The Evolution and Growth of CORPORATE CONTROL SYSTEMS

By Rebecca Toppe Shortridge, CPA, and Shaokun Carol Yu, CPA

The roots of control systems, including corporate governance and management control, stretch back hundreds of years to the move from agrarian societies to industrial economies. Today, control systems might be defined as a group of principles and processes that result in an environment that encourages executives, managers, and employees to focus on value creation for company owners and other stakeholders. Gaining an appreciation of the origins of these systems through simple examples illustrates the importance of these practices to even the most basic organizational structures and points out a critical link to modern corporate governance. Regardless of the complexity of the organization or product, a few keys are critical to establishing effective controls.

The need for control systems grew out of corporations that allowed owners to be separated from the operations of the businesses they owned. When commerce systems first started to evolve, they primarily involved laborers who became efficient at producing specific products. Laborers traded their wares with others, frequently relying on bartering. As economies grew and technology evolved, organizations developed that used large numbers of workers and mass production systems. Owners of such organizations couldn't observe the actions of management and other employees directly, which resulted in conflicts between the owners' desires to maximize wealth and the employees' desires to fulfill their individual needs. Therefore, contracts between owners and employees became necessary. But establishing contracts for each manager, worker, and supplier was burdensome. Ultimately, firms emerged when owners entered into several contracts to form a system of relationships under their direction, reducing the need to continually negotiate new contracts and resulting in a more efficient business world.

A Simple Example

Increased efficiency led to new problems as the decision-making rights of management and employees expanded and owners increasingly became removed from the day-to-day activities of the business. As a simple example, assume a tomato farmer owns and farms one small field. Because the business is small, the farmer plows the field, plants the crops, tends the crops, and harvests the tomatoes when they are ripe. The farmer's profits are primarily dependent on his work ethic and knowledge of tomatoes, so he works diligently. As time passes, the farmer learns the key to producing tomatoes efficiently. Because he has an entrepreneurial spirit, the farmer decides that he can increase his profits by buying additional fields and hiring workers to perform labor-intensive tasks. The farmer purchases four additional fields and agrees to pay each worker $10 an hour. The farmer believes that most people have a strong work ethic, so he freely moves around all of the fields without overseeing the day-to-day operations.

The workers are interested in maximizing their wealth. Under a $10-per-hour pay structure, this might not include maximizing the effort put forth performing labor-intensive tasks. Thus, the workers realize that they receive $10 per hour regardless of their level of effort and decide to move slowly and take frequent breaks; after all, there's no incentive to work at a brisk pace. How could the farmer prevent this problem? Perhaps it can be solved simply by telling the workers what's expected of them.

After the farmer explains his expectations clearly, the productivity of the workers improves for a short time. Despite the fact that the farmer clearly conveyed his expectations to the employees, however, they still seem to move slowly. The farmer decides to pay the workers based on the number of tomatoes harvested, giving the workers an incentive to work efficiently. By utilizing a piecemeal rate, the owner provides an incentive for the workers to harvest more tomatoes and thus improve the owner's value.

Even in this simple environment, it's difficult to write a contract that induces employees to act in the owner's best interests. Because the workers are paid based on the number of tomatoes harvested, they have an incentive to pick rotten tomatoes and tomatoes that aren't ripe. This behavior is again in conflict with the farmer's best interests because he prefers that the tomatoes that aren't ripe remain on the vine until they are usable. The owner might revisit the initial incentive contract by relying on accounting data. For example, the owner could use accounting information to determine that he will earn a sufficient profit if 75% of the tomatoes harvested by workers are usable. Thus, the owner amends the contract to include an incentive based on workers harvesting a certain number of tomatoes that are picked appropriately.

Components of Control Systems

The discussion of the tomato farm highlights three critical components of management control systems (see Figure 1):

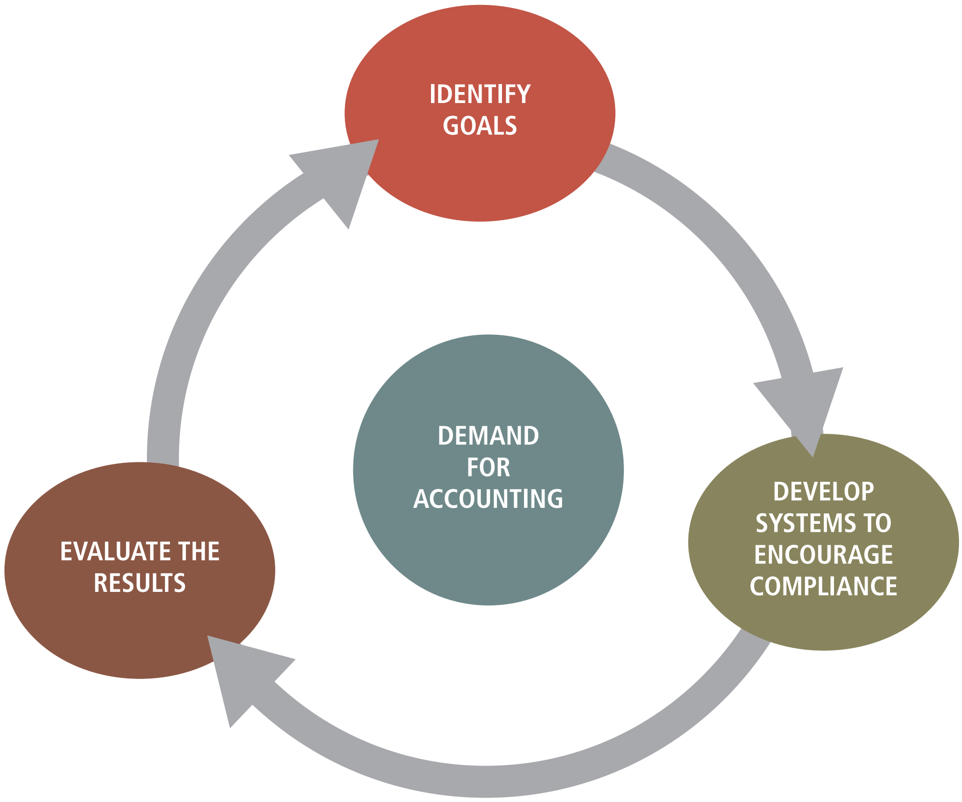
1. Identifying the goal(s) of the organization and conveying it to management and workers,

2. Developing systems to encourage compliance with the desired results, and

3. Evaluating the results and taking actions, if needed, to improve performance.

Identify the Goal: Arguably the most important starting point for achieving organizational success is identifying *what* the organization is trying to achieve and then clearly expressing that goal to the team. Without an understanding of the objective, it's impossible to develop

Figure 1: *Components of Management Control Systems*



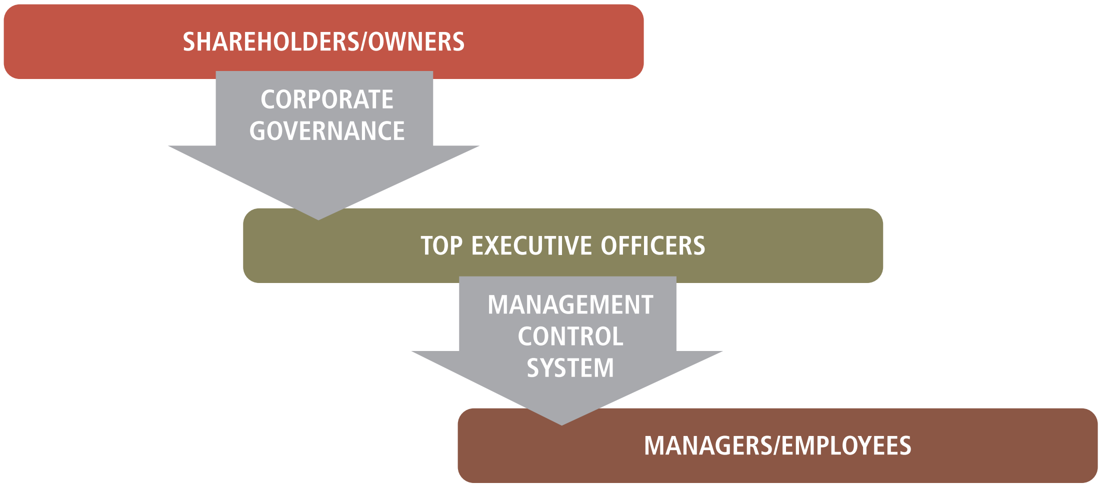
a strategy or management control system to achieve the objective. It's also important for the goal to evolve over time as the business objectives change. In the case of the tomato farm, the goal was to harvest tomatoes so that 75% were consumable. As another example, IBM originally focused on producing mainframe computers. This goal was communicated to the public and to employees, and Big Blue developed a tremendous reputation. But with advances in technology, including the advent of desktop computers, IBM started losing out to its competitors. Eventually, the organization realized that it needed to change its strategy and convey the new approach from the top down to continue to thrive as a high-quality organization.

Encourage Compliance: While clearly defining the goal is critical, developing systems to encourage achievement of the goal usually poses the most significant challenge. In a 1999 *Fortune* magazine article titled "Why CEOs Fail," Ram Charan and Geoffrey Colvin documented that 70% of corporate failures occur because of poor execution, not because of bad strategy. Management control systems are important to successful execution of goals.

According to *Management Control Systems: Performance Measurement, Evaluation and Incentives* by Kenneth Merchant and Wim Van der Stede, result controls (which tend to be preventative in nature) may be appropriate for encouraging compliance. If designed well, result controls define the owners' and managements' expectations of employees and encourage employees to achieve the desired outcome. Result controls are focused on motivating employees to perform. In the tomato example, paying workers by the number of tomatoes harvested is a result control. For result controls to be effective, the desired outcome has to be defined clearly.

Evaluate the System: The final process involves closing the loop by evaluating the results of the organization and modifying the control system, if necessary, to improve organizational results going forward. Specifically, leaders of entities must assess if the control systems were effective at obtaining the desired results. In the case of the tomato farm, the owner might ask if the tomato harvest met expectations. A more general question might be, "Did the company meet its profit forecast?" If the answer is "no," management needs to examine why the goals weren't met. Perhaps the tomato harvest was unsuccessful because of weather, or perhaps it was unsuccessful

Figure 2: *Aligning Stakeholder Goals*



because the workers didn't apply themselves diligently. In the latter case, how can the result control be modified to maximize effort going forward?

A Key Components Example

As an illustration of the components of the control system and the evaluation process, suppose that an organization wants to improve customer service. Improving customer service can be interpreted many ways and is difficult to measure. It's important, therefore, for management to *explicitly* define what it means by improving customer service *and* how it will measure improvement. For example, it probably isn't enough to assess an improvement in customer service by broadly asking customers what they feel. Their feelings are difficult to measure. But if improving customer service is defined as reducing the number of products returned, an improvement in customer service can be measured directly. After defining the goal clearly, the organization should develop relevant targets and rewards. If the number of returns declines by 5%, all employees involved could receive a bonus. This incentive plan encourages employees to comply with organizational goals by rewarding them for achieving a specific target.

As a final step, management should evaluate the incentive system, i.e., close the loop. Does the incentive produce the desired results? In particular, did customer service improve; i.e., did returns decrease by 5%? If so, the control system functioned appropriately. If not, what modifications need to be made? Perhaps a 5% reduction in returns isn't possible or the bonus wasn't large enough to incentivize the employees. Closing the loop with an evaluation of the results is crucial for the long-term efficacy of management control systems.

Corporate Governance: A Necessity

The customer service example focuses on result controls, but result controls alone aren't sufficient to align the interests of employees with those of other organizational stakeholders. High-quality corporate governance helps assure shareholders that executives make choices to maximize owners' interests when creating management control systems. Further, for management control systems to work efficiently, it's necessary for the board of directors to be actively involved in establishing the tone and culture of the organization through strong corporate governance practices.

For example, Kinross, a global mining company founded in 1993, clearly states that its board of directors is "ultimately responsible for the supervision and coaching of the management...[and] should have responsibility for the selection, appointment, monitoring, evaluation and, if necessary, the replacement of CEO and other executives." The board also ensures that the "CEO and executives create and maintain a culture of integrity throughout the Kinross organization." Academic accounting research suggests that strong leadership, starting with the board of directors, can improve the alignment of the goals of stakeholders and workers as mentioned in Kinross's statement (see Figure 2).

Three themes seem to be particularly important for establishing strong boards of directors and, thus, good corporate governance and management control systems:

1. The independence of the board,
2. The attentiveness of the board, and
3. The quality of the audit committee.

Independence of the Board: The independence of the board of directors (based on both the number and percentage of independent members) is improved if the board is composed of members outside the management of the organization. Further, separating the chairman of the board and the chief executive officer improves the ability of the board to act in the best interests of external stakeholders. In general, boards that are more independent are tied to higher-quality earnings, more-thorough disclosures about strategic information, and additional details regarding executive compensation practices. These results likely are attributable to the willingness of independent board members to scrutinize the results of the organization and consider alternative modes of operation.

Attentiveness of the Board: Boards that are more active set the tone for the organization. Perhaps by meeting more frequently, the internal management of the organization receives the message that someone is monitoring its activities and will act to prevent abuses. Board attentiveness is generally measured by the number of board meetings held per year. It's reasonable that a board that meets more frequently is more engaged. This increased engagement may allow the board to bring new insights to the management of the firm. Research by Nikos Vafeas published in the *Journal of Financial Economics* documented that an increase in the frequency of board meetings improved firm operating performance.

Quality of the Audit Committee: The quality of the audit committee is crucial to maintaining an environment of corporate control. For example, the audit committee for Coca-Cola Enterprises is in charge of oversight of the Enterprise Risk Management process that monitors and manages key business risks. Three characteristics are important to improve the quality of the audit committee:

- Independence,
- Expertise, and
- Diligence or involvement in monitoring.

The percentage of outside directors on the committee generally represents the independence of the audit committee. Professional certification in accounting or finance or previous employment experience in accounting or finance denote financial expertise. Further, it's important that an audit committee meet frequently so it can continually monitor the activities of the organization and be alerted to potential problem behaviors. Finally, the size of the audit committee is important as well. Perhaps larger committees are more effective because they have more members to think about potential corporate governance problems.

It's critical for the executives, management, and employees to understand that the board's primary focus is ensuring investors' interests. According to Merchant and Van der Stede, good governance—and, thus, management control systems—"depend on managers building a culture of integrity that involves an open and candid relationship with their engaged and supportive, but challenging, boards." Independent boards that are involved regularly and are willing to challenge management establish the groundwork for the entire organization.

Following the ideas of agency theory, management control systems and corporate governance mechanisms developed to align the behaviors of employees and management to the interests of shareholders. Gabrielle O'Donovan addressed this in the 2003 article "A Board Culture of Corporate Governance" in *Corporate Governance International Journal*. She defined corporate governance as "an internal system encompassing policies, processes and people, which serves the needs of shareholders and other stakeholders, by directing and controlling management activities with good business savvy, objectivity and integrity." This definition implies that management control systems and the overriding governance systems shouldn't only direct the activities of the employees but should also result in good business practices to meet the goals of *all* stakeholders. **SF**

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