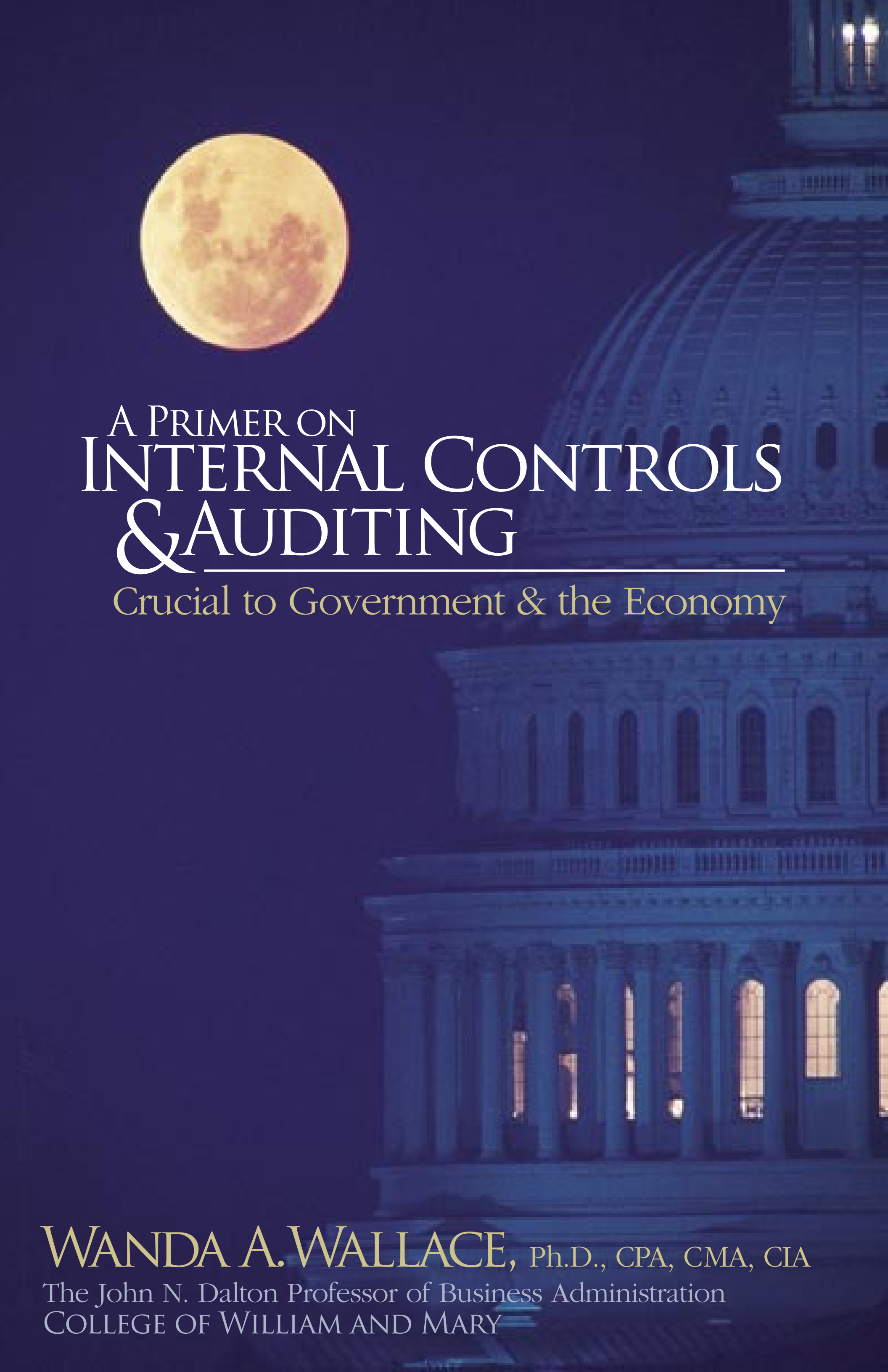

# A Primer on Internal Controls & Auditing

## Crucial to Government & the Economy

Wanda A. Wallace, Ph.D., CPA, CMA, CIA
The John N. Dalton Professor of Business Administration
College of William and Mary

**To order additional copies, go to**
***www.agacgfm.org/publications/wallace_order.aspx.***

# A Primer on Internal Controls & Auditing:

## Crucial to Government & the Economy

**By: Wanda A. Wallace, Ph.D., CPA, CMA, CIA**
**The John N. Dalton Professor of Business Administration**
**College of William and Mary**

**Published by the**
**Association of Government Accountants**
**Alexandria, VA**
**June 2004**

## Acknowledgements

I appreciate the professionalism of Marie Force, director of communications and editor, who has been instrumental in bringing this book to print. She has organized the review process, the creative effort of design and production. It has been a pleasure working with her.

I also want to thank my husband, James, who has been indispensable as a 'sounding board' during the writing process. The input from two reviewers also enhanced the final product.

## Preface

I have written books for professional and educational audiences on the topics of internal controls and auditing with a length in excess of 1,000 pages. While such resources serve a purpose, I asked myself whether I could address the core aspects of these two topics in fewer than 100 pages. I was reminded of the story that Mark Twain wrote in a letter that had he more time, the letter would be shorter.

The most precious resource for most of us is time. How can we effectively use our time to learn what is essential, improve our understanding, and build our expertise? We live in what many refer to as the information age. We are constantly bombarded by information in all directions and have the significant challenge of choosing which information to study and master.

Internal controls and auditing have been an integral part of economic activities since early times. They apply to government, nonprofit organizations, businesses and individuals. The cost of an absence or weakness in internal control and auditing can be likened to the cost of no education. Try going without either and the costs will be obvious. People engaged in governmental activities—employees, elected and appointed officials, members of oversight bodies such as Boards of Governors, those involved in monitoring and auditing operations, and numerous subcontractors, outsourcers and quasi-public organizations—would benefit from a shared understanding of control constructs and the nature of the audit process. The term “control environment” is widely understood to reflect the whole organization’s understanding, appreciation for and attention to effective internal control. Yet, basic understanding is a critical first step and is the focus of this book. It will help those adept in government accounting and auditing controls to explain how to achieve well-controlled operations and how audits combine with control structures to achieve efficient, effective operations. As more people care about their taxpayer dollars and services, as well as make investments, start businesses, participate in corporate governance, operate nonprofit entities, assume regulatory or enforcement responsibilities, and pursue a plethora of careers in professional services, a core understanding of these topics is indispensable.

I hope that a large cross section of people choose this “quick read” and find it to be a good investment.

Wanda A. Wallace
Williamsburg, Virginia
April 30, 2004

## Table of Contents

## Introduction

How many times do we read about large losses of money by individuals, partnerships, companies, charities and governmental entities? The reason for the loss is often due to a "lack of controls." Many times, the follow-on question is, "Where were the auditors?" Each of these common explanations for losses is at the heart of economic activity. Yet, what are internal controls? What is auditing? Can these questions be answered easily?

Around the globe, governments and professions are working to set aside technical jargon to communicate with wider groups of interested readers. Whether the issue involves political processes, law, medicine or sophisticated commercial transactions, the goal is the same—to plainly explain the five W's: Who, What, Where, When and Why? Moreover, how something works, clearly communicated, can provide the foundation on which expertise can be built.

I cannot imagine anyone effectively dealing with economic activity without a basic comprehension of internal control and auditing. It may be that some individuals innately understand both control and auditing, and many may even suggest that they are little more than common sense. Of course, not all are endowed with such automatic "instinct" and even those who are will benefit from adding some structure to their thought processes. My objective is to communicate in a straightforward, understandable manner.

*Upon reading this book, if you find yourself able to explain what is meant by internal control and auditing, that is a huge value added for any economic endeavor you pursue. More important, if you find yourself able to design, implement, evaluate, enhance and understand both controls and audits, then your knowledge foundation is in place. You are then free to pursue the technical jargon vocabulary so that you can speak in the "short-hand" of specialists. Of course, the succinct, easy-to-read publication can be a core resource in building foundational knowledge among those you work with and to whom you provide services. Wouldn't the stories of debacles decline if every employee and every citizen developed their own "control sense" and an informed consumer's perspective as to the actual audit process? Just as terrorism and crime have been fought by vigilant citizen awareness, economic failures could be averted through a common understanding of what controls should be present and how they are monitored by an audit process. That permits the individual to recognize risks, alert responsible parties, and improve controls, audits and economic outcomes.*

## An Analogy

Think back to your youth and the usual "pick-up" game of baseball, played on a make-shift diamond. You and your friends choose sides and begin to play. Consider what has already been presumed. Everyone understands what baseball is, the nature of the game, the core rules, and where each of the bases and home plate are located. These are all forms of internal control. Without a system that explains how many times a batter can swing and miss, what constitutes an out and how many outs occur before sides are changed, the game cannot proceed. Admittedly, depending on your age, the number of players, the shape of the field, and a number of other environmental factors you may at times adapt the rules in various ways. For example, the bases might be cars along a street, with different distances between bases. While such allowance may be made for the "pick-up" game, everyone seemingly understands that baseball at an official diamond would be a better-controlled game.

Then, remember the role of an umpire (referee). Often, you had no umpire as a kid, meaning arguments arose among players as to whether something was a strike, a home run, an out or simply a foul. As leagues were formed and games were counted toward official tournaments and pennants, the referee appeared. An umpire's role can be likened to that of an auditor. The notion is that this individual understands the game being audited, can compare the actual play to the rulebook and objectively calls the game—with no apparent or actual conflict of interest or bias.

To be an effective baseball player, core concepts, rules and structure must be understood. Skills have to be developed, and allowable behavior has to be distinguished from that which is disallowed. For example, the pitcher will try to strike out the batter but is not permitted to hit the batter with the ball without penalty—a walk to the base, for the batter. Runners can steal a base, but they risk the consequence of being tagged out on a fly ball. The details are seemingly endless, but the point is clear. To control a game of athletics, rules are in place, they are developed for anticipated events, and actions outside of the rules will have consequences—with efforts made to prevent and/or detect certain actions and outcomes. Moreover, auditing can be made an explicit element of the game to monitor the controls and evaluate the results in an objective, verifiable manner. In the best of worlds, three referees watching the same play would make the identical call. Of course, we understand that where the umpire stood might affect the angle of observation and result in a "bad call." The idea is introduced that the quality of the referee can be influenced by certain choices made (for example, where to stand), as well as by certain innate skills and capabilities—including the quality of his or her eyesight!

## Providing Structure to Control Theory

Continuing the baseball analogy, let us assume a major league baseball game in a stadium owned by a governmental entity. Remember, stadiums are built to attract business to the locale and provide entertainment for the citizenry. The better run each aspect of its operations, the less the cost and greater the benefits. Let's focus on a hot dog concession stand.

The basics of control theory explain that we should wish to separate authorization, custody and accounting. What this means for a hot dog stand is that one individual should authorize the purchase of hot dogs and the selling of products, while another should take custody of the hot dogs for sale, and a third should account for the number of hot dogs sold. The reason this approach results in control over the concession stand is that no one of these individuals could cause a loss to the concession stand without being either prevented from doing so or being detected after causing the loss. The core notion of this separation of duties is that collusion is essential for an undetected loss to arise. Collusion means that rather than respecting their assigned duties and responsibilities, two or more individuals cooperate with one another in order to "beat" the designed controls.

This is when the imagination comes into play. We need to ask, what are the types of things that any one of three individuals might do that could cause loss to a hot dog stand? Could these activities go unprevented or undetected if the assigned duties were performed without collusion? Control theory and experience suggests that a person who abuses a system of controls is more likely to act alone than to collude with another. One reason why collusion is not desired is the "no honor among thieves" problem and the increased chance of somebody revealing the wrongful activity. In other words, separation of duties has big benefits due to the fact that collusion would be necessary to "beat" the system.

Consider the potential sources of loss to a hot dog stand. The obvious possibility is to bring one's own hot dogs, of lesser quality, and sell them for similar price, and pocket the difference. However, for this to occur, one would need collusion across the participants. While the authorizer could indeed order the lesserpriced hot dogs, for this not to be detected would presume it would not be noticed by the custody person who handles the hot dogs or by the accounting person who records the costs associated with the purchase.

In similar manner, assume the hot dog salesman chose to eat some of the hot dogs or give them away. Then the accounting process, which would track both how many hot dogs had been purchased and how many sales dollars were collected, would note the "mismatch." In other words, if 100 hot dogs are purchased, 20 are returned, and the cash collected relates to 70 hot dogs, then something is missing. Either 10 hot dogs (30-20) were eaten, stolen or given away, or the cash collected was not turned into the till. The other possibility is that the correct price was not charged per sale, causing a shortfall in total receipts.

If the accountant decided to understate revenue, because he or she knew that all recorded revenue was to be shared with the ballpark at which the concession stand was operated, then the question must be asked of how he or she would actually benefit from such an action. In order to remove assets from the concession stand, some custody would have to exist or some authorization power. Without either of those capabilities, the books alone achieve nothing. If the authorizer knew the purchases of hot dogs and the price for selling, if the salesman in custody of the product knew the level of activity, then an accounting report that mismatched the authorization and operating activities would be detected and questioned by the other two individuals. Even the hypothetical goal of understating revenue would require collusion to proceed undetected.

If you are able to understand the control rudiments for a simple business like a hot dog stand, you can map these basics to far more complex settings. The same core ideas permeate the operations of global conglomerates.

## Hone Your Observational Skills

Next time you walk into a government office to pay your water bill or car tax, or into any store, such as a food coop, watch carefully how duties have been assigned and ask yourself whether the individuals involved appear to understand the basic concept of segregation of duties. For example, in a retail operation, you may notice that the store is organized to have a manager, a cashier and a bookkeeper. The manager authorizes reorder of inventory, hires the employees and acts as a manager of day-to-day operations. The cashier handles the cash and is expected to ring up the sale on the cash register. The bookkeeper is provided the tape within the cash register that provides a record of the day's transactions. If the manager and the accountant do not handle the cash register and if the day's deposit of the cash register receipts at the bank is made by the cashier, then a check and balance system is in place. The cashier knows the internal tape will create an expectation for the accountant as to the total day's deposits. The accountant knows that a bank balance can be confirmed after the deposit to reconcile with the recorded sales. The manager understands how the reordering of goods relates to the sales recorded to determine whether the accounting results make sense.

Obviously, in the real world, the above description can become "tainted." Practice may differ from concept and design. For example, when the cashier takes a break or goes to lunch, the manager may step into the cashier's job. Alternatively, the accountant might be asked to take on duties that ought to be separated. The problem with such temporary lapses in segregated duties is that they create an opportunity for error or abuse going unprevented or undetected. Such temporary assignments undermine the entire idea of control system design. They remove the necessity of collusion, because by allowing one individual to both authorize and have custody, or both have custody and accounting, creates the opportunity for such problems as substitution of unintended goods for properly authorized merchandise or the removal of assets without evidence.

For example, the manager could authorize the purchase of goods for personal use and given custody, merely remove such assets. Granted, the accountant would be tracking the total purchases and might notice that inventory balances were building more than usual or that certain types of inventories were evidenced that did not appear to be the usual items sold. However, if inventory were not in the custody of the manager, then authorizing purchases for personal use would achieve little. The manager would have to collude with the person in charge of custody of the inventory in order to remove it after receipt at the premises.

To be specific as to the potential consequences of having the accountant substitute for the cashier, remember that the accountant will take possession of the cash register 's internal tape. If that accountant also handles the cash, it is possible for cash to be removed with an adjustment of the accounting record accordingly, in such a manner that it will not be evident that cash has been removed. Admittedly, the manager who is aware of the total level of operations may eventually detect what appears to be a shortfall in revenue or a decrease in the margin available from which to replenish operations. However, a good control system would have meant timely detection.The accountant, not able to handle the cash, would be expected to reveal quickly that the deposits failed to reconcile with the accounting record internal to the cash register.

## Tension Exists Between Operating Efficiency and Control

Of course, the tension between operating efficiency and effectiveness and control objectives always involves some risks. In other words, rather than hire a fourth employee, a retail operation may accept the additional risk exposure of having the manager step in for the cashier during breaks or lunch. However, that same retailer need not destroy the segregation of duties by also having the accountant take custody of the cash. If the people involved with the retail operation understand the idea of internal control, thought will be given to what risks arise under which circumstances and what will be the possible consequences.

A common complaint among those involved in operations is that internal controls are clumsy, bureaucratic, impractical and cost more than they benefit. It is true that poorly designed controls may be all of these and worse. However, control mechanisms that are well-developed and understood can be reasonably efficient, practical and yield far more benefits than they cost. A key facet of a well-designed control structure is a work force education on the benefits of controls, especially since the perceived costs of the controls are evident. Whenever an employee has to stay an extra hour because something fails to reconcile, he or she sees the related control responsibility as an undue burden. Similar sentiments arise if an employee finds a discrepancy in the inventory received relative to that ordered and has responsibility for sorting out the reason why, or is prevented from obtaining merchandise for sale without first gaining authorization from a designated individual. However, imagine if the cash drawer were consistently unreconcilable to the recorded sales, or if vendors shorted inventory shipments regularly, and merchandise was double ordered and could not be sold before the goods expired or that inventory's selling season was past. The likelihood of economic success would be dramatically reduced. Then, will operations personnel realize, at the end of the day, that the loss of their job was precisely due to inattention to a control structure that facilitated both efficient and effective operations? The best approach is to educate operating personnel beginning the first day of employment that controls are an integral facet of their operating responsibilities. Each employee should be encouraged to suggest means by which operations and controls can be integrated seamlessly to achieve both sets of objectives, in concert. If a risk exposure exists that could be better controlled, an employee who realizes that control structures enhance the overall success of the entity's operations is more likely to help in identifying and suggesting how such a risk might be addressed.

## Trust Alone is Ill-Advised

The manager may be viewed as automatically having authorization, custody and accounting-associated responsibilities. Hence, substitution of the manager for either custody or accounting may not be perceived as particularly threatening. Such an attitude ignores the basic idea of control and the realization that people do make mistakes and at times people may do the wrong thing, intentionally. In other words, anyone who purposefully removes the three-way checks and balances possible through separation of duties should understand that there is no prevention or detection system in place. If a manager is permitted to authorize the orders, control the assets and account for their handling, without oversight or separate monitoring by another, then one has placed total trust in that person. Total trust means that you believe the person cannot and will not make a mistake, has no incentive to act in any way that is inconsistent with the best interests of the owners of the establishment, and cannot be corrupted to act in any improper manner. Total trust is a luxury that can have extremely high cost and is virtually impossible to justify as a way of dealing in an economic context. The reason the choice is not justifiable is because it is so easy to create checks and balances.

## Consider the One-Operator Entity

Often governmental entities have satellite operations such as a fish and wildlife refuge setting, in which only one person is available to perform all necessary economic activity. Post offices in small towns are similar. In such a setting, a one-operator entity where a manager also is the cashier still can be organized to provide the headquarters or central office with an accounting of the operation that is separated from the manager. This can be achieved by having bank statements sent directly to central office. This facilitates a clear depiction of total checks written, to whom, and for what amounts, as well as total deposits made in what amounts and on which dates. The central office can evaluate the reasonableness of inventory or supply purchases, cash receipts collected and overall performance. The central office may even assume authorization responsibilities, such as providing an approved vendor listing from which all purchases are to be made. If the manager knows these controls are in place, they act as a deterrent to wrongful behavior. Moreover, the manager ought to be relieved to know that someone else is helping him or her exercise quality control over operations. If a large mistake were made overpaying a vendor, not paying a bill or failing to make a timely deposit, the owner would likely notice and raise questions in time for potential disaster to be averted. Such control is conducive to more responsible behavior and a well-run economic entity.

## Checks and Balances with Multiple Advantages

Another check and balance that might be contemplated, even in the presence of a three-way segregation of duties, is to install a video camera at the retail type of operation, such as a post office or a government office designated to issue licenses or collect fines and payments for parking tickets or traffic violations. Side benefits of such an investment include safety, insurance and ease of identification of customers. However, another benefit is that the camera can capture in a time-coded manner the sequence of actions taken by an employee and whether those actions are in concert with the duties assigned. For example, a cashier may be given the following instructions. Take the money from a customer. Lay it on top of the cash register. Ring up the sale. Give the change to the customer along with the receipt. Then, upon the customer's acknowledgment of the satisfactory completion of the transaction, place the proceeds in the cash register and close the cash drawer. The reasons for these steps are basic. By laying the cash on the register, disputes that may arise as to whether a $20 or $50 bill was handed to the cashier can be avoided. By ringing up the sale, the cash register's internal record reflects the transaction. By giving the receipt to the customer, that individual can help ensure the correct amount was entered and appropriate change provided.

The point, of course, is that everyone recognizes that cashiers can make mistakes, intentionally abuse their position, be taken advantage of by a customer or create ill will with a customer unintentionally. Specifically, the cashier could think a $20 bill was handed when a $50 bill was given, the cashier may pocket money and not ring up a sale, or may pocket some money and ring up a sale for less than the actual value received. A cashier may use the cash register incorrectly and give the wrong change. A customer may be mistaken in the bill given up to the cashier, or the customer could be a professional "quick change" artist who flashed a $50 bill but handed a $20 bill when paying for the merchandise. Most of these potential problems or "bad acts" are explicitly deterred by a well-established protocol backed up by the video record of what has transpired.

### Two-Sided Benefits

A cashier who is responsible for the handling of sales and associated assets should be relieved to know that a record exists of actual behavior to disprove allegations of bad acts. The tapes can be checked to determine whether the prescribed policies are being followed. If a question arises from a customer and for some reason time has passed since that transaction, the time on the customer's receipt (or the internal record of the register) would make finding that frame of the video a simple matter. The denomination of the bills placed on the top of the register can likely be seen and the matter can be resolved. Similarly, if someone has passed a bad check and law enforcement has been asked to pursue the matter, the picture of the customer passing the check can be strong evidence and useful to the recovery process.

The very presence of surveillance can deter shoplifters, and insurers appreciate the positive control effects of such security measures. The point is that a win/win occurs with respect to overall control and risk reduction. Natural problems that can arise day-to-day within an individual's assigned responsibilities can be addressed.

Imagine if you thought you were the only one granted access to the cash register and were expected to be responsible for having a balanced register. Then you found out someone else had a key, knew the combination, or somehow gained access and may have removed the cash or altered an internal record in the register. Your willingness to be held responsible for the consequences would decrease and you would ask that you be responsible for only that which you control. It is human nature to be reluctant to be evaluated on uncontrollable events. If others share your cash register, then a means for sorting out who is the cause of a shortfall is enhanced by video surveillance, as well as built-in identifiers as to who rings up which transaction associated with what merchandise.

Now we begin to understand the attractiveness of the bar code cash registers and the wide use of passwords and similar identifiers to show who is using a cash register during a particular period of time. Periodic emptying of the cash register, particularly at the time of shift changes or breaks is also helpful. Through enhancement of internal automated record keeping, the accounting function can clarify the relation per cashier between inventory exchanged and cash received. Rather than holding all cashiers responsible for a shortfall at day's end on register No. 10, the time of day that the shortfall was experienced often can be isolated, as can the operator of the machine.

Yet, for those accustomed to thinking about what can go wrong, you know that passwords can be discovered by others and used to intentionally abuse a situation. The way the control can be enhanced is to first make certain that individuals realize they are held responsible for their password use, and hence it is imperative that they not reveal their password to anyone. Periodic change in passwords is another deterrent to unauthorized use or access. However, another obvious advantage to videos reappears. If the machine indicates the cash register was operated at noon by cashier No. 101 and the video shows cashier No. 132, then it becomes apparent that cashier No. 132 must have somehow gained access to the password of the first cashier. One possibility is that cashier No. 101 did not properly log off, and the result is a blur of the responsibility of these two cashiers for one another's activities. Now we enter the world of incentives. Each cashier understands that a separate check and balance is tracking whether a cash register is over or under its expected balance. This creates an incentive for each individual to protect his or her password, to properly log on and log off, and to otherwise contribute to a control system capable of being fair in evaluating that cashier's personal performance. Word that management has a practice of firing employees who have too many inaccuracies in either direction further motivates due care.

Suddenly, we have an important revelation: controls are a two-way street. They are incredibly useful to both the entity and the manager/employee. They protect each and they assist them in being more effective and efficient in both performance and evaluation of economic activities. In the absence of a control system, as disputes arise, issues of what actually happened often are unanswerable because a framework was not established that permitted insight into the who, what, where, when, why and how of day-to-day economic activity. Honest, hard-working employees should demand controls. Assume you are one of five employees in an area of operations and one of the five is a thief. You want the employer to identify the real thief rather than wrongly implicate all five employees. A lack of controls is undesirable for both employee and employer.