# Intrinsic Nature of Management Control Systems: Legislated and Contextual Elements

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### **Abstract**

The present study examines the intrinsic nature of management control systems (MCS). It focuses, particularly from a participant's perspective, on the interactive and fundamental elements constituting implementation of MCS. The study investigates three research questions: (i) What are the employee perceptions in responding to the implementation of MCS? (ii) What is the basic principle of MCS that evokes well-defined interactions with employees during the implementation? (iii) What are material considerations for successful implementation of MCS? Implementation of MCS in Japanese organizations was analyzed based on participant observations, relevant studies, and the practical experiences. The study results indicate that MCS involve legislated and contextual elements, which are both complementary. Furthermore, evidence indicates that balanced use of the two elements improves the possibility of successful implementation.

Keywords: Management Control Systems, intrinsic nature, legislated element, contextual element, Japanese employee

## INTRODUCTION

Management control systems (MCS) help organizations to achieve specific objectives. A growing body of research identifies the most appropriate design and use of MCS for successful implementation in diverse environments (Ahrens & Chapman, 2004; Chenhall, 2003; Malmi & Brown, 2008; Merchant, 1985; Ouchi, 1980; Simons, 1995). The definition of MCS in literature is based on some characteristics to test the MCS context in simplified situations (Chow, Kato, & Shields, 1994; Chow, Shields, & Chan, 1991; Merchant, Chow, & Wu, 1995). In the literature, owing to similarities and dissimilarities across countries, employee preference is often replaced by cultural influences without further investigating the dynamics of employee responses to MCS (Harrison, 1992, 1993; O'Connor, 1995; Ueno & Wu, 1993). Those studies on culture and MCS have dominantly employed the notion of cultural dimensions developed Hofstede (1980) who described the dimensions of culture and organization as power distance, individualism, uncertainty avoidance, masculinity, and Confucian dynamism (Hofstede & Bond, 1988). However, extensive use of Hofstede's concept has prohibited consideration of other relevant variables on culture, while providing a convenient research tool for analysis. Lack of in-depth examination has resulted in contradictory findings of limited usefulness (see the literature review by Harrison & McKinnon, 1999).

The present study proposes a new perspective on MCS research by exploring their intrinsic char-

acteristics, which mean belonging to the basic constitution of MCS regardless of control types. These internal features remain static rather than being directed to different qualities by external influences. Contemporary MCS research has focused on the extrinsic characteristics of control, which refer to expressed objective of MCS, classifying control taxonomy and examining its usefulness in diverse situations. This approach helps specify what MCS are considered to be effective by emphasizing the design of MCS because the obvious control characteristics could lead organisms to engage in perceived behavior driven by MCS. However, this contingency-based research in isolation from other implementation tactics restricts the use of MCS and narrows its applications in that there are no universally effective MCS which suit equally to all organization in all situations (Chapman, 1997; Chenhall, 2003; Fisher, 1995, 1998; Govindarajan, 1986; Otley, 1980; Selto, Renner, & Young, 1995). Insights drawn from alternative research methods and perspectives can provide a new basis for a more active approach to MCS research that assumes any MCS can be successfully implemented. Analysis based on participant observation (Briers & Chua, 2001; Dent, 1991) helps examine employee behavior aspects in the implementation of MCS. Ahrens (1994), for example, showed nationally different uses of management accounting from his observation of one conversation between accountants and sales managers. The present study, on that basis, identifies the two distinctive aspects associated with MCS. The distinctive aspects of MCS not evident from conventional research are named as *intrinsic* nature of MCS, considering how they relate to the essential qualities of MCS. This term can guide research into how the distinctive aspects of MCS exist in their implementation. Working as a controller for foreign manufacturing companies in Japan (e.g., Belgian-, French-, German-, Swiss-, and U.S.-owned companies) for 12 years, the author has implemented various MCS (e.g., top-down/ bottom-up budgeting, individual and department performance evaluation, standard costing and variance analysis) in diverse situations. In the majority of cases (i.e., except bottom-up budgeting), foreign (home country) MCS, such as budgetary process, incentive compensation practice, KPIs, were transferred to overseas operations of Japanese organizations without redesigning. The effect of cultural differences on the implementation of MCS was always obvious and had to be dealt with. However, regardless of the characteristics and contextual variables (e.g., industry, organization, and culture) of the MCS, considerable similarities (DiMaggio & Powell, 1983; Scott, 1995) were witnessed during implementation of the MCS across companies. Understanding the similarities among different MCS determined the ease or difficulty in implementing transplanted MCS. In the present study, the review of a representative case of MCS—the implementation of the standard cost accounting system—develops an understanding of the similarities classified as legislated and contextual elements. The study introduces the discussion on the universal elements of MCS and their management for successful implementation of MCS. The discussion presents new perspectives that analyze MCS from the inside out as well as guide the direction of future research.

This paper is organized as follows. Section 2 reviews the literature on MCS, particularly relating to boundaries and taxonomies. Section 3 outlines the research method by introducing a case study of a company and its background. Section 4 presents research findings on the sequential development of employees' perspectives. Section 5 interprets the study findings and offers suggestions for future research. Finally, Section 6 draws conclusions.

#### MANAGEMENT CONTROL SYSTEMS

#### **Boundaries of MCS**

MCS have emerged as a major topic of academic interest in the field of management accounting since the 1960s. The concept of management control was first introduced by Anthony (1965), who distinguished 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). Emphasizing the role of middle managers, he focused on the use of finance and accounting information as performance mea-

sures. Over time, this classic concept has evolved beyond the confines of middle management to cover the broad roles of MCS in diverse contexts. Highlighting the importance of non-accounting control, Ouchi (1977) introduced three types of controls: behavior, input, and output. Since then, the complementary use of both accounting and non-accounting controls has been integral to the MCS.

From the 1980s, contingency-based MCS research has expanded and proliferated in response to various MCS design and requirements of use. The mid-1980s saw the emergence of frameworks such as activity-based costing, which enabled managers to obtain more accurate product costs based on strong causal relationships. To overcome the drawbacks of performance measures based on financial indicators, balanced scorecard (BSC; Kaplan & Norton, 1992, 1996) was introduced as a tool to enable a more holistic approach. BSC is designed to translate organizational vision and strategy into four measurable performances: financial, customer, internal business process, and learning and growth. BSC is a control system that combines financial and three non-financial performance measures and aligns the system to ultimately build goal congruence within an organization. In a dynamic business environment, formalized MCS need informal structures to allow quick responses to specific changes. Simons (1995) proposed four levers of control framework, introducing beliefs systems and interactive control systems as MCS elements. Unlike the two conventional controls, that is, boundary systems and diagnostic control systems, that suppress and monitor any exceptional deviations, beliefs and interactive control systems are used to motivate employees to create positive behavioral outcomes within an organization. Simons argued that successful implementation of business strategy requires the use of all four levers of control to balance organizational tensions.

As defined by Anthony and Govindarajan (2001, p. 6), management control is "the process by which managers influence other members of the organization to implement the organization's strategies." Thus, the definition of MCS is extended to informal and non-financial controls such as social controls. Various concepts and forms of MCS have been

developed to encompass all kinds of control mechanisms and practices that help managers to achieve organizational objectives. Moreover, behaviorfocused MCS research has introduced different MCS functions to manage within uncertain environments (Chapman, 1998; Ahrens & Chapman, 2004). Researchers have also added newly defined types of control as a basis for classifying the existing MCS. These ongoing research trends likely will continue to enable better handling of complex issues associated with implementation of MCS.

Amid overlapping definitions and conceptualizations, Chenhall (2003) broadened the concept of MCS for better understanding while differentiating it from other terms such as management accounting systems (MAS) and organizational controls (OC). Accordingly, Chenhall defined MCS as the systematic use of management accounting that includes other forms of control (e.g., personal or clan control) that are excluded from MAS and OC. This broad concept and its applications contribute to MCS research by considering non-accounting controls as well as psychological factors. Merchant and Otley (2007) took a holistic view of various control concepts and systems to test the broad MCS concept and domain, thus concluding that the field of MCS, owing to its complexity and interdisciplinary nature, is underdeveloped. Without attempting to reestablish or rearrange the MCS concept based on its characteristics, the present study adopts the term MCS to include these broad and extended definitions in analyzing control activities and systems implemented by managers in organizations.

#### Taxonomies of MCS

Extant research on effectiveness of MCS has established the MCS taxonomy based on control concepts and forms (See summary by Harrison & McKinnon, 1999; Chenhall, 2003). Chenhall (2003) categorized control into two groups based on its nature: organic and mechanistic. Mechanistic forms of MCS are more formal and procedural in operations, whereas organic forms of MCS are more flexible to use and abundant in data. Other studies based on the holistic approach have proposed that a control system does not operate in isolation, and therefore, a comprehensive framework is necessary for in-depth understanding of an organization's

complex control systems (Abernethy & Brownell, 1997; Chenhall, 2003; Malmi & Brown, 2008). Malmi and Brown (2008) introduced a new MCS package conceptual framework (Abernethy & Chua, 1996) following five unique controls: planning, cybernetic, reward and compensation, administrative, and cultural controls. Utility of the MCS framework is based on a new conceptual typology for successful implementation of a control system. This helps managers to implement MCS without overlooking any control elements, and thereby effectively control employee behavior. In line with the MCS package that addresses the complex nature of control, recent literature argues that configuration of control is associated with the contextual factors for its effectiveness (Bedford & Malmi, 2015).

A taxonomic approach to the analysis of MCS transfer is based on the characteristics of MCS. Kato (2000) presented two types of management system transfer by separating practices from the overall implementation: method- and concept-oriented transfer. In method-oriented transfer, implementers are taught only practices that maintain implementation of the MCS without any sharing of the 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 including practices are transferred. Kato found that most management system transfers are method oriented and concluded that the transfer of Japanese target costing to foreign countries faces obstacles and limitations, so he suggested that concept-oriented transfer provides better possibilities for success of implementation. His research offers a new perspective in which practices and concepts of MCS are separate from each other, by defining MCS as either method-oriented or concept-oriented. Such a classification may however limit the applicability of MCS.

Simons (1995) presented another divided view of control systems in his introduction chapter on the four levers of control. He argued that opposing yet complementary *Yin* and *Yang* forces exist in control systems as well as in the world. In fact, he assigned each of his four control levers to one of those two major groups based on their *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). The Asian philosophy analogized by Simons, however, teaches that all nature is composed of the two forces in balance. In general, women are said to 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 Ying or Yang type based on body constitution, and any imbalance of those opposing forces results in illness. Although Simons highlights the Ying and Yang qualities in control systems, his approach, though, is not consistent with the Asian philosophy that would insist that even a single control system be composed of the Ying and Yang qualities in balance. Rather, it is suggested that dichotomous views coupled with genuine Asian philosophy can identify complementary forces that interact to form a control system.

The principal goal of MCS as a control system that has remained constant is its contribution to meet the organization's objectives. Through MCS, managers seek to ensure that employees behave in conjunction with the organization's objectives. Ongoing research on MCS has continuously identified new concepts, designs, and uses to remain upto-date. In parallel with the mixed outcomes reported in the literature, implementation of MCS has become more complex, and warrants further research for a new approach and analysis from another perspective to overcome problematic MCS issues.

## RESEARCH METHOD

Much accounting study is methodologically based on the empirical research (Myers, 2009). However, specific research methods might be used for different research purposes. A questionnaire survey was originally designed to gather quantitative data for statistical testing of a series of hypotheses concerning the implementation of MCS. However, the hypotheses derived from the extant literature (Har-

rison, 1992, 1993; Hofstede, 1980; Hofstede & Bond, 1988; O'Connor, 1995; Ueno & Wu, 1993) had to be revised whenever author encountered unrevealed phenomena in the field. It means that distanced capture is limited to the particular events and issues at a single point in time, and it is difficult to measure changes in the population and to describe field events as process. The present study, therefore, adopted participant observation method with an interpretative approach to understand the implementation of MCS in a real business organizational context. Author spent 3 years working in the organization to be familiar with organizational realities before MCS research was constructed in ways that could make theoretically meaningful contributions. The full-time controller position enabled author to shed light on diverse aspects of the field that were instrumental in developing ongoing hypothesis. The implementation of MCS, also, requires prolonged engagement with the field and actors from preparation to practice because MCS are adopted to assist managers achieve desired organizational goals by influencing other members of organization. In that sense, MCS that encompass a broad range of organizational controls are very different from other management accounting techniques based on computation (e.g., product costing, inventory valuation, overhead allocation). Thus analysis of holistic MCS as a processual event from participant observation can prove how single cases can be of general interest. Indeed, Janelli's (1993) anthropological 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 event inside the Korean conglomerate revealed rich facts and information that other research methods could have not provided. Participant observation, as intrinsic to the real field, provides useful and indepth information on relevant actors, activities, and interactions. As such, it attempts to understand people's beliefs and activities "from the inside" (Myers, 2009). The data collected from participant generates different perspectives on the research. Certainly, ethnography helps researchers to question what is taken for granted (Myers, 2009); by opening up social contexts for examination, it enables deeper and richer understandings of accounting practices (Ryan, Scapens, & Theobold, 2002). If a social phenomenon has its own meaning within a specific context, contextual details are necessary to interpret the data. 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).

The present research is 3-year study conducted from 2006 to 2009 on a France-Japan joint venture. A consideration in the research design was to maintain comparability with other cross-cultural MCS studies. These studies have predominantly focused on comparisons between Western and Eastern nations because of substantive differences between Western and Eastern cultures (see the literature review by Harrison & McKinnon, 1999). This organization was selected as the best match, in terms of size and industry of parent companies. Both are among the 10 largest glass manufacturers in the world; both are somewhat diversified; both are considered to be industrial leaders in their country; their management styles are considered to be representative of those prevailing in their country. France can be considered as a representative Western country example even though it is not an Anglo-American country. Cross-cultural researchers (e.g., Hofstede, 1980; Triandis, 1995) have isolated individualism as a predominant trait of Western cultures. In their study of national culture, France is categorized as a highly individualistic society like other Western nations (e.g., U.S., U.K.) while most Asian countries (and in particular Japan) show a strong preference for collectivism. The distinction between French and Japanese cultures is an important determinant of research design, thereby preserving comparability to prior cross-cultural MCS studies.

More precisely, data were collected while the author was working as a controller (on a full-time basis) and pursuing a PhD (on a part-time basis) as well. As a member of the controlling department, the author has access to financial data and qualitative information needed for MCS research preparation and analysis. His job responsibilities as a controller entailed enabling local Japanese employees on behalf of the French management to comprehend new operational MCS or KPIs. A series of in-

depth interviews with colleagues and senior managers were conducted for clarification and collecting additional data on MCS. The study objective was to understand employees' responses to new MCS and their perception during the implementation. The basis for data analysis and discussion was anecdotal evidence obtained by observed phenomena.

## Company Background

In the early 2000s, a French company entered a joint venture (JV) in Japan with a Japanese competitor as a majority (51 percent of the shares owned by French company while Japanese company owning 49 percent) stakeholder. The company is a wellestablished publicly traded multinational company in France, producing a variety of high-performance materials. The Japanese counterpart, a well-known glass manufacturer, is also listed on the Tokyo Stock Exchange. A JV was signed to accelerate the introduction of French products into the Japanese market while Japanese competitor was suffering from domestic market saturation. Majority of the employees of the JV were Japanese, but the management team was formed by the French partner. The new JV was 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 approximately 2,500 tons per month, and the sales volume, including imported trading goods, reached 4,000 tons per month. Following the JV, the French introduced their enterprise resource planning (ERP) system for standard cost accounting system which includes the accurate product costing and the use of variance analysis to manage effectively and efficiently instead of developing a new system.

## Implementation of MCS: Standard Cost Accounting System

The ERP system was implemented by the French based on the standard cost accounting system. French IT and controlling managers were deputed to the JV in Japan to transplant the home-country's ERP system. Other visiting French IT specialists and consultants supported this project. Production processes and organizations were redefined to enable implementation of the standard cost

accounting system. Many new cost centers were set up based on the respective cost drivers, and new cost allocations within the system were set up to suit the French management. The controlling department played a pivotal role in validating recorded transactions and providing other departments with operational support. For example, it adjusted raw material consumption and data input of actual activity quantities during period-end closing. As such, communications between the controlling department and the production operators were facilitated through data collection and verification. All employees participated in period-end closing by completing necessary procedures in the ERP system and providing data requested by the controlling department. Even employees on the shop floor were busy checking data and preparing reports. If the reports showed unexpected deviations, they were asked to investigate and explain. After period-end closing, the controlling department provided cost center reports with variance analyses to the respective cost center owners. The email distribution included senior managers so as to alert cost center owners' attention to variances. Additionally, the new management team held monthly management meetings at the plant site, where all managers discussed key issues as well as all cost variances shown up by ERP system.

## EMPLOYEES' PERCEPTION OF MCS

During early implementation, new practices and tasks were assigned to employees in order to introduce and maintain the standard cost accounting system. Irrespective of the employees' desire to embrace changes, detailed responsibilities according to the system were determined and assigned based on their respective positions and job descriptions that included authorized access to the ERP system. The new system compelled employees to participate in the period-end closing processes with data input and reporting activities. New practices and assigned tasks resulted in behavioral change with additional physical work. However, because the system's concept and method had been transplanted from France, employees accepted the new requirements as a necessary education in advanced management skills. In addition, the local employees

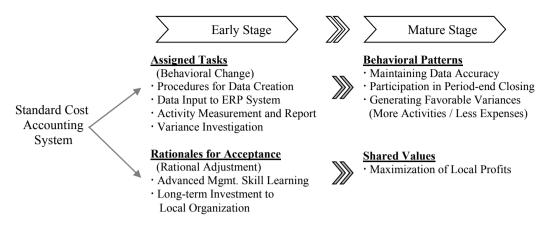


Figure 1: Standard Cost Accounting System from Employee Perspective

considered the new ERP system to be a salutary long-term investment in the local organization by the new foreign management.

In particular, the standard cost accounting system created participatory period-end closing activities. The collaboration and feedback processes established enduring ties between the controlling department and the non-finance departments, and this resulted in non-finance employees too being concerned about the financial results for their respective areas of responsibility. 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. Maximization of local profits as the goal of the implementation of the standard cost accounting system was gradually clarified at the mature stage of implementation and inculcated into employees. Thus, assigned practices and tasks requiring behavioral change became established behavioral patterns, and the rationales supporting the rational acceptance of MCS were transformed into shared values governing those patterns. Figure 1 illustrates how the standard cost accounting system established behavioral patterns and shared values in the JV between the French and Japanese companies.

In summary, employees' response and perception may develop and even evolve as driving forces when they need to adapt to the pressure from MCS. Furthermore, Figure 1 suggests that perceiving the elements related to MCS is separable. What are these elements? Do they exist universally inside of other MCS? These issues are discussed in the fur-

ther sections.

#### DISCUSSION

## Two Aspects of MCS: Legislated and Contextual Elements

Two distinctive aspects of MCS were identified throughout the implementation of the standard cost accounting system. Employees were obliged to perform new tasks to contribute to achieving the MCS-defined organizational objectives. required practices and assigned tasks to follow under MCS have, in themselves, a legislated element. "Legislated" literally signifies "legal binding force." Employees are required to meet work standards or perform assigned tasks under any MCS. These mandatory factors including physical labor are defined as the legislated elements. In the JV, all users of the new ERP system were trained to perform their assigned duties under the control of the French management. They had to input operational data into the system and report detailed information to the controlling department. At every periodend closing, this monitoring process for variances ensured that all of the performed practices were on the right track, that is, tending toward the organization's objectives. With the clear definition of responsibilities and logical measurement in the standard cost accounting, the newly required practices and assigned tasks did not attract unfavorable employee attention within the JV.

Concurrently, the implementation of MCS sets

Table 1: Legislated and Contextual Elements of MCS in Joint-Venture

MCS	Legislated Elements (Assigned tasks to employees)	Contextual Elements (Goals that managers intend to achieve)
Standard Cost Accounting System	Follow Procedures for Data Maintenance, Input Operational Data into System, Measure Production Activity, Report Production to Stakeholders, Validate Data Accuracy, Analyze Variances	Increase Data Accuracy and Transparency for Decision- making, Maximize Local Profits by Monitoring and Controlling Activities

specific goals for managers to achieve. These goals are intangible conceptual objects and therefore must be understood rationally in a given context. This embedded set of informal control concepts is defined as the contextual elements. These elements also existed in the JV's standard cost accounting system. The new management team endeavored to improve the local operation and its profitability through MCS. At the early stage of implementation, these contextual elements could not convey the organizational direction to the Japanese employees, due to their passive roles in MCS and only fractional understanding of it. However, by repeating assigned tasks and perceiving improvement, the overall goals of MCS were convincingly imprinted on the employees. The relationship between variances and financial results was envisaged and further discussed between management and employees. Top priority was assigned to data accuracy in the system for precise calculation of variances, from budgeting to daily practices. Employees appreciated that all these activities were necessary to improve the bottom line. Quantitative performance assessment of the contextual elements was, due to its inherent features, not feasible during implementation of MCS. Therefore, employees' comprehension of and concurrence to the contextual elements are believed to be represented and confirmed by their behavior, specifically their motivation or increased commitment to MCS. Both the legislated and contextual elements of MCS in the JV are summarized in Table 1

MCS are management processes that cover a wide range of controls designed to help managers to achieve their organization's objectives. Several definitions and classifications of MCS addressing the characteristics of control exist to guide MCS research. Prior research categorizes the standard

cost accounting system 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). According to the cybernetic control definition, performance is the result of executing the legislated elements. Other activities undertaken by management, such as standard setting, or performance monitoring and feedback, are a constant control process to ensure that employees follow the legislated elements and work for the achievement of the contextual elements. While the two aspects of MCS expand on the implementation of MCS by focusing on employees' perception, it will be useful to consider the presence of their characteristics within the MCS contexts in which they operate. Recognizing the differences between the two to categorize them into the proper area of MCS would be a necessary step in ensuring that the specific elements of distinctive aspects maintain relevance to the fundamental properties of MCS. Author constructs a table with the distinguishable traits in the left-most column. A further comparison of the attributes of the two aspects of MCS is provided in Table 2.

Existence in MCS supports the precision classification of the legislated and contextual elements. The legislated elements are embodied in MCS as required practices or assigned tasks, whereas the contextual elements carry the goals of MCS, which are characterized as the organization's objectives. Figure 1 shows that the implementation of MCS in the JV proves that it can be used and be valid only when physical tasks and rational understanding coexist internally in an organization. This classifi-

Table 2: Two Distinctive Aspects of MCS

Distinguishable Traits	Legislated Elements	Contextual Elements
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 Method	Descriptive, Informative	Persuasive, Convincing
Questions from Employees	How to do? What to do?	Why this Control System? Why should we conform to this Control System?
Intended Response	Following, Obeying	Understanding, Agreement
Desired Outcome	Optimization within Constraints	Increased Motivation and Commitment
Gaugeability	Detectable and Assessable during the Implementation	Immeasurable Quantitatively during the Implementation
Type of Reward on Performance	Extrinsic Reward	Intrinsic Reward
Employment Fit	Contract or Temporary Employee	Permanent Employee

cation helps test whether the tasks assigned by MCS are in line with the overall organizational objectives.

Communication method specifies the effective means of communication for the respective elements. Regardless of how well MCS are designed and prepared, the assigned practices and goals should be conveyed appropriately to employees during implementation. Therefore, effective education and training are vital to the implementation of MCS. The legislated elements can be conveyed through verbal orders or codified procedures. In the JV, employees received training for the new ERP system. However, with the contextual elements of MCS, explanation based on the broad context is more effective in clarifying the goals of the MCS. In fact, if goal congruence can be achieved between managers and employees in the implementation of MCS, no further communication is necessary about the contextual elements. However, during early stage of the ERP implementation, the contextual element, in this case, maximization of local profits was not properly communicated to employees. The overall goals of MCS could be understood by employees only later, after its full implementation. As such, different communication methods for the legislated and contextual elements would be more effective.

Explanation method cannot be the same for both legislated and contextual elements. The legislated elements are to be communicated descriptively and informatively, because required practices or assigned tasks can be instructed and inculcated in this manner by managers to employees. However, the contextual elements need to speak to the heart of employees in a persuasive or convincing manner, as the case may be, for a shared understanding of the organizational goals. Therefore, maximization of local profits, the contextual element in the JV, could not be conveyed easily to the Japanese employees during the early stage of implementation. Instead, it took time for the standard cost accounting system to deliver a clear message about local profits, thereby convincing the Japanese employees of the organizational direction.

Questions from employees are a probable list of doubts that would be expressed by employees about the implementation of MCS. MCS are designed and led by managers to achieve the organization's objectives. Therefore, employees encoun-

ter many new requirements and situations and want to clarify on their performance and understanding. The required practices and assigned tasks in the legislated elements explicitly specify the job and the method. In the JV, proper training was conducted on the ERP system, so there were no significant questions with regard to the legislated element. These legislated elements, however, could not simply answer questions about why employees should conform to the new standard cost accounting system. The goals of MCS could only explain why the new MCS were implemented and provide a basis for employees' rational acceptance. Without a proper understanding, The JV employees considered MCS just as a learning of advanced management skills, thereby creating their own rationale.

**Intended response** is the reaction that superiors expect from their employees in the course of MCS implementation. With regard to the legislated element, managers do not expect new opportunities or significant improvements from their employees. If the standard operating procedures are followed and obeyed, these elements of MCS are considered to be a success. In the standard cost accounting, employees inputted data into the system and reported production information to stakeholders in a timely manner, as instructed by their managers. However, due to the inherent characteristics of the contextual elements, they cannot be followed or obeyed mechanically. For example, even if maximization of local profits is presented to employees with the implementation of MCS, it is not easy for them to decide the correct method to follow to achieve it. Therefore, understanding of and agreeing to the goals of MCS are the desirable responses of employees on the contextual element side.

Desired outcome is the originally expected result of MCS. Employees focusing on the legislated elements will try to maximize that result within the constraints. But those employees who better comprehend and concur with the contextual elements will have greater motivation and commitment to the goals of MCS; they will not just complete the assigned tasks. In the JV, employees were required to obey the instructions to maintain the standard cost accounting system. Observing the effects of their assigned tasks, employees realized how they could contribute to the company's profitability in

their respective, responsible areas, and they were encouraged to do so.

Gaugeability indicates the availability of a reasonable diagnostic measurement. To function as a control system, MCS should be equipped with a measuring process. Because by evaluating the performance and outcome of MCS, managers can recognize where they are and determine the corrective actions to be taken. And yet, not all elements of MCS implementation can be measured. The legislated elements which accompany specific tasks and require tangible responses can be compared with predetermined standard operating procedures. Managers can detect and assess deviations from the standard as per the protocol that provides the process by which deviations are investigated for improvements. This recursive control process of the legislated elements between the controlling department and the non-finance departments in the JV was already existent. However, the contextual elements, due to their intrinsic characteristics, cannot be measured quantitatively to find out whether employees similarly perceive the goals of MCS. The degree of their comprehension of or concurrent with the MCS goals, therefore, needs to be tested and traced differently. Indeed, importantly, a satisfactory result from the legislated elements does not necessarily mean that employees have the same understanding about the contextual elements.

Type of reward on performance also needs to differ according to the gaugeability of MCS elements. In the case of JV, the reward system did not play an important role because the Japanese company's system for employees had been maintained by the French management, without regard to implementation of MCS. However, the desired employee behavior cannot be obtained if the design and use of the incentive system is not appropriate. For example, if the rewards for the outcomes of the legislated elements can be measured quantitatively and objectively through performance evaluation, extrinsic rewards based on economic incentives could provide a better motivation for employees. On the other hand, for the contextual elements, which cannot be measured, intrinsic rewards such as job satisfaction are necessary. If, however, the contextual elements use extrinsic rewards to align

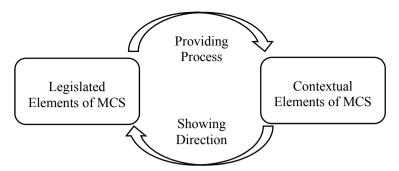


Figure 2: Relationships between Legislated and Contextual Elements in MCS Implementation

employees' efforts with the goals of MCS, the mismatch between those elements and the rewards would lead to dysfunctional behavior.

Employment fit reflects the fundamental capability of an organization to implement MCS. For MCS, it can build a control environment that would influence implementation. In fact, in recent times, temporary employees have been largely occupying significant positions in businesses, thus providing human resource flexibility. Such "leased" employees, working for a limited employment period, typically show a preference for the legislated elements of MCS because their interests lie in completing the specifically assigned tasks within a given time in return for the promised compensation. By contrast, in their response to MCS, permanent employees, with their relatively high loyalty to the organization, adopt a long-term approach in dealing with the contextual elements.

## Relationships between Legislated and Contextual Elements

The two aspects of MCS identified earlier can be reasonably compared with the two fundamental forces comprising the four levers of control proposed by Simons (1995). For the implementation of MCS, the legislated elements contain the constraining forces that require physical change against the opposition of employees; and the contextual elements include the inspirational forces that generate positive rational adjustment to the goals of MCS. Considering the standard cost accounting system of the JV, these two distinctive aspects are detected even in one control system, as noted earlier. Initially, the assigned tasks for the standard cost accounting system were followed by the employees.

By diffusing clear-cut contextual elements justifying the use of the new costing system by the organization, the goals of MCS were shared and understood among employees. As such, by balancing the two elements of the standard cost accounting system, these two distinctive elements of MCS were gradually routinized and changed into behavioral patterns and shared values. The legislated elements provided the concrete process through which the contextual elements could be achieved. Similarly, the contextual elements showed the organizational direction that employees should perceive in following the legislated elements. A logical link between these two elements must be established to promote their mutually reinforcing forces. Figure 2 illustrates how the two legislated and contextual elements operate mutually in the implementation of MCS.

The contextual elements show the direction and provide the vision for the legislated elements (as seen in Figure 2). Without a clear understanding of the MCS context, there are possibilities that flawed practices or tasks are established, which in turn are performed by employees. The legislated elements, on the other hand, provide the concrete process by which MCS goals are achieved. The two elements can be balanced without sacrificing either to firmly establish them in an organization's culture. Thus, the legislated elements can become behavioral patterns and the contextual elements can be transformed into shared values. Balancing both can ensure that MCS are functioning in the intended directions, without partiality.

#### CONCLUSION

Based on the extant literature and the author's own

experiences, the present study has focused on the intrinsic nature of MCS as reflected in their implementation. The findings suggest that MCS are composed of the two distinctive aspects—the legislated and contextual elements—that are significantly associated with each other in the implementation. Hence, the author argues that understanding the intrinsic nature of MCS can lead to potential success in the implementation rather than studying superficial control characteristics of MCS. A thorough analysis of one control system and its interactions with employees warrants more in-depth discussions in MCS research.

The present study considers only one typical case of cybernetic control, and bases its evidence for the intrinsic nature of MCS on the author's observations and experiences. Therefore, studying more MCS in diverse contexts is likely to be needed to overcome those limitations and construct a more comprehensive and testable theory. Future research will to achieve better understanding of the intrinsic nature of MCS: legislated and contextual elements. The present study might propose a new approach to conventional MCS research that cannot see the trees for the wood.

#### REFERENCES

- Ahrens, Thomas (1997). Talking Accounting: An Ethnography of Management Knowledge in British and German Brewers. *Accounting, Organizations and Society*. 22(7), 617-637.
- Abernethy, Margaret A., and Peter Brownell (1997).

  Management Control Systems in Research and Development Organizations: The Role of Accounting, Behavior and Personnel Controls.

  Accounting, Organizations and Society. 22(3), 233-248.
- Abernethy, Margaret A., and Wai Fong Chua (1996). A Field Study of Control System "Redesign":
- The Impact of Institutional Processes on Strategic Choice. *Contemporary Accounting Research*. 13(2), 569-606.
- Ahrens, Thomas, and Christopher S. Chapman (2004). Accounting for Flexibility and Efficiency: A Field Study of Management Control Systems in a Restaurant Chain. *Contemporary*

- Accounting Research. 21(2), 217-301.
- Anthony, Robert N. (1965). Planning and Control Systems: A Framework for Analysis. Boston: Harvard Business School Press.
- Anthony, Robert N. and Vijay Govindarajan (2001). *Management Control Systems* (Vol. 10). New York: McGraw-Hill.
- Bedford, David S. and Teemu Malmi (2015). Configurations of Control: An Exploratory Analysis. *Management Accounting Research*. 27, 2-26.
- Briers, Michael and Wai Fong Chua (2001). The Role of Actor-Networks and Boundary Objects in Management Accounting Change: A Field Study of an Implementation of Activity-Based Costing. Accounting, Organizations and Society. 26(3), 237-269.
- Chapman, Christopher S. (1997). Reflections on a Contingent View of Accounting. *Accounting, Organizations and Society*, 22(2), 189-205.
- Chapman, Christopher S. (1998). Accountants in Organizational Networks. *Accounting, Organizations and Society*, 23(8), 737-766.
- Chenhall, Robert H. (2003). Management Control Systems Design within its Organizational Context: Findings from Contingency-based Research and Directions for the Future. *Accounting, Organizations and Society*. 28(2), 127-168.
- Chow, Chee. W., Michael D. Shields, and Yoke Kai Chan (1991). The Effects of Management Controls and National Culture on Manufacturing Performance: An Experimental Investigation. *Accounting, Organizations and Society.* 16(3), 209-226.
- Chow, Chee. W., Yutaka Kato, and Michael D. Shields (1994). National Culture and the Preference for Management Controls: An Exploratory Study of the Firm—Labor Market Interface. *Accounting, Organizations and Society*. 19(4-5), 381-400.
- Chua, Wai Fong (1986). Radical Developments in Accounting Thought. *Accounting Review*. LXI(4), 601-632.
- DiMaggio, Paul J. and Walter W. Powell (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*. 48 (2), 147-160.
- Dent, Jeremy F. (1991). Accounting and Organiza-

- tional Cultures: A Field Study of the Emergence of a new Organizational Reality. Accounting, Organizations and Society. 16(8), 705-732.
- Fisher, Joseph G. (1995). Contingency-based Research on Management Control Systems: Categorization by Level of Complexity. Journal of Accounting Literature. 14, 24-53.
- Fisher, Joseph G. (1998). Contingency Theory, Management Control Systems and Firm Outcomes: Past Results and Future Directions. Behavioral Research in Accounting. 10 (Supplement), 47-64.
- Green, Stephen G. and M. Ann Welsh (1988). Cybernetics and Dependence: Reframing the Control Concept. Academy of Management Review. 13(2), 287-301.
- Govindarajan, Vijay (1986). Impact of Participation in the Budgetary Process on Managerial Attitudes and Performance: Universalistic and Contingency Perspectives. Decision Sciences. 17(4), 496-516.
- Harrison, Graeme L. (1992). The Cross-cultural Generalizability of the Relation between Participation, Budget Emphasis and Job Related Attitudes. Accounting, Organizations and Society. 17(1), 1-15.
- Harrison, Graeme L. (1993). Reliance on Accounting Performance Measures in Superior Evaluative Style-the Influence of National Culture and Personality. Accounting, Organizations and Society. 18(4), 319-339.
- Harrison, Graeme L. and Jill L. McKinnon (1999). Cross-cultural Research in Management Control Systems Design: A Review of the Current State. Accounting, Organizations and Society. 24(5), 483-506.
- Hofstede, Geert H. (1980). The Culture's Consequences: International Differences in Workrelated Values. Beverly Hills, CA: Sage.
- Hofstede, Geert H. and Michael H. Bond (1998). The Confucius Connection: From Cultural Roots to Economic growth. Organizational *Dynamics.* 16(4), 5-21.
- Janelli, Roger L. (1993). Making Capitalism: The Social and Cultural Construction of a South Korean Conglomerate. Stanford, CA: Stanford University Press.
- Kaplan, Robert S. and David P. Norton (1992). The

- Balanced Scorecard: Measures that drive Performance, Harvard Business Review. 70(1), 71-79.
- Kaplan, Robert S. and David P. Norton (1996). The Balanced Scorecard: Translating Strategy into Action. Harvard Business Press.
- Kato, Yutaka (2000). Nihontekikanrikaikeino Kaigaiiten: Syuhousyudougatadounyuuto Conceptsyudougatadounyuuno higakubunseki [Transfer-Japanese Management Accounting Overseas: Comparative Analysis of Methodoriented Introduction and Concept-oriented Introduction], *Kaikei*. 157(3), 219-236.
- Malmi, Teemu and David A. Brown (2008). Management Control Systems as a Package— Opportunities, Challenges and Research Directions. Management Accounting Research. 19(4), 287-300.
- Merchant, Kenneth A. (1985). Control in Business Organizations. Boston, MA: Pitman.
- Merchant, Kenneth A., Chee W. Chow, and Anne Wu (1995). Measurement, Evaluation and Reward of Profit Center Managers: A Crosscultural Field Study. Accounting, Organizations and Society. 20(7-8), 619-638.
- Merchant, Kenneth A. and David T. Otley (2007). A Review of the Literature on Control and Accountability. Handbook of Management Accounting Research Volume 2. 785-802.
- Myers, Michael D. (2009). Qualitative Research in Business and Management. Sage Publications.
- O'Connor, Neale G. (1995). The Influence of Organizational Culture on the Usefulness of Budget Participation by Singaporean-Chinese Managers. Accounting, Organizations and Society. 20(5), 383-403.
- Otley, David T. (1980). The Contingency Theory of Management Accounting: Achievement and Prognosis. Accounting Organizations and Society. 5(4), 413-428.
- Ouchi, William G. (1977). The Relationship between Organizational Structure and Organizational Control. Administrative Science Quarterly. 22(1), 95-113.
- Ouchi, William G. (1980). Markets, Bureaucracies and Clans. Administrative Science Quarterly. 25(1), 129-141.
- Ryan, Bob, Robert W. Scapens, and Michael

- Theobold (2002). Research Method and Methodology in Finance and Accounting. Second Edition, Thomson.
- Scott, Richard W. (1995). *Institutions and Organizations*. Sage Publications, Thousand Oaks, CA.
- Selto, Frank H., Celina J. Renner, and S. Mark Young (1995). Assessing the Organizational Fit of a Just-in-time Manufacturing System: Testing Selection, Interaction and Systems Models of Contingency Theory. *Accounting, Organizations and Society.* 20(7-8), 665-684.
- Simons, Robert (1995). Levers of Control: How Managers use Innovative Control Systems to drive Strategic Renewal. Harvard Business Press.
- Triandis, Harry C. (1995). *Individualism and Collectivism*. Boulder, CO: Westview Press.
- Ueno, Susumu, and Frederick F. Wu (1993). The Comparative Influence of Culture on Budget Control Practices in the United States and Japan. *International Journal of Accounting*. 28(1), 17-39.