unexpected occurrence of psychological agitation among the Japanese employees, the AC placed heavy emphasis on developing the same corporate culture across the company through an in-house educational program. The AC even announced that the EJV's compensation systems would be maintained with job security until the organization was fully consolidated into the single AC. However, the author witnessed a change of employee feelings about the company. Japanese employees began complaining about the AC's management style and their new superiors. It seemed that local voices and thoughts were not adequately recognized by the new management team. It was not surprising, then, that some employees, including some key persons, began to leave the AC. To be specific, two R&D managers moved to a Japanese competitor; the alloy shop manager returned to the JC; the controlling manager returned to the European company (EC); also, several other managers and employees left the AC to pursue other, non-related careers. Later, news was reported that the AC plant manager, who had originally transferred from the EJV, decided to leave the AC. He had been a prominent technical manager in the EJV and AC since joining the JC after graduation from university. Considering that, with the exception of the

controlling manager, it was their first time changing jobs, the significance of the problem could not have been more strongly emphasized.

On a day several years ago, the AC's IT manager (former the EJV's IT deputy manager) invited the author to the year-end party organized by ex-EJV colleagues currently working in the AC. The author's first impression was surprise at the fact that the former EJV employees in the AC still organize this kind of gathering periodically. When I reached the appointed place near the AC's manufacturing plant, eight managers were in attendance. Diverse business-related conversation was shared, though there was a prevailing nostalgia for the EJV. It was even mentioned that in the same place the previous year, a farewell-party was held for the Japanese controlling manager who had returned to the EC. The fact that former EJV employees still held these types of informal gatherings in the AC was surprising and meaningful. Strong ties among the participants were detected in their conversations. What I saw and felt at that year-end party stimulated me to reexamine the causes of such a situation.

Both the EC and the AC transferred their own MCS to the newly-acquired Japanese operation. The EC implemented a standard cost accounting system, which is regarded as a conventional accounting system in that it relies on quantitative measures with excessive calculation for use and maintenance. The AC introduced new Key Performance Indicators (KPIs) to monitor local operations and promote functional relations. Judging from the characteristics of the respective MCS, both can be categorized as a cybernetic control system, which is more formal, incorporating standardized operation procedures. Traditionally, cybernetic control based on management by exception or result has been developed and considered to be more suitable for Western cultures, because it stresses optimization within constraints (Johnson & Kaplan, 1987; Hiromoto, 1988). If so, how did the European management implement their MCS successfully in the traditional Japanese organization? And what made the Japanese employees turn against the AC and its implementation of the new MCS? On the assumption that both MCS share similar characteristics as cybernetic control systems, qualitative

research into the real situations can provide clues to the change of employee behavior throughout the course of the MCS implementation.

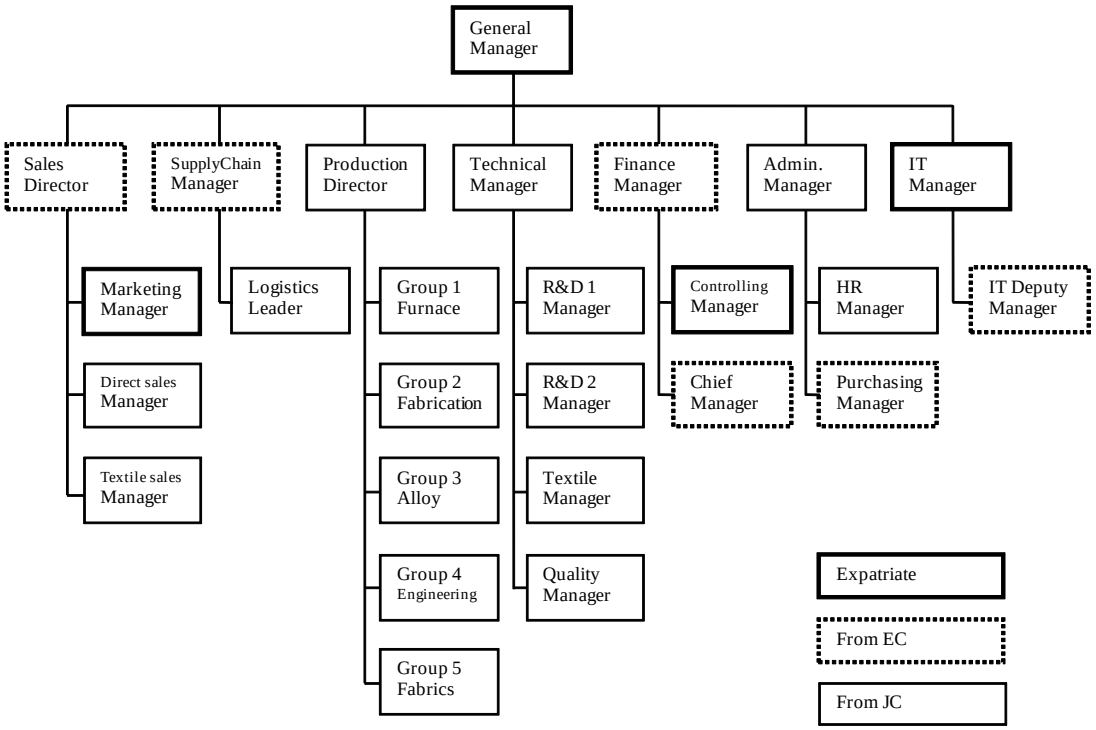
3.2 Company background

Here, the pseudonym AC represents the American manufacturing company. The previous joint venture, that between the European and Japanese manufacturing companies before the acquisition by the AC, is referred to as EJV. EC indicates the original European manufacturing company, and JC the Japanese manufacturing company. The EC has been present in Japan for more than 30 years by foreign direct investment, and also has maintained several joint ventures with various Japanese companies for performance materials. In the early 2000s, the EC decided to establish a new joint venture with the JC wherein the EC holds the majority of shares. A shareholders' agreement was formed by acquiring shares of the JC's a subsidiary inside of the JC plant site. Most Japanese employees were transferred from the JC, but the management team was replaced by EC managers. The JC's managers, concerned about job security, were reluctant to transfer. But the JC persuaded them to transfer nonetheless, with the guarantee of reemployment if they wanted to return to the JC under certain conditions. Before long, four young European managers were dispatched from the EC's head office: a general manager, marketing manager, IT manager and controlling manager. All of them were in their 30s. The general manager was in full charge of the local entity's business, in the manner of an entity president (Figure 3.1).

The new joint venture capitalized at JPY 1 billion with monthly revenues in excess of JPY 800 million. The number of employees, including sales and administrative staff, was around 200. The production volume was 2,500 tons per month, and the sales volume, including imported trading goods, was 4,000 tons per month. It included furnaces with its own metal shop, where their own refractory was produced. A new ERP system was introduced for alignment with the EC system with the help of internal and external consultants. The manufacturing process was redefined with a specific cost driver, and activity-based costing was applied under the standard cost accounting

system. To maintain a strict standard costing system, for example, even actual production labor costs were posted into six separate labor cost centers based on employment contracts to calculate variances before standardized labor costs were respectively allocated.

Figure 3.1 Initial EJV organization chart

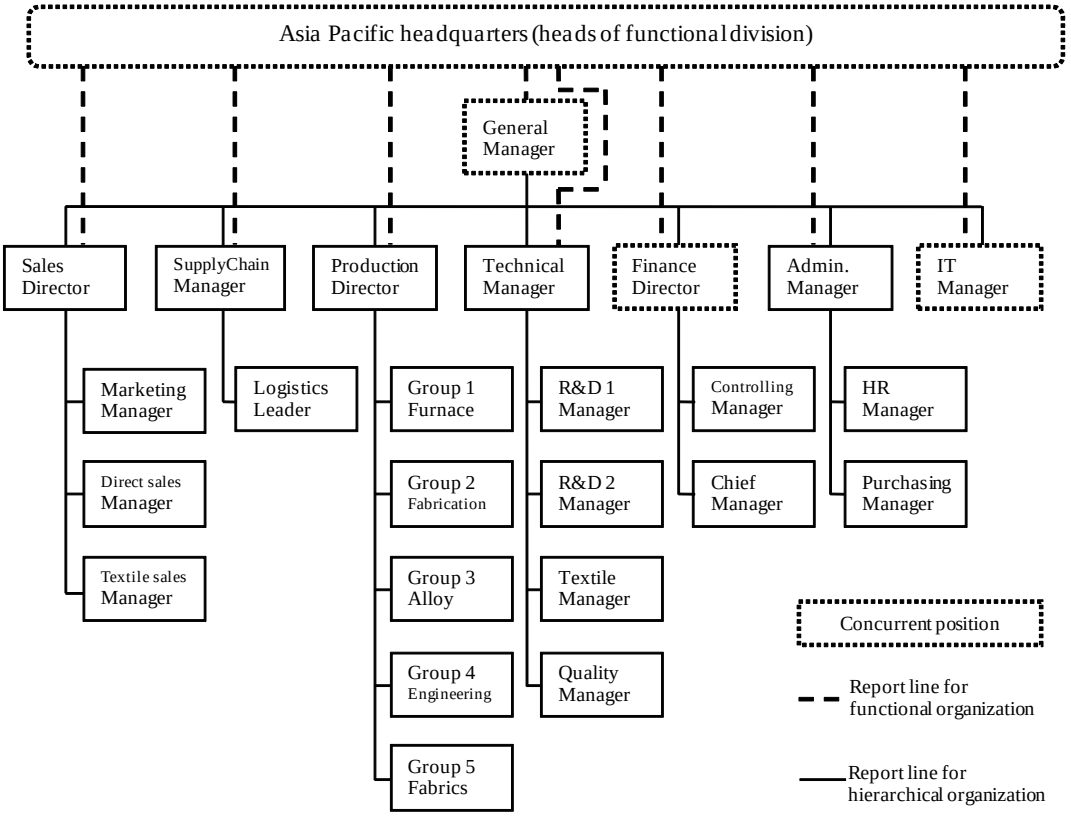


Source: Company documents

The AC was founded in the United State more than half a century ago. It used to be a manufacturer of performance materials for construction and fireproofing. It already had a long history of close relationship with other Japanese manufacturing companies through joint ventures. In the late 2000s, both the EC and the AC announced the intent to merge divisions of their businesses and, soon after, the AC acquired the EC's reinforcement business to strengthen its position in performance materials. Accordingly, the EJV became an AC wholly-owned subsidiary after the AC took complete ownership of EJV shares. The EC's IT manager returned to Europe while the acquisition was under negotiation. Immediately prior to the change of ownership, the EC's general manager, finance manager, and controlling manager were recalled to the EC. The controlling manager position was

filled by a Japanese controlling manager from one of the EC's Japanese affiliates. The vacant positions of general manager and finance manager (finance director in the AC), meanwhile, were taken up by existing local AC management (Figure 3.2).

Figure 3.2 Organization chart after AC's acquisition



Source: Company documents

4 Research method

In this research, in order to understand the MCS implementation in a real business-organizational context, the participant observation method was used with an interpretative approach. Being part of the field, participant observation provides in-depth information on the relevant actors, activities, and

interactions. As such, it attempts to gain an understanding of people's beliefs and activities "from the inside" (Myers, 2009). The collected data from participation cannot be obtained from other methods, and data collection generates different perspectives on the research. Ethnography helps researchers to question what is taken for granted (Myers, 2009). For example, Janelli's (1993) ethnographic study described the detailed daily practices and dynamics prevailing in a Korean conglomerate. Even though they were from a foreign point of view, the observations on the events inside the Korean conglomerate revealed rich facts and information that other quantitative research could not have provided. The ethnographic approach to conducting accounting research is not common. However, Ahrens and Chapman (2007) argued that understanding context in the style of an anthropologist can facilitate the understanding of organizational uses of accounting practices and control systems. Ahrens (1997) conducted a comparative study of British and German brewers to succinctly hypothesize his ethnographic research findings.

Qualitative field research also has fundamental weaknesses that need to be mentioned before it is applied. First, the research field may have difficulties in representing the whole society, and the field can be influenced by external factors such as the researcher's viewpoint. Also, sample size and theoretical generalization remain challenging, especially compared with other methods. Despite these issues, deeper and richer understandings of accounting practices certainly are obtainable within the respective social context (Ryan et al., 2002). If a social phenomenon has its own meaning within a specific context, contextual interpretation is needed in order to explain it. Interpretative researchers believe that "all actions have meaning and intention that are retrospectively endowed and that are grounded in social and historical practices" (Chua, 1986: p. 615). In other words, in interpretative research, meanings are emergent and facts contain social meanings.

Treating field research and case study as a synonym, the present case study set out to develop causal explanations as well as to explore relationships between observed facts in a Japanese organization. By introducing multiple cases and building explanatory stories, this study reveals more evidence for data analysis and discussion. Although the explanation of cases is rather redundant and the analysis

of the observations is relatively subjective, the cases were organized to develop better understanding of the comparative situations under the implementations of two distinct MCS. Maintaining the focus on the interaction between employees and MCS throughout MCS implementation, this study examined the changes of employee behavior so as to clarify the factors affecting the process of MCS implementation. Yin (2009, p.18) defined "a case study as an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." Additionally, according to the case study method, the contextual variables were clarified as to whether they were independent or dependant.

5 MCS Implementation in EJV

To prepare detailed reports for different internal business units and to better manage local operations, the EC's group ERP system was introduced to the EJV by headquarters' support. Foreign ERP specialists from headquarters and locally hired external consultants cooperated together day and night to keep the project schedule. The expatriate controlling manager played a mediating role between the home country's ERP team and the Japanese operation teams. The support from the local IT department was for hardware equipment and IT security issues with ERP access authorization. The cost center structure and cost drivers were determined so as to capture local operations as accurately as possible. For example, 161 cost centers were created including system controlling ones, and 65 cost centers were categorized as work centers with defined activities. Other local systems and organizations were restructured to meet the EC's needs and to fit into the operational process. In the EC, a financial forecast was prepared twice a month and delivered to headquarters. Upper management wanted to know about the financial results of their business, without surprises. The same culture was infused into the ERP system and transplanted in overseas subsidiaries such as the EJV. On the other hand, the Japanese employees regarded the new ERP system as a long-term investment in the EJV. New business flow and cost calculation configurations in the ERP system were also seen as a transfer of the EC's advanced management skills. Both by top-down directions

and bottom-up participation, the new ERP system based on the standard cost accounting system was successfully introduced into the EJV.

5.1 **Transfer of personnel**

The EC dispatched four young managers to the EJV to enhance communication and the local responsiveness to the Japanese market. Among them, the IT manager and the controlling manager were located with the other administrative departments in the plant site's main building. Half of the building was occupied by JC employees because the EJV was renting office spaces from the JC. Two expatriate managers were expected to transplant EC systems and procedures into the EJV plant, to assure better control through hierarchical surveillance. In the preparation period of new the ERP system implementation, the controlling manager used to be late for work and skip the morning calisthenics, even though all employees on the premises were expected to participate. One day the HR manager thus tried to persuade him:

> "Robert, you should not be late for work. You are a manager. It is deteriorating the office atmosphere. Even we, administrative Japanese employees, are obliged to wear uniforms and go outside for morning calisthenics. Otherwise, shop floor workers would complain of our attitudes. Please come earlier and join the work-out." Robert raised his voice to protect himself. "I don't understand why I have to do so. I worked late last night. Also, in my home country, it is quite normal to be 30 minutes late for work. You can check this with EC's Tokyo office."

Even though it is not a part of European business culture, morning calisthenics in company uniform was the norm in the EJV. The controlling manager's reputation was damaged by not accepting the HR manager's advice and the Japanese employees wondered whether his attitude was grounded in European culture or his own personality. To expatriate managers, the EJV was just a subsidiary of

the EC. They did not feel the need to adapt themselves to Japanese business culture. Therefore, they maintained their own ways, and expected the Japanese to understand and adapt to them.

One day the controlling manager and a Japanese subordinate were scheduled to visit the Tokyo office on a business trip. The controlling manager asked the subordinate to take the train to his place (fortunately, the subordinate had to pass by that place on his way in any case) in order to meet for the train ticket purchase to Tokyo. He insisted that, according to EC group policy, the higher-ranked employee is supposed to pay the travel and entertainment expenses instead of subordinates. Thus, the Japanese subordinate had to take the train early in the morning to meet his boss and purchase tickets together. In Japan, they prepare their own tickets, and employees do not have to travel together if not necessary. In this way, stringent application of company policy by expatriates did not tolerate any practices based on Japanese business culture that were beyond their understanding.

On the other hand, when the IT manager was looking for a house to rent as an expatriate, he found what he liked, but it was for sale only, not for rent. Then, he tried to persuade the local HR manager to purchase the house for him. He computed the net present value to prove that buying the house was a better decision than renting for the company. Even though his proposal was rejected, this story spread throughout the EJV and helped Japanese employees to understand European ways of thinking in a Japanese organization.

In the EJV, expatriate managers caused minor conflicts with Japanese employees in the beginning. First, the self-centered Western disposition surprised the Japanese. The managers were perceived to pursue their own interests, even at a cost to the Japanese organization. Also, a coercive and uncompromising attitude was constantly tolerated by the Japanese employees, and they had no choice but to accept the changed environment under the new European management. A clear psychological separation between the expatriates and the local Japanese employees was created. This reinforced the collectivist culture among the Japanese in responding together to the alien European management. In addition, a dichotomous way of thinking among the European expatriates treated all

of the Japanese employees equally without favoritism for any Japanese individual. In the changed organizational circumstances, through the conflicts between the two parties, a new equilibrium was reached between what expatriate managers wanted and what Japanese employees expected.

5.2 MCS implementation by controller

> "Why do we have so many cost centers? They look so complicated and need a lot of work to maintain the system." So I asked an accountant who had been working the longest in the finance department after joining the EJV. She answered "We also do not understand why, but now we are accustomed to it. Many of them are created for costing and allocation purposes. One thing that is clear is that we cannot run the system to close our book during month-end closing without Robert. He is the only person here who can handle this complex system."

Before long, it became obvious that no one in the EJV except for the expatriate controlling manager fully understood the logic inside the ERP system. Most of the master data and system issues were validated and reviewed by him before any request was sent to the ERP support team in the home country. Any technical troubles even in other departments needed his help for probable solutions because all of the system data were linked and interdependent. Other finance members often consulted him for cost centers and chart of account before posting journal entries. Accurate cost calculation was pursued overbearingly by detailed allocations based on actual or strong causal relationship. Through talks with the controlling manager, another reason became known. Robert said:

> "I do not want others to run the system. If they make a mere mistake, it really takes time for me to find and fix it during month-end closing."

Distrust toward his Japanese colleagues, rather than system complexity, served as the foundation for his work attitude. Over-reliance on one person for the entire system and closing process provided an impression that no internal control activity was in place. But this practice gained implicit agreement in the EJV organization. Aspects of the surrounding environment, for example the tone at the top, also supported him for the purposes of data accuracy and consistency. Sometimes, the controlling manager requested a temporary access authorization to a restricted ERP transaction and posted adjusting entries that were supposed to be performed by an accountant. Not many Japanese employees even had a chance to know what exactly he did in the system. But when, because of the AC's acquisition, his return to the EC was determined, he hurried to pass all of his duties off to other colleagues.

The endowment of the controlling manager with exclusive centralized authority sent a clear message to the EJV throughout the MCS implementation process. The expatriate controlling manager was an MCS implementer entrusted with the power of assessing and directing the activities of the local organization on behalf of the general manager and headquarters. Important duties in the ERP system were not assigned to the local Japanese employees, owing to a deep-rooted belief that local Japanese employees would commit errors in running the system. And the Japanese employees realized that they were excluded from the process of important decision-making or group reporting. It was always expatriate managers who made decisions on critical issues for the EJV or who issued reports to headquarters in Europe.

5.3 **MCS implementation as a routine activity**

In the EJV, the expatriate general manager was responsible for the full results of local operations, which were directly linked to his performance evaluation. His office was at Tokyo EC headquarters, but during the period-end closing around the 2nd working day, he came to the local plant and was awaiting the outcome of a cost calculation from the ERP system. As soon as the details of manufacturing variances were available, he discussed the interim result with both the finance

manager and the controlling manager. After the income statement was finalized for group reporting, he returned to Tokyo.

With the implementation of the ERP system, the controlling team uploaded the actual activity quantity of each cost center into the system during month-end closing. Communications between the controlling team and the production operators had been facilitated through data collection and verification. Under the new ERP of the European management, all employees were required to participate in period-end closing by providing production data requested by the controlling team. Non-finance employees became busy like finance people during the closing period in gathering and preparing activity information. If the activity reports showed an unexpected deviation compared with the previous month or monthly plan, they were required to investigate and come up with an explanation. After month-end closing, cost center owners received cost center reports with variance analyses pertinent to their responsible areas. In the distribution email, the general manager, production director and finance manager were included together to arouse cost center owners' attention about the variances. The new management team held monthly management meeting at the plant site where all of the managers discussed key issues such as financial results, inventory levels, production issues, market trends, and departmental variance reports. Participation in period-end closing with open-book management (Case, 1995) of local financial information increased employees' interest in the EJV's financial result.

> When Takahashi-san visited the main building for the HR department, he spoke to the controlling manager with a smile. "Hi, Robert. You need to know this. We cleaned the floor with tab water because oil was spilt. Do not be surprised to see the water consumption in the batch cost center during month-end closing."

Production people began to report, in advance, unusual activities that would cause unfavorable variances in cost calculations. Even though the monthly variances were not always taken negatively or seriously counted toward performance measurements, unfavorable variances meant shame to

Japanese managers. Since Japanese managers understood how variances were generated in their cost centers, they appreciated the visualization of detailed monthly results from the controlling team. They believed that creating favorable variances was a way to show that they could directly contribute to the company. And the fact that the upper management received the same, emailed reports at the same time, put cost center owners in an uneasy mood. Japanese employees constantly and spontaneously tried to generate favorable variances with their colleagues and subordinates. Also, the tight variance control with participative period-end closing enabled shop floor information to be reported to the controlling team immediately, without waiting until period-end closing.

With the help of the ERP system and variance reports by the controlling team, the relationship between finance and non-production became closer. Previously, non-finance employees thought that, as long as they handed over invoices to finance by the end of the month, book closing was the responsibility of the finance team. Through participation, Japanese employees became more concerned about the financial result of their operations. They began to perceive the standard cost as the start line beyond which they should generate favorable variances rather than as the finish line to meet in the end.

5.4 Controllership in MCS implementation

Controllership was new position for the Japanese employees. Its duties used to be assigned to several employees from different departments. In the EJV, the expatriate controlling manager equipped with corporate procedures and policies centrally processed all of the financial and operational data to help the management team with the pertinent information in a timely and accurate manner. In order to perform planning and control responsibilities from budgeting to performance evaluation, the controller also had to be familiar with non-financial operations such as production and procurement. The conventional view is that controllership is based on strict output control through mathematical calculations. However, with technological improvement and globalization, the role has been changing. In this changing environment, the expatriate controlling manager knew which language he

should deploy when he communicated with his counterparts in the EJV. Also, the existence of controllership in daily working life influenced how the local Japanese employees thought of the local finance team. Managing the local accounting information and preparing all of the internal reports and financial postings, the controller validated the data in the system and adjusted it if necessary so as to align it with group policies, before finalizing the result. The information processed by the expatriate controlling manager was official and final. If any financial or operational information were needed, EJV employees contacted the controlling manager to obtain the necessary information without preparing their own data.

> "Robert, can you give us some sales data which I need in order to check the stock movement? I plan to prepare a report to trace it by material groups. I also need your advice on material grouping." The supply chain manager asked Robert. "No problem, actually, I have a similar one prepared for monitoring of sales volume. Material groupings are based on BD and trading/non-trading. BD means a business division determined by corporate. I also use this BD when I report financial results to headquarters. Do you plan to report it to someone? If so, please consult me again before you send it out. Anyway, I will send you the file, take a look and let me know if you need additional information. Also, I recommend that you use three-month average sales volume to check the turnover. "

The controlling manager was not a mere information provider for upper management. He supported other functions with necessary information. Sometimes, he proactively involved himself in producing operational reports, thereby diffusing the message of being under watch. The standard cost accounting system with activity reports and variance analyses played an important role as a communication channel between the controlling manager and the local Japanese employees, thus maintaining high degree of data accuracy. As a management accountant, the controlling manager drew a clear line between management accounting and financial accounting on behalf of local employees. Between the controlling manager and the non-finance employees, only management

accounting information was communicated throughout the MCS implementation process. Between the controlling manager and the finance team members, management accounting information was adjusted for financial accounting reporting. The MCS, which are strictly based on management accounting information, enabled local Japanese employees to understand the relevance of the numbers to local operations.

6 MCS Implementation in AC

After the AC's acquisition in the late 2000s, no new management was dispatched to the EJV. The existing AC operations in Japan did not have any expatriates from overseas headquarters, either. Asia Pacific regional headquarters in China directly and remotely supervised and coordinated seven manufacturing sites in Asia. Incumbent AC's managers concurrently managed the newly acquired EJV organization. Therefore, the organizational hierarchy and report line were realigned to the AC's function-oriented organization. The functional structure across borders was newly defined to emphasize functional specialty based on department without changing local hierarchical organizational structure. Each function was managed by respective functional leader with the predetermined KPIs of the functional unit. The KPIs became a medium of communication between functional leaders and local operations, providing them with necessary information at a glance. The EJV's standard cost accounting system was maintained in the ERP system for material management and cost calculation. The local controlling team continued sending cost center reports and detailed variance reports to the newly-appointed general manager and finance director, who concurrently managed the entire Japan AC entities. Soon, they asked the controlling team not to include them in the distribution list for the detailed local reports. They explained that, as the regional management team, they received a summary of financial results from China's regional finance team, to which the local controlling team report.

6.1 **Transfer of method**

As the AC's other functional leaders planned and held training session, the regional cost controller of the Asia Pacific region visited newly acquired EC sites to train local controlling teams in how to prepare new AC reports. The preparing of various AC internal reports for timely submission during period-end closing was taught. In these predetermined group reports, material grouping and cost accumulation were not aligned with local manufacturing process and costing systems. For example, in the reports, fabric materials measured by *m2* in the EJV had to be transformed into *kg*. Additionally, for internal reporting purposes, a product requiring special surface treatment was categorized simply based on its diameter. In order to prepare the standardized business dashboard for upper management, the AC's regional headquarters required all manufacturing sites to submit local management accounting information in the same templates.

Once when the regional cost controller visited the former EJV site for training, the Japanese controlling manager asked the production manager to help her in grouping products based on AC's definitions:

> "Takahashi-san, we need your help here. Do you have a minute? Let me introduce B.J. to you. B.J. is a cost controller for the Asia Pacific region. As the controlling team, we have to submit new AC internal reports on a monthly basis. We need to first reclassify our products in order to fill out new AC templates. These products are not clearly defined by AC definitions, and we are not sure how to categorize them; please advise us which categories are closest to these products."
>
> Takahashi-san expressed his surprise. "Wow! What is this? No, no. this product is using very expensive surface treatment material developed by our R&D manager Nomura-san. See that product code starts with N after his name."

The controlling manager replied, “No wonder, its standard cost is much higher than similar products. But we have to classify by diameter according to AC’s definition. Please help us.”

Takahashi-san asked the controlling team about the use of report. “What are they going to do with these reports? It is non-sense. Out products cannot be simply categorized based on diameter.”

B.J. answered Takahashi-san’s question instead of the local controlling team. “We compare each site’s costs on product group level for benchmarking.”

After the regional cost controller had returned, the controlling team with the help of the production team continued the work of categorizing the local products. The production manager kept casting doubt on the usefulness of the internal reports. The controlling team also knew that the AC’s internal reports lacked relevance to the local products and operations. To reassure production manager as well as to avoid any responsibilities associated with relevance issues, the controlling team stood by him, tried to maintain a distance from the AC’s regional headquarters, and questioned the intent of the internal reports requested by AC headquarters.

Local management accounting information was reproduced by the controlling team in preparing internal AC reports. This process involved various employees for information validation as observed above. The participants soon realized that the reports did not consider specific local situations. The controlling team also was embarrassed by the transmission of local information to the predetermined internal reports. These reports were consolidated into a few KPIs to provide the management team with a snapshot of local performance on the business dashboard. While internal data were being converged into standard formats, psychology between the local sites and regional headquarters was diverging.

6.2 **Information management for MCS implementation**

Each local site at different locations was obliged, when reporting to regional headquarters, to input necessary data into spreadsheet files in a shared folder of regional headquarters' server. Some data were reported directly to functional leaders within the functional organization, but in that case the leaders used to save the necessary information in the shared folder after they gathered and validated the functional unit's data. Thus, management accounting information for all seven manufacturing sites in the Asia Pacific region (2 in China, 2 in Japan, 1 in Korea, 1 in Thailand, 1 in India) became accessible by most regional managers and local finance people. If monthly KPIs showed large deviations compared with the budget or monthly average, additional comments from the local controlling team or responsible persons were required. If favorable and unfavorable variances were offset and the deviations were within the given respective tolerances, the explanatory comments could be omitted.

> The controlling manager asked the production manager after examining the KPIs of the Korea plant. "Takahashi-san, you have been to the Korea plant, right? In this report, the unit manufacturing cost of the Korea plant is $1.02/kg whereas our plant is almost $2/kg. In fact, the cost is even decreasing at Korea plant."
>
> Takahashi-san replied. "Yes, I went there with Ikeda-san last month. It was quite a new plant compared with ours. But they do not have direct processing facilities like our plant. They make semi-products and then dry them. After the drying is finished, they process them further. Also, the products they manufacture are very limited. I will check and let you know again. Anyway, why is our manufacturing cost so high? What about the other plant in Japan?"

Through information-sharing among subsidiaries, the local Japanese managers' attention was directed from their own operations to the results of the other subsidiaries' operations. Understanding that comparisons between manufacturing sites were being made, local managers became more

concerned about the KPIs of the other sites. The local controlling teams also tried to grasp the other sites' situations behind the numbers. This type of investigation consumed unnecessary time and energy in the AC companywide. Especially within the Japanese organization, cooperation across local departments was exerted to analyze other subsidiaries' results and situations.

6.3 MCS implementation by functional leaders

Functional leaders in functional structures implemented their own MCS to achieve the goals of functional units based on the company's KPIs. Orders and reports for functional performance were communicated within functional units through emails or telephone conferences. Every local department was busy reserving conference rooms and telephone conference equipment. On the other hand, lateral, cross-departmental communications in the local AC organization were disrupted and decreased. Due to such poor cross-departmental communication, someone's absence on a business trip was not notified until the person was wanted for a certain purpose. Each local department operated independently under its own functional structure.

While we were having an after-work gathering with colleagues from finance, IT, and the supply chain, the IT manager asked to be excused for a while for a telephone conference call with IT managers in the Asia Pacific region and the Chief Information Officer (CIO). With the time difference between Japan and the U.S., such meetings used to be scheduled either early in the morning or late in the evening. After he came back, he said:

> "I will visit China next month on a business trip. All of the IT managers from the Asia Pacific region and CIO will attend a meeting. It seems that our CIO wants to organize face-to-face IT meetings more frequently." And he continued, "I may move to Tokyo to supervise the other plant site. But I will travel here often after I move."

Under EJV management, the expatriate general manager, for cost-saving purposes, would review and approve employees' overseas travels. Approval was given only when the overseas travels were absolutely necessary with respect to the interests of the EJV. In the AC, no one was fully responsible for the bottom line, because local entity was divided and managed by functional units. Other colleagues felt that under new functional organization, only the situation of the IT department had been improved. The other departments were still struggling to adapt themselves in their responses to the new bosses.

The MCS implementation by functional leaders in the overseas offices did not consider the local workplace environments in pursing the goals of the functional units. Functional orders fostered a deteriorating atmosphere for local employees across departments, specifically through the different degrees of control intensity, and the consequent weakening of the existing clan control (Ouchi, 1980) typical of a Japanese organization. Complaints about the unfairness of the MCS across departments were expressed toward the AC organization rather than toward the Japanese counterparts. Organizational silos of AC functional structure were embedded through the implementation of functional MCS. The Asia Pacific regional managing director, who expected a synergy effect from the IT department after the acquisition, began to complain about the slowness of IT support in his managing region. But, he was not able to push the local IT departments because IT functional organization was managed by CIO.

One day, the purchasing manager told the controlling team that Chinese clay was on the way to our plant for production testing. He said that he knew the vendor, and, under the EC management, had considered switching to the raw material. But it soon became clear that, after earlier testing the clay with other production and technical managers, its purchase had been declined. When we asked for further information, he explained the situation to us thusly:

> "AC's other plant in Japan had bought this clay a long time ago, but it seems that they found some quality issues in processing this raw material and stopped using it. Nonetheless the Asia Pacific regional management team wants to test it in our lines to see whether it can be used. During the meeting, our managers, pointing to the previous test results, showed concern over the raw material and opposed the plan, but the decision was made to proceed anyway."

The local controlling team was not officially informed of this testing until this raw material had arrived and cost information was needed for master data creation in the ERP system. Soon, the test turned out to be a complete failure, causing damage to refractory equipment in the production lines. The rest of the clay was sold to a recycling company without further testing. All of the local Japanese employees felt frustrated by not being able to persuade the regional management team to abandon the plan.

6.4 MCS implementation across borders

Local Japanese managers were tasked with reporting to new functional leaders in foreign countries such as China, Korea, Singapore, and the U.S. Those functional leaders scheduled periodic meetings with related local sites for remote management. Telephone conference calls and electronic communications were the routine communication tools for the cross-border MCS implementation. But as the production manager said to the controlling team after a conference call,

> "Indian English is not easy to understand with its strong accent. It even seemed that the Indian manager was outside on the street. I heard car horns sound throughout the meeting. Anyway, can you check the last month's production volume? My boss

said that the production volume that I reported is slightly different from what he received from the regional finance team."

Due to the geographical distance between superiors and subordinates, the MCS implementation depended on wire communication or email conversation. Due to multipoint meetings, language skills became another key element of the multinational MCS implementation. Some local Japanese managers felt anxiety about conference calls in English. A few of them brought their bilingual subordinates into the telephone conference call for better communication. This hurt managers' pride in front of their subordinates, while the subordinates were not satisfied with the simple interpreting task.

Also, another issue concerns data consistency. Local departments were managed respectively and each submitted requested data to functional leaders through direct communication. But since those superiors received similar information from global or regional finance teams, discrepancies between data from different sources were detected at a certain management level at which all of the information across the functional organization was available. This detection entailed extra confirmation works back to the local operation departments and controlling team.

7 Discussion

7.1 MCS implementation process

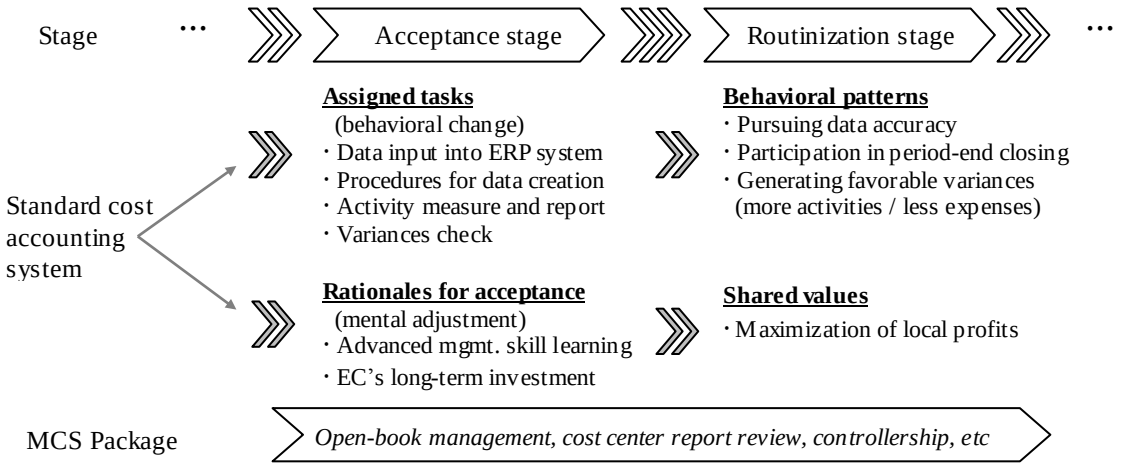
MCS are implemented by managers to achieve an organization's objectives. Accordingly, MCS research takes an instrumental or functional approach to the design and use of MCS. From the employee point of view, an organization's objectives are shaped, and impact them, through MCS implementation. By taking, with IT implementation model (Kwon & Zmud, 1987; Cooper & Zmud, 1990), a structural approach to participant observation, two stages of the implementation process

wherein employee behaviors can function as critical factors affecting MCS implementation can be identified. As explained earlier, employee involvement in MCS implementation begins from the adaptation stage. However, ownership of implementation still belongs to managers while employees receive necessary training for new procedures. It is at the acceptance stage that employees perceive MCS as a new control system that should be implemented. And at the routinization stage, through interactions between employees and MCS, the accepted MCS are established as normal activity by employees.

At the acceptance stage of MCS implementation in the EJV, the new practices and tasks were given to Japanese employees for the purpose of implementing the standard cost accounting system. Regardless of the employees' desire to embrace change, detailed responsibilities according to the new ERP system were defined and assigned based on the employees' job descriptions. With the given system access authorization, employees had to input goods movement into the ERP system in real time. Furthermore, any new transaction or material had to go through several approval procedures and validation processes before the new data became available in the system. The standard cost accounting system with the new ERP system required Japanese employees to participate in the period-end closing process with activity reports and variance analysis. New practices and newly assigned tasks entailed behavioral change. Japanese employees knew that the new system was introduced under the compulsion of EC management, and thus conformed themselves to the requirements. The concept of the new standard cost accounting systems was transplanted from the EC home country. Above all, key roles such as approval for data access authorization and master data creation in the ERP system were not assigned to Japanese employees. While discontent was growing among the Japanese employees due to their limited authority and responsibility, they accepted the new responsibilities with the ERP system as advanced management skills from the EC. Also, the Japanese employees considered new ERP system to be a long-term investment in the EJV organization by the EC.

Throughout the implementation of the standard cost accounting system, other control systems operated concurrently. For example, open-book management through monthly management meetings was introduced. For this meeting, managers in the Tokyo office traveled to the plant sites. Meanwhile, the local managers gathered together to discuss current issues and to review performance results prepared by the controlling team. Overall, the standard cost accounting system created participative period-end closing activities in the EJV organization. Soon, most of the Japanese employees found that they had become busy in the month-end, and so they did not schedule meetings or appointments at that time. If it were feasible, the controlling manager asked production people to process and measure monthly actual operation data without delaying or estimating any events. Review and feedback of cost center reports by the controlling manager also supported the standard cost accounting system, indicating clearly how each cost center could generate positive effects for the company. The expatriate controlling manager was in the center of all of these activities. These control systems required different tasks to be performed separately, but they shared objectives similar to those of the standard cost accounting system in promoting an understanding of the overall goals of the EJV. The European management team implemented all of these control systems to maximize local profits, which act was in line with their performance measurement scheme. The organization's objectives were gradually clarified at the routinization stage of MCS implementation. Thus, assigned tasks requiring behavioral change were established as behavioral patterns, and the rationales supporting the mental acceptance of MCS were transformed into shared values governing behavioral patterns. Figure 7.1 illustrates how, from the acceptance stage to the routinization stage, the standard cost accounting system is developed into behavioral patterns and shared values respectively in the Japanese organization.

Figure 7.1 Standard cost accounting system in EJV from acceptance to routinization stage

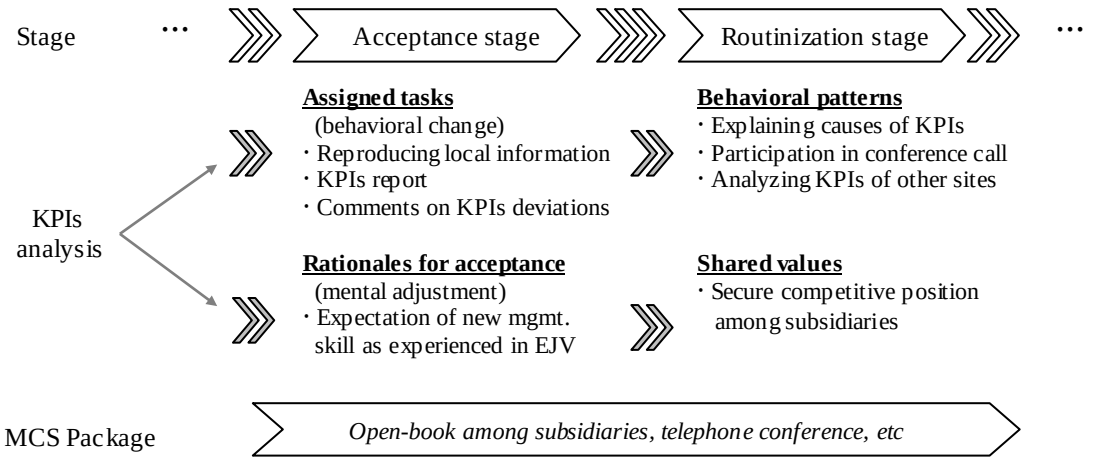


Similarly, the present AC cases provide additional support to this discussion. KPIs analysis by functional leaders was implemented to secure a company-wide synergy effect in the functional organization. Japanese employees were trained to reproduce, as new practices and tasks at the acceptance stage of MCS implementation, the local results of the standard cost accounting system for AC internal reports. The reproduced data were to be reported and communicated for functional KPIs. Responsible employees had to input comments on functional KPIs showing large deviations. The Japanese employees knew that standardized internal reports and KPIs lack relevance to local operations. However, as they had become accustomed in the EJV, they followed the directions of the functional leaders and accomplished the assigned tasks, in expectation that the main MCS implementation goal—that is, the synergy effect in the functional organization—would be visualized and achieved.

At the same time, and throughout the MCS implementation, the other control systems were in operation to support and facilitate the KPIs analysis of the functional units. Due to the geographical distance between the superiors and the subordinates, periodic conference calling became the main communication channel in reviewing KPIs. However, some unexpected problems such as language barriers and time differences soon surfaced, irritating Japanese employees. Also, opened-KPIs

among subsidiaries distracted the attention of Japanese employees, generating unanticipated responses such as a sense of rivalry instead of the intended outcomes of MCS implementation. In preparing functional KPIs, Japanese employees investigated their causes beforehand in order to be able to explain them to their functional leaders during the telephone conferences. Open-book management among subsidiaries made Japanese employees analyze the KPIs of other sites, comparing them with their own operations. Assigned tasks related to KPIs analysis and other control systems were repeated and turned into behavioral patterns. However, the uneasy situation at the routinization stage of MCS implementation, with no clear organizational direction, in the Japanese organization, emergent group goals that satisfied the needs of Japanese employees and governed their actions. Sharing knowledge about other subsidiaries, Japanese employees in the EJV cooperated to analyze all of the KPIs available in the shared folders. Thus, the goal of MCS implementation—the synergy effect in the functional organization—was not shared by the Japanese employees, but rather was replaced by a new organizational search for internal competitiveness among subsidiaries (Figure 7.2).

Figure 7.2 KPIs analysis in AC from acceptance to routinization stage



At the acceptance stage, MCS begin to be perceived by employees as assigned tasks, according to rationales for acceptance. Employees are engaged in new activities that require behavioral change

regardless of their will. If activities and behavior are accepted and repeated by employees, they can be instituted as new patterns in an organization at the routinization stage. In accepting new practices of MCS, employees also need rationales to motivate themselves to commit to MCS implementation through mental adjustment. If this inspirational motivation is encouraged and reinforced constantly by employees, it can manifest as shared values guiding the organizational direction at the routinization stage. Likewise, MCS implementation is perceived by employees as two distinct things: as assigned tasks that carry over into behavioral patterns through behavioral change and repeated behaviors, and as rationales for acceptance leading to shared values that are to be internalized through mental adjustment and repeated understanding.

The dichotomous approach to the analysis of MCS implementation, even though it is from the implementer's viewpoint and does not segment implementation, has been introduced for transferring MCS overseas. Separating practices from the overall MCS implementation, Kato (2000) argued that there are two types of management system transfer: one is method-oriented transfer, and the other is concept-oriented transfer. In method-oriented transfer, only practices that maintain management system implementation are taught by implementers, without sharing overall concepts. However, in concept-oriented transfer, the concept of the management system is understood by employees in advance of the detailed practices; moreover, multiple layers of systems and contexts encompassing practices are transferred together. Kato found that most transfers of a management system are method-oriented. He concluded that transfer of Japanese target costing to foreign countries as method-oriented transfer faces obstacles and limitations, and suggested that concept-oriented transfer provides better possibilities for success. Even though practices and mental understanding are distinguishable from each other in MCS, both are essential to MCS implementation, as explained above. The next section discusses what these two distinctive aspects of MCS are.

7.2 Two aspects of MCS: legislated and contextual elements

Throughout the standard cost accounting system in the EJV, two distinctive aspects of MCS were detected. Employees had to perform new tasks to contribute to the achievement of the organization's objectives as defined by MCS implementation. The required practices and assigned tasks to follow under MCS have, in themselves, a legislated element. A legislated element is a formal and compulsory action that managers require their subordinates to obey in the process of MCS implementation. With the introduction of the standard cost accounting system, Japanese managers were asked to designate responsible members of their teams for new roles in the ERP system. As either key or end users for the ERP system, the designated Japanese employees were trained to perform assigned duties under the control of European management. They were required to input operational data into the system in real time and to report the detailed data to the controlling team at month-end closing. If necessary, the expatriate controlling manager prepared a step-by-step manual after consulting the ERP support team in the home country and shared it with the local responsible employees. The controlling team validated all of the data in the ERP system before they ran the system for cost calculations. As such, unpredicted deviations and human errors were screened for data reliability and adjusted when necessary. At every month-end closing, this monitoring process of management-by-exception under the standard cost accounting system ensured that all of the performed practices were on the right track, which is to say, tending toward the organization's objectives. With the clear responsibilities and logical measurement in standard cost accounting, newly required practices and assigned tasks did not attract unwelcome attention in a Japanese organization.

On the other hand, a contextual element also exists in the standard cost accounting system as a goal of MCS implementation. The contextual element represents the informal and mental part of control, which provides a basis for employees' awareness of the organizational goals that managers have intended to achieve through MCS implementation. Maximization of local operating profit was pursued as a goal of MCS implementation by the new European management to allocate resources

toward an improved overall financial result. At the acceptance stage of MCS implementation, this contextual element could not convey organizational direction to Japanese employees with limited roles, authorities and responsibilities. Through other control systems along with the standard cost accounting system, the overall goals of MCS implementation were imprinted on Japanese employees both in a persuasive and a convincing way. The expatriate controlling manager continually emphasized the importance of variances in the cost center report. And the clear linkage between those variances and the financial result for the EJV was shown and discussed during management meetings. To calculate the variances precisely, data accuracy in the ERP system was pursued, with the highest priority, from the budget period to daily practices. Therefore, by comparing actual results with budget, a certain level of tension was created between the controlling team and the cost center owners. However, the Japanese employees understood that all of these activities were planned and performed to improve the bottom line. Performance assessment of the contextual element in a quantitative way, during MCS implementation, is not feasible, due to inherent features. Employees' understanding and agreeing to the contextual element may be expressed as motivated behaviors or increased commitment to MCS implementation. Both the legislated and contextual elements of MCS in the EJV are shown in Exhibit 7.1.

Exhibit 7.1 Legislated and contextual elements of MCS in EJV

MCS	**Legislated element** (*Assigned tasks to employees*)	**Contextual element** (*Goals that managers intend to achieve*)
Standard cost accounting system	Input operational data into system, Procedures for master data creation, Measure production activity, Report activity to controlling team, Validate data accuracy, Check variance	Increase data accuracy, Maximize local profit by monitoring and controlling activities
Open-book management	Participate in monthly meeting, Prepare meeting materials, Prepare explanation on variance	Improve local performance
Cost center report review	Receive reports and feedback, Explain expenses and activities	Create favorable variance for positive financial result
Controllership	Communicate with controller	Help controller to monitor activities for closing and reporting

Not coincidentally, two similar distinctive aspects of MCS were sensed throughout the implementation of the functional KPIs analysis in the AC. Under the legislated element of the MCS, the Japanese employees were asked to prepare and submit local data for standardized AC templates after internal training. To be precise, the local Japanese employees were trained and obliged to reproduce existing local data for standardized corporate templates. For reporting to functional leaders, data were to be saved in the shared folder, and explanatory comments were required for the exceptional deviations. As part of the monitoring and controlling process, Japanese employees had to join periodical conference calls for review of functional KPIs. If necessary, additional data had to be prepared and reported directly to the functional leaders. Theses physical activities required for KPIs analysis belong to the legislated element.

At the same time, as a representation of the contextual element, the company-wide synergy effect in the functional organization was pursued by functional leaders throughout the MCS implementation process in the AC. After the AC acquired the EC's division, new management stressed the importance of the company-wide synergy effect. For the purpose of creating this effect, local sites were managed. Other control systems also have been implemented to support KPIs analysis in the functional organization. However, the original goal of KPIs analysis was not perceived and understood by the Japanese employees during the implementation. Following the required physical practices of the MCS, the Japanese employees wanted to know how those activities could contribute to the creation of the synergy effect. During the MCS implementation, they thus looked for the reasons behind the assigned tasks to motivate themselves. After all, the new shared values within the AC had emerged as the contextual element of the MCS to guide their behaviors. But with only a weak logical linkage between the tasks of the KPIs analysis and the synergy effect, the Japanese employees in the AC, throughout the KPIs analysis, cooperated to strengthen their competitive position among subsidiaries. Securing the competitive position of the local organization thereby became the new contextual element and also, a shared value. A list of legislated and contextual elements of the MCS in the AC is provided in Exhibit 7.2.

Exhibit 7.2 Legislated and contextual elements of MCS in AC

MCS	Legislated element (*Assigned tasks to employees*)	Contextual element (*Goals that managers intend to achieve*)
Functional KPIs analysis	Report local data to functional leader, Reproduce local information, Prepare and submit functional KPIs, Comment on KPIs deviation	Generate company-wide synergy effect in functional organization
Open-book among subsidiaries	Save local data in the shared folder	Share best practices for synergy effect
Conference call	Participate in periodic meeting, Follow superior's orders	Make best decisions for functional organization to bring about synergy effect

MCS are management tools encompassing a wide range of controls to help managers achieve their organization's objectives. Many MCS definitions and classifications addressing the characteristics of control form or function exist to guide MCS research. However, the different approaches and perspectives of participant observation allowed this study to access and capture the intrinsic nature of MCS, providing two common aspects across two different MCS, and drawing a distinction between the two. A comparison of the attributes of the two distinctive aspects of MCS is highlighted in Exhibit 7.3. The legislated element of MCS can be communicated and monitored appropriately in the relationships between superiors and subordinates. Therefore, employees' perception of the legislated element is expressed and noticeable in the way they perform the required practices or assigned tasks. On the other hand, the contextual element intrinsically has more complicated aspects. Managing the relationships between superiors and subordinates to achieve an organization's objectives is the most important function of the contextual element. The qualitative characteristic of the contextual element makes it difficult to communicate its extent. In addition, the performance of the legislated element does not ensure that subordinates have the same understanding about the contextual element as superiors have. Subordinates perceive the contextual element of MCS as a vehicle for motivating themselves in a given environment or MCS implementation.

Exhibit 7.3 Two distinctive aspects of MCS

	In MCS	
Intrinsic nature	Legislated element	Contextual element
Existence in MCS	Required practices, Assigned tasks	Organization's objectives, Goals of MCS implementation
Communication method	Verbal statement, Codified procedure and manual	Context-dependent explanation, Goal congruence
Explanation manner	Descriptive, informative	Persuasive, convincing
Questions from subordinates	How to do? What to do?	Why this control system? Why should we conform to this control system?
Intended response	Following, obeying	Understanding, agreement
Gaugeability	Detectable and assessable during the implementation	Immeasurable quantitatively during the implementation
Reward type on performance	Extrinsic reward	Intrinsic reward
Employment fit	Contract or temporary employee	Permanent employee
Expected output	Optimization within constraints	Increased motivation and commitment

Intrinsic nature is based on the fundamental content of control. "Legislated" literally signifies the "legal binding force." In the MCS, subordinates are required to meet work standards or perform assigned tasks. These mandatory factors that entail physical labor are defined as the legislated element. At the same time, MCS have a specific purpose throughout implementation. The purpose is a conceptual object that is intangible and that therefore must be understood mentally in a given context. This embedded set of controls is defined as the contextual element. Thus, these two distinctive elements together comprehend the intrinsic nature of MCS.

Existence in MCS supports the classification of the legislated and contextual elements. The legislated element is embodied in MCS through required practices or assigned tasks. On the other hand, the contextual element carries the goals of MCS implementation, which are characterized as an organization's objectives. Both the standard cost accounting system and KPIs analysis are

categorized into cybernetic control, which is defined as "a process in which a feedback loop is represented by using standards of performance, measuring system performance, comparing that performance to standards, feeding back information about unwanted variances in the systems, and modifying the system's comportment" (Green & Welsh, 1988, p. 289). Performance, according to the cybernetic control definition, is the result of executing the legislated element. And other activities taken by managers, such as setting the standard, or measuring and comparing the performance and feedback, are a constant monitoring process to ensure that subordinates follow the legislated element and work for the achievement of the contextual element. As such, a cybernetic control system also is composed of these two elements. As presented in Figures 7.1 and 7.2 above, the MCS in both the EJV and AC cases proved that MCS can come into existence and be valid only when physical tasks and mental concepts exist inside. This classification helps test whether or not tasks assigned by MCS are in line with the overall organizational objectives. Especially, when several MCS are in operation as a package, the tasks of each control system and the goals of control system implementation must proceed in the same direction.

Communication method specifies the effective means of communication for the respective elements. No matter how thorough MCS may be designed and planned, when MCS are implemented, the assigned practices and goals should be conveyed appropriately to employees. Therefore, effective education and training are vital to successful MCS implementation. The legislated element can be trained and performed through verbal orders or codified procedures. In the case of the EJV, this element of MCS was directed by the expatriate controlling manager. In the beginning, the employees received training in the new ERP system. But when it was implemented, he specified the detailed duties under the standard cost accounting system, and prepared system manuals when employees needed them. Even in the AC, internal training was performed to introduce the new practices of the functional KPIs. In the contextual element, broad context-dependent explanation is more effective in clarifying the goals of MCS implementation. If goal congruence is created between superiors and subordinates in MCS implementation, the situation would become one in which only a low level of

control is needed but a high level of commitment is created. In the standard cost accounting system of the EJV, this contextual element—maximization of local profits–was not communicated appropriately to employees. Throughout the implementations of the other control systems, which delivered the same organizational direction as the standard cost accounting system, the overall goals of MCS implementations were understood by the Japanese employees. In the AC cases, neither context-dependent explanation nor goal congruence was attempted with respect to the communication with employees during MCS implementation, which fact caused the synergy effect to be pursued only by functional leaders. Instead, from the introduction of the functional organization, it was formally announced that a company-wide synergy effect in the functional organization would be pursued by the functional KPIs. Therefore, each element should be communicated in an effective way to achieve the respective purposes. For example, goal congruence is not necessary to the task of increasing data accuracy or the duty of preparing timely reports. Different communication methods should be applied for the respective legislated and contextual elements.

Explanation manner in communication cannot be the same for the legislated and contextual elements. The legislated element is to be communicated in a descriptive and informative way because required practices or assigned tasks can be taught and inculcated in that way from superiors to subordinates. In the EJV, the ERP system experts instructed the Japanese employees to use the new ERP system. The expatriate controlling manager took over the training duties later on, and supported the use of the ERP system to maintain the strict standard cost accounting system. Also in the AC, the functional leaders showed the Japanese employees how to prepare the new AC reports for the KPIs. However, the contextual element needs to speak to the heart of subordinates in a persuasive or convincing way, so that the same understanding about the organization's objectives is shared. This is why the contextual elements in both cases—maximization of local profits and the synergy effect—could not be conveyed clearly to the Japanese employees at the early stage of implementation. As shown in the EJV cases, the standard cost accounting system itself, with the support of the other

control systems, delivered a constant message for the improvement of local profit, thereby convincing the Japanese employees of the organizational direction. But the functional KPIs in the AC, with the other control systems, failed to persuade them of the intended synergy effect in the functional organization.

Questions from subordinates are a list of expected doubts that would be raised by subordinates in the course of MCS implementation. MCS are designed and implemented by superiors to achieve an organization's objectives. Therefore, subordinates encounter many new requirements and situations, and naturally want to check whether their understanding is right or not. The required practices and assigned tasks in the legislated element explicitly demonstrate what subordinates are required to do and how they should perform those duties. In both cases, the expatriate controlling manager and functional leaders provided the Japanese employees with clear tasks with training and manuals for MCS implementation. Thanks to their efforts, no significant questions arose on the legislated element side. This legislated element, however, cannot answer questions about why employees should conform to the legislated element. Only the goals of MCS implementation can explain why MCS should be implemented or provide a basis for mental acceptance by employees. In both cases, the Japanese employees were curious of this contextual element from the beginning. Whereas they gradually understood that the standard cost accounting system had been implemented to improve local profits, they used the functional KPIs to secure the competitive position of the AC among the subsidiaries.

Intended response is the reaction that superiors expect their subordinates to show in the course of MCS implementation. On the legislated element side, superiors do not expect new opportunities or big improvements from their subordinates. If the standard operating procedures are followed and obeyed, this element of MCS is considered a success. In the standard cost accounting, Japanese employees inputted data into the system and reported activity to the controlling team in a timely manner as instructed by controlling manager. Also, according to the training they received from their functional leaders, they prepared KPIs analysis by reproducing local data and inputting comments.

However, the contextual element, due to its inherent nature, cannot be followed or obeyed. For example, even if maximization of local profits and the company-wide synergy effect are presented to employees in MCS implementation, it is difficult for them to identify what specifically to do to achieve those goals. Therefore, simply understanding or agreeing to the goals of MCS implementation is the desirable responses of subordinates on the contextual element side.

Gaugeability indicates whether a reasonable diagnostic measurement is available or not. MCS are equipped with a measuring process as a control system. By measuring the output of MCS implementation, managers can define where they are and also can determine what kind of corrective action should be taken to achieve the organization's objectives. Yet not all elements of MCS implementation can be measured. The legislated element can be compared with predetermined standard operating procedures. Therefore, it allows managers to detect and assess deviations from the standard. Moreover, it provides the process by which deviations during the MCS implementation period are invested for improvements. This recursive control process of the legislated element was applied to both the EJV and AC cases by the controlling manager and functional leaders, respectively. However, the contextual element, as to whether employees have the same understanding about the goals of MCS implementation, cannot be measured. The degree of their agreement with the goals of the control system cannot be quantified during the implementation period. Therefore, a satisfactory output from the legislated element does not necessarily mean that employees have the same understanding about the contextual element.

Reward type on performance also needs to be different according to the gaugeability of MCS elements. In the both cases, the reward system is not linked to performances, maintaining rather characteristics of traditional JC's reward system. However, it is assumed that if the design and use of the incentive system are not appropriate, the desired employee behavior cannot be obtained. Rewarding the outcomes of the legislated element can be quantitative according to a performance evaluation. In this case, the extrinsic reward based on economic incentives provides a better motivation for efforts. This is because even employees can measure their performance objectively

and calculate the compensation. On the other hand, the contextual element which cannot be measured needs to rely on intrinsic reward, such as job satisfaction, to motivate employees. If the contextual element uses extrinsic reward to increase motivation for implicit goals of MCS implementation, the mismatch between the contextual element and the extrinsic reward would lead to dysfunctional behavior.

Employment fit reflects the fundamental capability of an organization to implement MCS. This is in the same line of the discussion that emphasizes the control environment. The competency of personnel, which is affected by human resource policy, determines organizational capability. In some cases, certain production employees and office clerks are contracted employees. In fact, nowadays, employees include both temporary and permanent personnel. Also, temporary employees have been occupying a large proportion of significant positions in businesses, thus providing human resources flexibility. First, contract or temporary employees with a limited employment period may show a preference for the legislated element in MCS implementation. This is due to the fact that their interests lie in the achievement of specific assigned tasks within a given time in return for the promised compensation. By contrast, permanent employees with high loyalty to the organization take a long-term approach in responding to MCS. However, personality can be another decisive factor in determining this tendency. For example, permanent employees who always look for opportunities outside of the organization may show a stronger inclination toward the legislated element.

Expected output is the originally intended result of MCS implementation. Employees under the influence of the legislated element will try to maximize that result within constraints. But those who better understand the contextual element may have increased motivation and commitment to the goals of MCS implementation, not just completing assigned tasks. Both the EJV and AC cases showed unique patterns in support of this discussion. In the EJV, the Japanese employees had to follow directions to maintain the standard cost accounting system. They precisely performed their duties, as guided by the controlling manager, within the given time frame. Accomplishing their

assigned tasks, they soon realized that they could contribute to the company's bottom line by creating favorable variances, and they were encouraged to reduce costs and to increase activities in their responsible areas. In the KPIs analysis of the AC, the Japanese employees also completed the given tasks related to the functional KPIs, and reported them to the functional leaders as they were instructed. However, in following the directions, the Japanese employees created the contextual element—securing the AC's competitive position among subsidiaries—to motivate themselves. Therefore, it was concluded that the two elements of MCS are significantly associated with each other.

7.3 **Relationship between legislated and contextual elements**

In his introduction chapter of four levers of control, Simons (1995) also argued that opposing yet complementary *Yin* and *Yang* forces exist in control systems as well as in the world. Simons divided his four control levers into two major groups based on those *Yin* and *Yang* qualities. He described how beliefs systems and interactive control systems create positive and inspiring forces (*Yang*) and how boundary systems and diagnostic control systems create negative and constraining forces (*Yin*). These two forces can be reasonably compared with the two aspects of MCS identified above. The legislated element contains the constraining forces that require physical change against the free will of subordinates in MCS implementation; and the contextual element includes the inspirational forces that depend on positive mental adjustment toward the goals of MCS implementation. Therefore, based on the four levers of control, it was learned that boundary systems and diagnostic control systems have rather strong legislated elements by nature. Meanwhile, both beliefs systems and interactive control systems relatively rely on the contextual element in implementation. The Asian philosophy analogized by Simons (1995), however, teaches that all nature is composed of the two forces in balance. Generally, it is said that women have more of the *Yin* quality, whereas men have more of the *Yang* quality, because *Yin* means minuses and the shady side, while *Yang* means pluses and the sunny side. In Chinese medicine though, both men and women are further divided into either the *Yang* or *Ying* type based on body constitution, any imbalance of those opposing forces resulting

in illness. If we look inside the MCS in both the EJV and AC cases, these two distinctive aspects are detected even in the control system, as noted earlier. Therefore, the two aspects of MCS also should be balanced during implementation, just as the four levers of control are implemented in a balanced way in an organization.

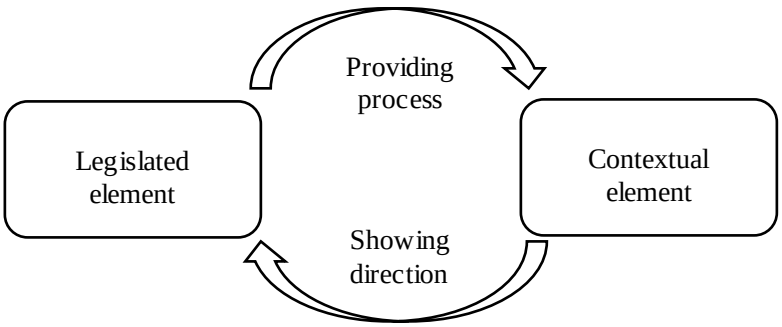
In the cases of the EJV, the initially assigned tasks for the standard cost accounting system were accepted as new duties by the Japanese employees in the new environment. Throughout the standard cost accounting systems and other control systems in the MCS package, the goals of MCS implementation were shared and understood by the Japanese employees. The standard cost accounting system of the EJV, lacking the contextual element, was considered to be the diagnostic control system among the four levers of control. In the other control systems by contrast, such as open-book management, and review of cost center report, the controllership functioned as interactive control systems, thus diffusing a clear-cut contextual element. This is how the standard cost accounting system of the EJV, with its strong legislated element, succeeded in providing a clear explanation of why the organization was monitoring the critical performance variables. By balancing and reiterating the two elements of the standard cost accounting system throughout the MCS implementation, the two distinctive elements were gradually routinized and changed into behavioral patterns and shared values, respectively, in a balanced way.

In the AC cases, initial training and education with respect to the functional KPIs provided specific tasks that were categorized as the legislated element. However, functional KPIs analysis and other control systems could not rationally answer questions regarding how functional leaders make use of KPIs analysis to generate a company-wide synergy effect or why Japanese employees had to keep preparing KPIs for the purposes of the synergy effect. The other control systems in the MCS package, such as open-book management among subsidiaries and telephone conferencing, did not deliver a unified organizational direction to the Japanese employees. Instead, those control systems in the MCS package incurred employee resistance to obeying the assigned directions. In short, the company-wide synergy effect, at which the KPIs analysis had aimed, was not perceived by the

Japanese employees. And neither did other control systems compensate for the lack of any contextual element in the KPIs analysis. Under the circumstances, employee attention was distracted, producing a new contextual element within the Japanese organizational context. As a result, following a similar legislated element of the MCS, the Japanese employees created and pursued novel organizational goals in search of an MCS contextual element. They started to analyze the KPIs of other subsidiaries, and compared them with their own organization. In other words, the legislated element became behavioral patterns under surveillance, but the contextual element, which the KPIs analysis had originally intended to obtain, failed to turn into shared values in the AC.

Regardless of the control characteristics, these two distinctive elements assist in implementing MCS by complementing each other. Therefore, MCS are composed of both legislated and contextual elements together. The legislated element provides the concrete process whereby the contextual element can be achieved. Likewise, the contextual element shows the organizational direction that employees should understand in following the legislated element. This logical link between the legislated and contextual elements must be created to promote their mutually reinforcing forces. The other control systems in the MCS package also can facilitate the creation of such a link for the successful implementation of MCS. Figure 7.3 illustrates how two, legislated and contextual elements operate mutually in MCS implementation.

Figure 7.3 Relationship between legislated and contextual element in MCS implementation



As illustrated above, the contextual element shows the direction and carries the vision over legislated element. Without a clear understanding the context of the MCS context, erroneous practices or tasks can be established and performed by employees. On the other hand, the legislated element provides concrete process by which the goals of MCS implementation are achieved. By emphasizing and reiterating the two elements in balanced ways, they can be settled and routinized in an organization. Certainly, in the process of acceptance and routinization, the Japanese employees perceived the two MCS elements and caused interactions with them. In case of the EJV, the contextual element of the MCS was clearly presented to satisfy the curiosities of the Japanese employees. By contrast, even though the KPIs analysis of the AC had an acceptance stage similar to that of the standard cost accounting system of the EJV, it failed to show the contextual element, which the Japanese employees actually wanted to know. Under these circumstances, a new and irrelevant contextual element spontaneously emerged. Therefore, again, the two elements need to be treated in a consistently balanced way, without sacrificing either for the other. By doing so, the legislated element can become the behavioral patterns, and the contextual element can be transformed into shared values. Balance can provide the assurance that MCS are functioning in the intended direction without partiality. To balance the two elements, the reason the Japanese employees were inclined to know contextual the element of MCS must be clarified. The hidden mechanism behind their action could provide better ideas on how to balance the two elements of MCS in MCS implementation.

7.4 Influence of perception on MCS implementation

This case study also looked into the intrinsic nature of a human being to clarify external human behavior and thought patterns. To examine the factors that directed the actions of the Japanese employees in the MCS implementation, the analysis focused on understanding how Japanese perceive MCS and how the perception process is associated with MCS implementation. As can be seen from the results empirically examined by Nisbett and his Japanese collaborators (Masuda & Nisbett, 2001; Nisbett, 2003; Nisbett & Miyamoto, 2005), the Japanese have a holistic perception process, concentrating on the entire context and the relationship between

objects and the context to which they belong. This implies that Japanese employees would also focus on similar elements in their perceptions of MCS. In addition to these elements, the relationship between the object-like elements of MCS and the MCS context would be given weighted emphasis.

The existence of the influence of the perception process on MCS was captured in the differing responses of the Japanese employees. At the acceptance stage of the EJV's MCS implementation, the Japanese desire to search for contextual elements was suppressed by initial conflicts between them and the expatriate managers. Additionally, Japanese culture, which emphasizes harmony, showed little outward resistance at the acceptance stage. Even in the AC case, the Japanese employees accepted the practices of the functional KPIs analysis, which, given the strong elements of scientific management, would be assumed not to fit a Japanese organization very well. They expected some results to be visualized later based on previous experience in the EJV, where the contextual element had been clarified gradually in the middle of MCS implementation. The cases showed that the Japanese, who stress contextual values and the holistic view, tended to want to understand the entire context of the MCS in the implementation of the standard cost accounting system and functional KPIs.

For such reasons, Westerners, who tend to be analytic with MCS, tend to require detailed tasks for clear understanding of MCS implementation. The required practices or assigned tasks can be recognized as the explicit substance, and can be considered to be performed under informative instruction, even without contextual understanding. The contextual element, contrastingly, is rather difficult to be sensed without a holistic perception, due to its inherent characteristics. These differences invite probable explanations of the influence of the perception process on MCS. People from Western cultures, who have been found to be analytic in the process of perception, attend to the required practices or assigned tasks of MCS, focusing on salient objects independently of MCS environments. These elements requiring concrete actions can, because of their explicit characteristics,

be recognized as salient objects of MCS. Therefore, this aspect of MCS would be perceived primarily by an analytic mind as duties to be accomplished. By contrast, East Asians such as the Japanese employees, who characteristically have shown attentiveness to context in the process of perception, and who focus accordingly on environment and the relationship between objects and context, tend to emphasize the contextual environment of MCS implementation. Therefore, the overall goals of MCS implementation and the relationship between assigned tasks and goals would receive the predominant attention of Japanese employees. As presented in the cases above, contextual elements of MCS such as an organization's objectives, have been important agents for Japanese throughout the process of MCS implementation.

In the light of the holistic perception process, requiring practices and assigning tasks without linking to proper contexts or without defining causal relationships between tasks and contexts entails potential risks in a collective Japanese organization. First, Japanese employees, with a holistic view and a collectivist mind, may continue to search for the contextual meaning of required practices and assigned tasks or may establish discretionally collectivist objectives, unless the goals of MCS implementation are perceived and understood by them. This inclination explains the new contextual element in the AC found during the functional KPIs analysis. Securing a competitive position over subsidiaries emerged as a goal of the KPIs analysis in the Japanese organization. Second, the relationship between the assigned tasks and the overall goals of MCS implementation needs to be clarified to Japanese employees, who also emphasize that relationship, especially when those tasks are determined and assigned under perceived managerial necessity. If collectivist Japanese employees feel that the goals of MCS implementation are set only for the interests of an individual or individuals, their group commitment to MCS implementation cannot be expected. By making Japanese employees understand the goals of MCS implementation, a new standard cost accounting system took root in the EJV, and was implemented to ensure the achievement of the organization's objectives under the control of the European management.

In line with perception, viewpoint has been highlighted as a driving force shaping diverse organizational problem-solving capabilities. The overall findings on the influence of the different perception processes on MCS are in fact consistent with the evidences of prior research that contrasted the management styles of Toyota and the American Big Three auto makers. Johnson and Bröms (2000) argued that Toyota has a living-system worldview according to which customers and worker are interconnected as an organic body, whereas the American auto makers perceive all objects within a mechanistic worldview. They also claim that the contrasting viewpoints are deeply embedded in the human mind, shaping the different management systems based on deeply held beliefs. The living-system worldview cannot be developed based on the analytic perception process, because the relevant respective viewpoints intrinsically conflicts with each other. The way Japanese see the world—by means of a holistic perception process—might account for this living-system worldview characteristic of Toyota's management style. Likewise, the analytic perception process of Westerners might have engendered the mechanistic worldview of the American automakers.

Prior cross-cultural MCS research also proves that differences exist between the East Asian and Anglo-American cultures in the preference for the design and use of MCS. Unfortunately though, in determining which cultural factors have influence on specific MCS characteristics, it is of only limited usefulness. However, similar or dissimilar characteristics between culture and MCS have been studied to find the relationship between the two. Studies applying the Hofstede cultural dimension (Hofstede, 1980; Hofstede & Bond, 1988) found that Japanese work-related values, with their strong collectivism and uncertainty-avoidance, are preferred over compulsive top-down control characteristics. (Lincoln et al, 1981; Chow et al, 1996). This tendency can be explained by the attitudes of Japanese employees, who emphasize harmony in order to maintain a stable office environment wherein seniority and strong ties prevail. They prefer to follow predetermined control systems that are accepted and shared by superiors and colleagues alike. Therefore, in a different context such as the home, work-related values may have little meaning as factors influencing employee behaviors. In other words, these behavioral patterns of Japanese employees depend on the context to which they belong, and as such, can explain the relatively strong Japanese preference for

the contextual element of MCS. By contrast, the Anglo-Americans are considered to be individualistic and low-context cultures that emphasize the free will of individuals to determine, under any circumstances, what to do and how to do. These cultural characteristics were reflected by the preferences with respect to participative budgeting, budget slack and controllable budgets in a comparative U.S./Japan study on budget control practices (Ueno & Sekaran, 1992; Ueno, 1993). The individualistic behaviors of Anglo-Americans also can be understood in the analytic view in which they can define and plan their own way quantitatively while focusing on their budgets and without considering organizational context.

7.5 **Management control environment**

In contrast to the AC cases, the transfer of personnel in the EJV provided an opportunity to observe cultural conflicts between expatriate managers and Japanese employees. Prior cross-cultural researchers who have taken MCS as independent variables have regarded cultural conflict as an obstacle to be overcome through culturally-fit design or MCS. Moreover, most of the prior research, conducted by survey or experimental methods, has missed opportunities to observe actual conflicts and effects in the MCS implementation process. As witnessed in the EJV case, not all conflicts in the early stage are harmful to successful MCS implementation.

The early conflicts between expatriate managers and Japanese employees provide a foundational control environment for MCS implementation. Increasing control consciousness and setting the tone of the new management among Japanese employees, the attitudes of expatriate managers have shaped a psychological and structural environment suitable for the positioning of new MCS in Japanese organizations. Japanese employees have learned by experience that achieving compromise with expatriate managers is more troublesome than following their directions. And the harmony-emphasizing Japanese culture (Rohlen, 1979), with its conflict-avoiding propensity, has positively functioned in accepting new organizational hierarchies where MCS are implemented with new roles

and responsibilities. The consistent messages embedded in conflicts is that Japanese employees are to follow MCS without any involvement in the MCS design or use.

Also contributing to the organizational solidarity among the Japanese in responding to the new management was the dichotomous view (expatiates vs. Japanese) of the expatriate managers, who, from the beginning, treated all of the Japanese employees equally. Sustained fairness in MCS helps to maintain a commitment to the MCS without deteriorating the existing working environment or losing competent employees. The importance of fairness in MCS has been studied as a requirement for the achievement of goal congruence in MCS implementation. Cugueró-Escofet and Rosanas (2013) argued that justice and fairness in MCS design and MCS use are the determinants of goal congruence. Among the local Japanese employees, the EJV's MCS, at least, was just in design and fair in use with limited authority and clear responsibility.

By contrast, the new AC MCS were introduced to local AC entities through internal training and education without transfer of personnel or kick-off meetings. Due to the characteristics of MCS which are specific for each functional unit, a control environment across local departments was not needed and in any cost could not be created. Further, different levels of control intensity and function-oriented implementation by functional leaders could not provide a homogenized control environment without regard to authority and responsibility.

MCS are processes that are implemented by managerial employees, in an organizational context, for the organization's objectives and during a certain period of time. Relating to operations, internal control also provides a process for assuring the achievement of an organization's objectives in the effectiveness and efficiency of operations, especially those that utilize the organization's resources most effectively. Both MCS and internal control are much alike in this regard. However, the control environment for MCS has not been highlighted, whereas control environment is one of most important internal control components and is tested first during internal control audit. The

development of a control environment for MCS must be considered one of the critical factors impacting positively on an organization's implementation of MCS in different environments.

8 Implications of employee perception and MCS elements for positioning of acceptance stage

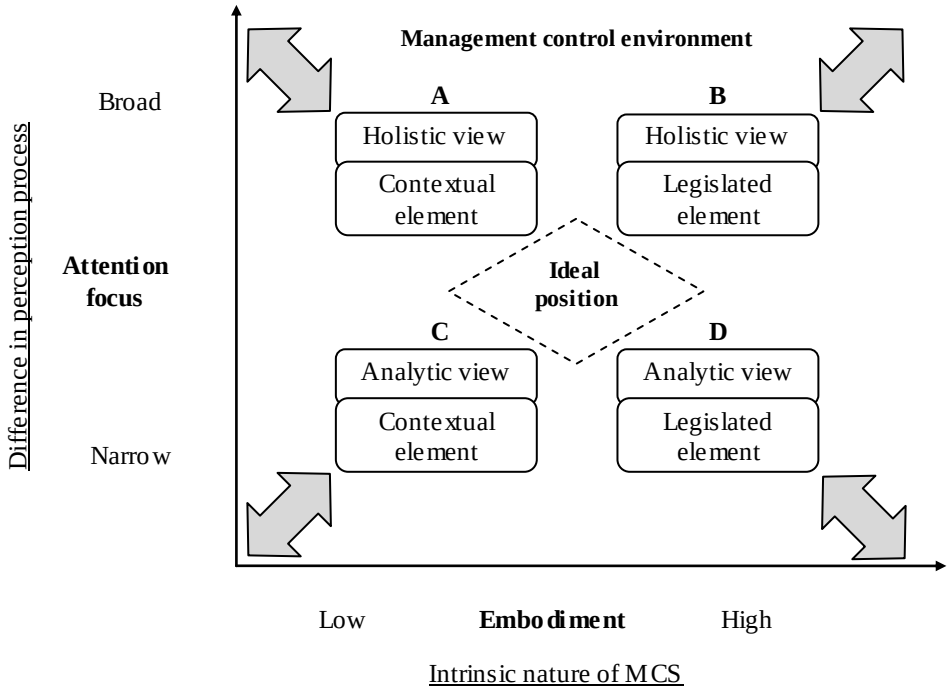
In order to successfully implement MCS in overseas subsidiaries, two aspects of MCS as well as different patterns of perception must be understood unmistakably. To summarize, East Asians who follow a holistic perception process, tend to acutely attend to the contextual element of MCS. On the other hand, Westerners, who follow an analytic perception process, typically focus on the legislated element of MCS along with explicit characteristics such as salient objects. In the same context, cybernetic control systems, such as the standard cost accounting system in the EJV or the functional KPIs in the AC, with a relatively strong legislated element, can encounter difficulties in being accepted by Japanese employees. However, the divergent results of two similar MCS implementations in the same Japanese organization point to the possibilities and opportunities of such implementation.

As psychologists have emphasized, evidence shows clear and characteristic perception-process differences between East and West. Theses differences can affect employee perception of MCS during MCS implementation. MCS designers or implementers such as superiors or managers can similarly be influenced by those differences. For successful MCS implementation in an organization, however, MCS research should focus on the employee perception process. Then, the relevant research findings could provide MCS designers with helpful suggestions on the design and use of MCS in a given context.

Through a focus on the intrinsic nature of MCS, two distinctive aspects of MCS have been identified: the legislated and contextual elements. These elements can be distinct in terms of embodiment. The

legislated element is more concrete and physical than the contextual element. Additionally, different perception patterns influence perception of MCS. The holistic perception process takes a broad perspective, while the analytic perception process takes a comparatively narrow one in focusing on salient objects. Under such circumstances, the possible combinations of these two variables need to be explored so as to clarify their dynamic relationship (Figure 8.1). Both the EJV and AC cases proved that balancing and reiterating the two elements of MCS under the influence of the process of perception leads to the proper functioning of MCS from the acceptance stage through to the routinization stage.

Figure 8.1 Combinations of employee perception and MCS elements at acceptance stage



A. Holistic view & Contextual element. The holistic view, with its attention to context, defines the perception process of East Asian countries (e.g. Japan). The contextual element in MCS comprehends the goals of MCS implementation in the forms of an organization's objectives. Therefore, quadrant A could provide strong grounds for contingency-based MCS research on the

best fit in a given environment. Employees with the holistic view, under the influence of the contextual element, may show outstanding ability in understanding the context-dependent goals of MCS implementation. Conventionally contingency-based MCS research assumes that the best fit is inherently more effective and efficient in MCS implementation. However, due to their inclination to context, employees in quadrant A may culturally lack talent at identifying necessary practices and tasks that materially contribute to the goals of MCS implementation. Therefore, unless clear practices and tasks to be accomplished are given, employees in quadrant A may create and perform irrelevant jobs that are nonetheless culturally considered to serve the ends of MCS implementation. For example, it is frequently seen in Japanese organizations that employees excessively perform duties, such as office cleaning, irrelevant to their job descriptions. In performing those duties during office hours, they believe that they are acting in the best interests of the company, and thus experience increased job satisfaction.

B. Holistic view & Legislated element. Both the standard cost accounting system and the functional KPIs analysis in this case study, with the legislated element of MCS and Japanese employees, belong to quadrant B. Because the nature of the holistic view and that of the legislated element are quite different, they may not go well with each other. The present cases showed that Japanese employees, with their attention to context, are culturally inclined to search for reasons behind required practices and assigned tasks. Even though it was not from the beginning, the MCS implemented by the EJV presented the contextual element consistently, thus satisfying employees' curiosities about the overall goals of MCS implementation. Also, the control environment and Japanese cultural factors helped Japanese employees cope with the new situations and to accept all of the elements of MCS from the beginning. In this way, they were able to understand the entire MCS implementation and to conform themselves to it in balancing the legislated and contextual elements. It was in this way that the standard cost accounting system, in quadrant B at the acceptance stage, had moved to the ideal position by the routinization stage. On the other hand, as seen in the AC cases, unless the contextual element of the MCS is understood under the influence of the holistic view, employees will be less motivated to perform the required practices and assigned

tasks until the goals of MCS implementation are understood. If the unbalanced situation continues, employees create emergent contextual goals based on the given legislated element within its context. Thus, the KPIs analysis of theca, which belonged to quadrant B at the acceptance stage, had shifted toward quadrant by at the routinization stage to satisfy the desire of the Japanese employees, and creating a clear link between the legislated element and the wrong contextual element.

C. Analytic view & Contextual element. Quadrant C can be compared to a situation wherein Japanese target costing is implemented in Anglo-American countries. In target costing, which emphasizes progressive improvement over the long-term perspective, individual attainment of assigned duties within target costing is not necessarily regarded as critical to the whole management process. Employees taking the analytic view have a preference for specific duties that can be measured and attained for corresponding compensation, regardless of the overall goals of MCS implementation. Given the behavioral propensities toward MCS, the goals of MCS implementation should be more analytic so as to enhance employee understanding, or tasks should be assigned under more contextual conditions. If not, arbitrary practices could be created and performed to meet the culturally-perceived context. In other words, quadrant C may shift to quadrant D instead of moving to the ideal position unless additional efforts are made to find the balance.

D. Analytic view & Legislated element. The combination in Quadrant D could be another best match for Anglo-American countries from a contingency-based researcher's point of view. The analytic view and the legislated element have much in common. Pinpointing the features of the analytic view and the diagnostic features of the legislated element can show a clear direction to employees in quadrant D, generating motivation to accomplish assigned tasks for extrinsic reward. However, due to the lack of the contextual element, the individual accomplishment of assigned tasks can be linked to the achievement of different goals or personal gains that eventually deteriorate the overall context of MCS implementation. Contrary to the assumption of conventional contingency-based research, quadrant D is also in the same culturally disadvantageous position as is quadrant A.

Management control environment. This is not always necessary for balancing the two elements of MCS. However, as observed of the EJV cases, the control environment can facilitate MCS implementation. First, it creates the climate wherein MCS can be smoothly accepted by employees. After being accepted, the control environment also helps MCS move toward the ideal position. In the EJV, it constantly forced employees to perform assigned duties in an accurate and timely manner until they see the results of what they have done. But the functional KPIs in functional organization of the AC could not create the control environment in the Japanese organization, allowing the organization to move in the direction it believed to be the right one..

Ideal position. In the center of the matrix, successful MCS implementation can be attained with the balanced two elements of MCS under the influence of the perception process. The MCS can be placed in either of Quadrant A, B, C or D at the acceptance stage. MCS implementation achieves a balance between employee perception and the MCS elements. Considering that different geographical areas or countries have different preferences respecting the two aspects of MCS, enhanced balancing may be achieved by adjusting the degrees of the two elements accordingly.

9 Conclusion

This dissertation has attempted to reveal both how a multinational company can successfully transfer MCS overseas and how employees accept the MCS. Despite increased interests and a large body of prior research, the mechanism for successful MCS implementation is little known to business practitioners and academics. Using participant observation in a real context, this case study has provided the opportunity to investigate factors that influence MCS implementation through employee behavior and thought.

The research approach segmented MCS implementation into sequential stages, as ABC implementation researchers have done. The subsequent analysis established that according to

those different stages, employee behavior and thought vary. From the acceptance stage to the routinization stage, Japanese employees are more concerned with the goals of MCS implementation than with the assigned tasks. This uncovered inclination in turn suggested the two distinctive aspects of MCS: the legislated and contextual elements. Another finding indicates that the geographical difference in the perception process also has an influence on MCS implementation in the Japanese organization. However, the primary contribution of this study lies in its posited framework for successful MCS implementation under combinational perception patterns and MCS elements. First, this framework clarifies the place of MCS implementation in the transference of MCS overseas. Second, it complements the approach of contingency-based MCS research where cultural-fit design and use of MCS are searched for. Lastly, it concludes that the balancing of the two elements of MCS under the influence of the perception process is an appropriate approach to successful implementation that provides for enhanced organizational capability and flexibility.

As the result of a qualitative study, the research findings, for generalization, need more testing with various cases in different situations. Future research is also necessary to clarify the factors affecting employee perception. In addition to those factors, the scheme of classification of East and West has to be more elaborate so as to better serve the specific goals of cross-cultural MCS research. Much work on the successful implementation of MCS in overseas subsidiaries remains, with the attendant opportunities. This study hopefully will convince MCS researchers of the necessity of a new approach, especially as relating to the context of cross-border MCS implementation and employee perception therein.

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