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Introduction to the Management Control Process

The management control process includes those means by which senior management (1) influences behavior and guides an organization toward achieving its mission, (2) assures that the organization is progressing satisfactorily toward that mission, and (3) assures that the mission is still the preferred one to pursue.

The design and implementation of an entity's management control process are driven by the entity's mission, the entity's business strategy, management's perception of the behavior required to implement that strategy, management's beliefs about human behavior, and the entity's need for a process to assure strategy renewal in response to new strategic opportunities, risks, and uncertainties.

The mission of an entity is the overarching objective it seeks to achieve and maintain. For example, the mission of a New York jewelry store might be to purvey distinctive, high-quality jewelry to discriminating buyers. This is its mission. It defines the store's desired character and purpose.

The mission in turn influences actions. For example, the management in the above example would never consider selling mock jewelry, but it would consider favorably locating the store in the heart of the fashionable Fifth Avenue shopping district. The former action is inconsistent with the entity's mission. The latter action is consistent with the mission.

Strategy is the plan an entity intends to follow to achieve its mission. A plan to locate the store in the heart of the fashionable shopping area is a strategic objective and action. It moves the entity in a significant manner toward achieving its mission.

Influencing behavior is the central thrust of a management control process. The desired result of the process is behavior that moves the entity toward achieving its mission. To encourage subordinates to act efficiently and effectively in carrying out the enterprise's strategy requires managers:

1. To *communicate* to the subordinates what is expected of them. The subordinates must know the organization's mission and strategy and their part in carrying out this strategy.
2. To *motivate* subordinates to achieve the enterprise's mission in an efficient and effective manner.
3. To *measure* the performance of the subordinates and *evaluate* their performance.

Professor David F. Hawkins prepared this note as the basis for class discussion.

Viewed in its totality, management control is a process. It is a series of continuous actions that advances the organization toward an end. And like all processes it is continually changing over time. In contrast, financial, cost, and responsibility accounting are systems. They are sets of coordinated rules, principles, and practices that interact in a regular and predictable way to gather and report information. In practice, some of the key components of the management control process are systems. But taken as a whole, management control is a process. Failure to recognize this can lead to major management control process failures, particularly when the component parts of the process do not act in concert with one another to move the enterprise toward achieving its mission.

Six Components

The management control process can be broken down into six components. They are:

- Management control environment
- Organization structure and responsibilities
- Information and communication
- Management control systems
- Incentives
- Monitoring

Management Control Environment

The management control environment component sets the tone for the implementation of the management control process. It is a major responsibility of senior management. They must by words and deeds create and nourish an entity culture that supports and enhances the management control process. A key to achieving this result is to develop an organization that understands its management control process and accepts it as being both empowering and necessary. This can be achieved best if senior management implements a management control process where there is congruence between its various components and overall purpose.

In addition to a company's formal management control process, the management control environment may include informal controls that influence employee behavior. Two of the more significant informal controls are group norms and individual controls. Group norms are norms imposed on individuals by the group, such as the idea that exceeding certain levels of individual productivity is not acceptable to the group. Individual productivity that exceeds the group norm may reflect adversely on the performance of others in the group. Individual controls reflect the level and nature of an individual's motivation and core values. These personal controls may lead an individual to reject actions that are personally unacceptable. Group and individual controls must be taken into account by those designing, administering, and evaluating a management control process.

Organization Structure and Responsibilities

The organization structure and responsibilities component includes the way the organization is structured and responsibilities are assigned to achieve the entity's mission. Typically, the major decisions in designing the organization and the responsibilities component involve (1) the degree to which employees below the level of senior management will be empowered, (2) the decision rights that will be delegated, and (3) the organizational structure best suited to facilitate these decisions.

The choice of the appropriate organization structure and responsibilities component is entity specific. It should reflect such considerations as the entity's mission, strategy, human and capital resources, markets, information capabilities, and geographic span of operations. The degree to which senior management adopts a decentralized or centralized organization structure is both a management control process decision and a significant determinant of the nature of the other five managerial control process components.

A decentralized organization structure empowers managers and key employees at organizational levels below senior management with some freedom to make decisions and to pursue courses of action based on those decisions. To ensure responsible behavior, the empowered employees must be held accountable for their actions. Decentralized organizations are particularly appropriate for large entities in uncertain, changing environments requiring managerial and organizational flexibility, creativity, and fast responses to survive and prosper.

A centralized organization structure imposes constraints that grant little, if any, freedom to act to managers and key employees below the senior management level. Centralized organization structures can be appropriate in certain situations, such as operating a nuclear power plant, where safety is a paramount concern, or a casino, where protection of cash is a major challenge.

If management adopts a decentralized organization structure, it inevitably faces a major dilemma. Namely, in a decentralized organization structure, how can senior management empower employees to be innovative and use their best judgment in making decisions while at the same time exerting sufficient control over their actions to ensure they do the right thing?

Clearly, one way to avoid having to deal with this dilemma is to operate through a centralized organization structure. While many of the management control process components covered in the note can be employed successfully in a centralized organization, the following discussion of these and other components assumes a decentralized organization structure.

Accountability and the setting of boundaries are the keys to resolving the decentralization dilemma. If employees are going to be empowered they must be prepared to be held accountable for their actions. A responsibility center form of organization is one way to achieve accountability. As we will see later, diagnostic control systems are also used for this purpose.

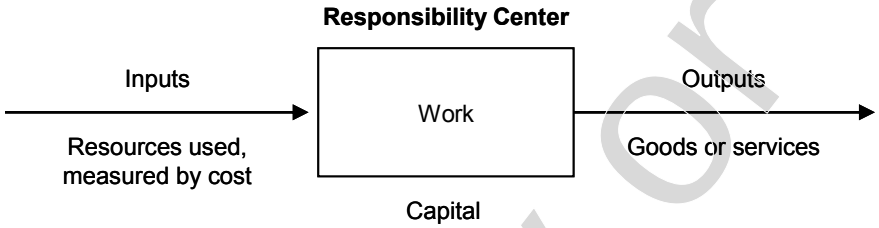
Responsibility Centers

A responsibility center is an organizational unit headed by a manager responsible for its activities.

A responsibility center exists to accomplish one or more purposes; these purposes are its objectives. **Figure A** shows the essence of a responsibility center. A responsibility center uses inputs, which are physical quantities of material, hours of various types of labor, and a variety of services. It works with these resources, and it usually requires working capital, equipment, and other assets to do this work. As a result of this work, the responsibility center produces outputs, which are classified either as goods, if they are tangible, or as services, if they are intangible. Presumably, these outputs

are consistent with the responsibility center's objectives, but this is not necessarily so. For example, a manufacturing center may produce more goods than the marketing department can sell, or it may provide goods of inferior quality. These are outputs even though they are not consistent with the company's overall objectives. Whatever a responsibility center produces, whether good or bad, desired or unwanted, constitutes its outputs.

Figure A Nature of a Responsibility Center



Source: Casewriter.

The goods and services produced by a responsibility center may be furnished either to another responsibility center or to the outside world. In the former case, they are inputs to the other responsibility center; in the latter case, they are outputs of the whole organization.[1]

Four Categories

Responsibility centers fall into one of four categories. Each category is defined by the nature of the manager's responsibility for the center's monetary inputs and/or outputs that are measured. The four categories are as follows:

- Revenue center
- Cost center
- Profit center
- Investment center

Revenue center A revenue center is an organizational unit whose manager is held primarily responsible for its revenues (outputs) but not its costs (inputs). Sales units are typically managed as revenue centers.

Revenue can be recognized in a responsibility accounting system through the process of selling to outside customers or by transfers of products or services to other responsibility centers and putting a monetary value (transfer price) on these transfers.

Cost center A cost center is a responsibility center where the manager is responsible for its costs (inputs) but not its revenues (outputs). Manufacturing and R&D are typically managed as cost centers.

[1] John Dearden, "Note on Management Control Systems," HBS No. 183-041 (Boston: Harvard Business School Publishing, 1982).

Profit center A profit center is a responsibility center whose performance is measured as the difference between its revenues and costs (output minus input). A stand-alone business unit is typically managed as a profit center.

Investment center An investment center is a responsibility center where the manager is held responsible for the use of its assets as well as its profit. In this situation, the manager is held responsible for earning a specified return on the center's net investment.

Information and Communication

The information and communication component consists of the flow within the entity of information relevant to the management control process.

In decentralized organizations, information and the communication of information play an important role. Employees with decision rights need information relevant to their span of control and, if required, the coordination and integration of their actions with those of others. Senior management needs information on the key performance variables of subordinates and the entity's strategic uncertainties. All levels of management need information for planning and evaluation purposes.

In addition to the information generation and communication dimensions of the four management control systems components (discussed later), there are three other information systems that play a significant information role in the management control process. They are the following:

- Financial accounting systems
- Cost accounting systems
- Responsibility accounting systems

Financial Accounting System

Financial accounting systems focus on the measurement and financial consequences of the economic activities of the whole entity and its major operating segments. Financial accounting reports are based on generally accepted accounting principles. These are accounting standards set by the Financial Accounting Standards Board, an independent private body whose pronouncements on accounting standards are followed in the United States.

The principal audience for financial accounting reports is senior management and parties external to the entity. Financial accounting reports are an important information source for senior management. They are used to monitor the economic performance of the entire entity and its major operating segments. As such, these reports are part of the management control process.[2]

[2] For more information on financial accounting systems see "The Accounting Framework, Financial Statements and Some Accounting Concepts," HBS No. 193-028 (Boston: Harvard Business School Publishing, 1992).

Cost Accounting Systems

Cost accounting systems recognize, measure, record, and report cost and associated nonfinancial information related to a company's activities, products, services, processes, and functions. Cost is a measurement in money terms of resources used for some purpose.

Each item, unit, or activity for which costs are measured is referred to as a cost object. A cost object is the technical name for a product, project, organizational unit, or other purpose or activity for which costs are measured.[3]

The output of cost systems is used for *both* financial accounting and responsibility accounting purposes. Financial reporting uses cost accounting information to measure inventories and cost of goods sold. Management uses the output of cost systems for a wide range of managerial purposes including budgeting, strategy formulation, forecasting, product- and process-improvement studies, performance measurement, as well as a variety of other operating decisions.[4]

Responsibility Accounting Systems

Responsibility accounting systems generate financial and related nonfinancial information about the actual and planned activities of a company's responsibility centers (i.e., its revenue, cost, profit, and investment centers). The information output of responsibility accounting systems is a major source of the information incorporated in diagnostic and interactive control systems, discussed later.

Beyond reporting information about a responsibility center's historical performance, responsibility accounting systems provide managers with information about their planned activities. Usually, this information is in the form of budgets and profit plans. Budgets and profit plans are formal plans expressed in financial terms of a responsibility center's planned actions and expected results.

Budgets and profit plans are used almost universally in the management control of companies having a number of responsibility centers. Budgets and profit plans provide a means for top management to exercise control over decentralized operations because top management can review and approve plans before they are undertaken. This assists top managers in evaluating the performance of responsibility center managers.

Responsibility center managers are responsible for achieving budgeted results in an efficient and effective manner. To facilitate the appraisal of responsibility center managers, responsibility accounting systems generate reports comparing the center's actual performance to its planned performance. Any difference between actual and planned results is referred to as a "variance."

Responsibility accounting systems also account for transfers of resources between responsibility centers. The value assigned to a transferred product or service is referred to as its "transfer price." The transfer price is a cost to the transferee and a revenue source to the transferor.[5]

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[3] "Allocation of Service and Administrative Costs," Institute of Management Accountants Statement No. 48.

[4] For more information on cost accounting systems, see "Introduction to Cost Accounting Systems," HBS No. 105-701 (Boston: Harvard Business School Publishing, 2004).

[5] For more information on responsibility accounting systems, see "Introduction to Responsibility Accounting Systems," HBS No. 105-009 (Boston: Harvard Business School Publishing, 2004).

Management Control Systems

The management control systems component includes those specific control systems used to manage the organization so that the benefits of innovation and creativity are not achieved at the expense of control. These include the following:

- Diagnostic control systems
- Belief systems
- Boundary systems
- Interactive control systems

These four systems have been labeled the "levers of control" (**Exhibit 1**).[6]

As a group, the role of these four systems is to direct employee energies to achieving the entity's mission by overcoming organizational blocks such as uncertainty by employees as to the organization's purpose, the pressures or temptations to do the wrong thing, lack of focus or resources, and lack of opportunity or fear of risk (**Exhibit 2**).

Diagnostic Control Systems

Diagnostic control systems are used by senior management to monitor critical performance variables. Critical performance variables are the things that managers and employees must do well in order to achieve their assigned role in the attainment of the entity's mission. Another objective of diagnostic control systems is to direct the attention of managers to implementing efficiently and effectively the appropriate critical performance variables.

Diagnostic control systems include such management tools as budgets, variance reports, profit plans, and project reports. The common characteristic of these tools is they are used by senior management to hold employees accountable for their actions, which are measured against metrics that reflect the appropriate key performance variables.

To illustrate a key performance variable and diagnostic control system, assume the senior management of a discount retail chain sets prices and identifies the effective and efficient management of store-level inventories as a key performance variable. Accordingly, the decision is made that a store manager's span of control includes inventory management. At the same time, senior management decides store managers will be held accountable for the entity's investment in their store inventory. Operationally, the accountability for this responsibility is measured in terms of the inventory turnover rate, the supporting rationale being the higher the inventory turnover the lower the investment in inventory. So that senior management can monitor this key performance variable, it sets inventory turnover targets for stores, receives regular reports on the actual store turnover rates and variances from the target rates, and meets with store management to discuss significant inventory turnover variances from the target rates.

Diagnostic control systems can be very effective monitoring devices. But they have the potential to encourage overzealous actions to maximize the achievement of the critical performance variables at

[6] The entire discussion of the management control system components is based on Robert Simons, "Control in an Age of Empowerment," *Harvard Business Review*, March/April 1995; and Simons, *Levers of Control* (Boston: Harvard Business School Press, 1995).

the expense of other desired outcomes. These maximizing actions may endanger the entity's mission. To guard against this possibility, additional management control systems must be put in place. In particular, these are the belief and boundary systems.

Belief Systems

Belief systems communicate the entity's core values and mission to employees. The goal is to remove employee uncertainty about the entity's purpose, indicate how employees are expected to manage internal and external relationships, and inspire employees to pursue new opportunities to create value for the entity. For example, the belief system of a retailer whose mission is to be perceived as an upscale customer-friendly store and whose success depends heavily on customer service and repeat business may include such employee behavior guidance as "the customer is always right," "work as a team to satisfy the customer," or "respect the customer."

Belief systems can come in many forms, such as mission statements, vision statements, and credos. The common characteristic of these statements is they communicate the entity's vision and core beliefs as well as seek to energize value-creating behavior.

While belief systems can be a powerful approach to obtaining employee commitment to the mission and adopting patterns of acceptable behavior, in combination with diagnostic controls belief systems may still not prevent misguided employee actions that the employee perceives as beneficial but in the end endanger the entity. To protect against this misguided possibility, boundary systems are adopted.

Boundary Systems

Boundary systems identify those actions and risks that employees must avoid. While diagnostic control and belief systems point to and encourage desired actions, boundary systems dictate what employees should not do.

As their name implies, boundary systems establish boundaries that employees must not cross as they seek to exploit their empowerment to innovate, take risks, and act for the good of the entity. As a result, typically, boundary systems are stated in negative terms. For example, an enterprise whose success depends heavily on its good reputation may have as part of its boundary system a requirement that "employees do *not* have conflicts of interest in their transactions with customers."

Boundary systems come in many forms, including codes of conduct and operating guidelines. The common characteristic of these statements is they proscribe certain types of behavior. They also indicate the punishment for acts outside the boundaries of acceptable behavior.

Interactive Control Systems

The interactive control systems include those control systems that senior managers use to get involved in the decisions of subordinates with the objective of learning about new strategic opportunities, risks, and uncertainties that may require a timely shift in the entity's strategy. In contrast to the "management-by-exception" diagnostic control systems (described above), interactive control systems are the "hot buttons" of senior management. It is on these systems that they focus their personal attention.

Examples of interactive control systems include business planning systems, project management systems, and the budget preparation and approval process. Common characteristics of these systems are that the information content is potentially strategic, the system's output is an action plan, senior management is personally involved on a recurring basis, the senior-subordinate dialogue is two-way and face-to-face, any aspect of the plan can be challenged, and all involved treat the exercise as important.

Interactive control systems are a principal vehicle for organizational learning. Senior management can use them to pass on experience to subordinates, subordinates can use them to pass new perspectives and information to senior management, and together the two groups can develop new knowledge that is useful for moving the entity toward achieving its mission and, if necessary, formulating a new strategy.

Incentives

The incentive component includes the incentives designed to encourage behavior by managers and employees that is consistent with achieving the entity's mission. To achieve this goal, incentives must be aligned with the entity's mission, strategy and employee decision rights, key performance variables, and actual performance.

Incentives can be either positive or negative. Positive incentives, such as a cash bonus, reward employees who behave in an agreed-upon manner. Negative incentives, such as the denial of a cash bonus, punish employees who behave otherwise. Research suggests that individuals are more strongly motivated by the opportunity to earn positive rewards than the fear of punishment. It also indicates the effectiveness of incentives diminishes as the time between the administration of the reward or punishment and the events resulting in the administrative action lengthens.

Incentives can be monetary or nonmonetary. Monetary rewards, such as cash bonuses, can be a powerful motivator, but beyond some level nonmonetary rewards, such as praise and public recognition, may be a more effective incentive.

Frequently, incentives are tied in large measure to how well an employee performs against the employee's assigned key performance variable targets. The assessment of the employee's performance may involve both measurable and judgmental evaluations of the employee's actual performance. The exercise of judgment may be necessary to evaluate both desirable or undesirable actions of the employee that were not captured by the quantitative performance metric.

Incentives can be a powerful motivator of employee behavior. Those who design and administer management control processes must be aware of the social-psychological aspects of incentives. They must be on guard at all times to ensure that the entity incentives encourage goal congruence, that is, the goals of the employees are consistent with the goals of the entity. If this is achieved, the actions employees take in their self-interest should also be in the best interests of the entity.

Monitoring

Processes require continued updating and modifying. The monitoring component of a management control process performs this function.

Monitoring is a senior management responsibility. This responsibility goes beyond the diagnostic system's monitoring of key performance variable performance and the interactive control system's monitoring of strategic uncertainties. It involves monitoring the management control process.

To carry out its monitoring role, senior management, with a critical frame of mind, should directly observe the process in action, test the congruence of its various components and the entity's mission, and challenge the human behavioral assumptions underlying the process's design and administration. This monitoring must be continual. If it is not, the process may become dysfunctional as events require or suggest changes to such things as the entity's mission, strategy, and key performance variables as well as the self-interests of employees.

Internal Control Process

Senior management's personal monitoring of the management control process can be facilitated by the internal control process.

The role of the internal control process in the management of enterprises is to provide a system of checks and balances that will give senior management reasonable assurance that the enterprise is on track to achieve its mission successfully and to minimize the probability of unexpected surprises.

A properly designed and managed internal control process can help an entity achieve its performance and profitability targets and prevent loss of resources. It can help ensure reliable financial reporting. And it can help ensure that the enterprise complies with laws and regulations, avoiding damage to its reputation and other consequences. In sum, it can help an entity get to where it wants to go and avoid pitfalls and surprises along the way.[7]

The internal control processes can be viewed broadly or narrowly. The broad view is that the internal control process encompasses *all* of those controls put in place by management to ensure the organization is achieving its strategic goals in an effective and efficient manner. This view is very close to the concept of a management control process. The narrow view includes only those controls designed to prevent fraud and ensure the accuracy and completeness of the accounting records that underpin financial statements and their related disclosures.

In practice most internal control processes fall between these two extremes. For the purposes of this note, the internal control process encompasses the means by which senior management seeks reasonable assurance that:

- The entity's accounting and operating information used in its financial, cost, and responsibility accounting systems and management control process is complete and reliable.
- Operations are being conducted in accordance with the entity's prescribed policies and procedures.
- The entity is in compliance with applicable laws and regulations.
- The entity's assets and information systems are protected from improper use.

Internal control activities fall into two categories—administrative controls and accounting controls.

[7] The Committee of Sponsoring Organizations of the Treadway Commission, Treadway Report (1987).

Administrative controls are designed to assure management that operations are being conducted efficiently and company policies are being followed. Examples of administrative controls include the operating performance reviews and the company's written procedures for dealing with vendors, customers, and regulatory authorities.

Accounting controls are concerned mainly with protecting assets and ensuring that financial records and reports are reliable and complete. Examples of accounting controls include those procedures designed to safeguard assets, ensure completeness and accuracy of accounting records, and ensure the timely release of financial statements.

To help ensure they have adequate and effective internal controls, many companies establish an internal audit function. Among its many tasks, a primary role of an internal audit is to examine and evaluate the adequacy and effectiveness of the company's internal control structure. The effectiveness of the internal control function is very dependent on the scope of its authority, internal organization structure, degree of independence, reporting relationships, staff qualifications, and budget.[8]

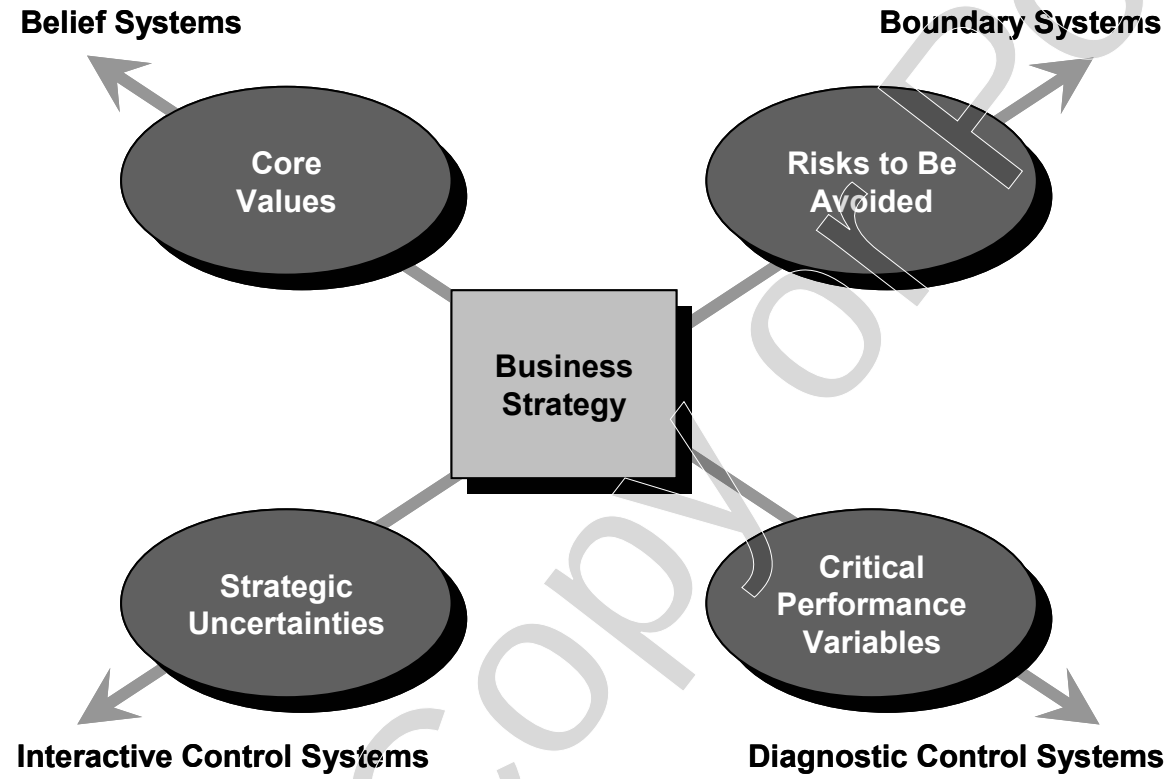
There are real limitations to any internal control process. An effective internal control process can help an entity achieve its objectives, but it cannot ensure its success. Furthermore, no matter how well an entity's internal control process is structured and managed, it can only provide reasonable assurance that the entity is on track to achieve its mission successfully and the probability of unexpected surprises has been minimized.

Facilitate But Not Assure

The design of the management control process involves economic, systems, and behavioral considerations. A well-designed and administered management control process can facilitate the achievement of an entity's mission. It cannot assure it. In the end this depends on the feasibility of the entity's mission and the soundness and execution of its strategy.

[8] For a more detailed discussion of the internal control process see "Introduction to the Internal Control Process," HBS No. 105-040 (Boston: Harvard Business School Publishing, 2004).

Exhibit 1 Levers of Control



Source: Robert Simons, "Control in an Age of Empowerment," *Harvard Business Review*, March/April 1995.

Exhibit 2 Organizational Blocks

Potential	Organizational Blocks	Managerial Solutions	Control Levers
To contribute	Uncertainty about purpose	Communicate core values and mission	Belief systems
To do right	Pressure or temptation	Specify and enforce rules of the game	Boundary systems
To achieve	Lack of focus or of resources	Build and support clear target	Diagnostic control systems
To create	Lack of opportunity or fear of risk	Open organizational dialogue to encourage learning	Interactive control systems

Source: Robert Simons, "Control in an Age of Empowerment," *Harvard Business Review*, March/April 1995.