FINANCIAL REFORM BEGINS AT HOME
(PRACTICE ORIENTED)

Thomas C. Redman, Ph.D.
Navesink Consulting Group
tomredman@dataqualitysolutions.com

Abstract: Recent scandals have called our attention to an issue, financial reporting, that we all know, privately at least, is long overdue. The issue goes far beyond fraud, as more and more financial statements require correction. Indeed, many, if not all, financial operations within corporations and government both cost far too much and do not produce the desired result. Reforms led by Congress, Attorneys General, auditing and accounting groups, and others will, over time, change the financial landscape.

But real financial reform begins at home. Corporations and government agencies have the opportunity to make changes that will simultaneously improve trustworthiness, profitability, and financial decision-making. Doing so will not be easy. In this paper we propose five tenets to guide an organization’s reform effort. These tenets call for a focus on customers, proper management accountability, measurement and continuous improvement, end-to-end management of financial processes, and leadership from the very top.

Key Words: Data Quality, Sarbanes-Oxley, Financial Reform, Corporate Governance

INTRODUCTION AND SUMMARY

Perhaps Enron, WorldCom, Tyco, Andersen and every company whose accounting practices have been questioned recently have done us all a favor. Their actions have called our attention to an issue, financial reporting, that we all know, privately at least, is long overdue. Between 1997 and 1999, long before the Enron meltdown, at least 364 companies restated financial statements [6]. And we are just as aware that the issue is not simply financial reporting, but all financial operations within corporations and government.

Congress, the SEC, rating agencies, and States Attorneys General have begun to take action. These actions have already had some impact. For example, the Sarbanes-Oxley Act [9] has forced Chief Executives to verify the accuracy of financial statements. And investment banks, in a settlement with the SEC, the New York State Attorney General, the New York Stock Exchange, and NASD, have agreed to separate banking and research, among other changes. Finally, accounting, auditing, and other groups are proposing technical changes [12], [14]. These and further actions will, over time, change the financial landscape.

But real financial reform begins at home. Corporations and government agencies have the opportunity to make changes that will simultaneously improve trustworthiness, profitability, and financial decision-making. While recent scandals are essentially about deceit, they are but the tip of the “financial issues iceberg.” Consider the following:

- Financial reporting: Even when there is no suggestion of wrongdoing, far too many financial statements must be re-stated because errors are found. More subtly perhaps, shareholders, investors, and others can’t understand financial statements anyway. Both breed mistrust. And mistrust envelopes all, even the “squeaky clean.” This issue shows no sign of abating more than
a full year after the Enron meltdown and is a surely a contributing factor to delayed economic recovery.

- Monetary transactions are erred: One example is customer billing. A small but significant fraction of bills are incorrect. Customers are angered when they are over-billed and demand satisfaction. There is no such feedback loop for under-billing and the organization loses revenue.
- Planning: While dozens (perhaps hundreds) of reports are produced, management still does not have the quality information it needs to plan and execute strategy. Executives must either use poor information to make decisions or run things “by the seat of their pants.”
- Budgeting: Revenue and expense budgets are routinely manipulated. The “annual budget cycle” is detested by all who participate.
- High costs: Financial operations are time consuming and costly. Many of the dozens of internal reports noted above are never used by anyone.

Responsibility for addressing these issues clearly lies within each organization. Importantly, financial operations are quite complex. They both involve and impact every individual and department (most of whom are not part of the Finance department), they cross organizational boundaries, and involve computer systems and applications that don’t even talk to each other. And since “money” is always in short supply, internal politics play a large role. So reform will not be easy.

But financial reform is possible and this essay provides guidance for the executive wishing to lead the effort within his/her organization. The next sections explore five “tenets of financial reform” and make specific recommendations for implementing them. The first tenet orients financial reform in the direction of “customers,” those who use or are otherwise impacted by financial operations. The second clarifies management accountabilities and the third explains the roles of measurement and continuous improvement. The fourth tenet proposes “process” as an organizing paradigm.

Almost everyone will accept these four tenets as sound management practice. Many, if not most, organizations can point to isolated examples where they have applied them in one way or another. We cite examples in each section. The example companies have made consistent improvements, lowered costs, and provided more trusted information to their customers.

But an isolated example or two does not make for reform. To completely reform financial operations, organizations will need to apply these tenets completely and consistently. Indeed, taken together, these tenets require that organizations completely rethink financial operations and statements. Doing so is an enormous challenge. Organizations will find that internal politics, inertia, and fear of change (the so-called “soft” issues) make it difficult to do so. So the fifth tenet is to “drive reform from the top.” Senior leadership will make reform more certain, faster, and less costly.

**Financial Quality Is Determined by “Customers”**

To begin, we will narrow our focus to publicly available financial statements, such as Form10-Ks. The first question: “What exactly is a high-quality financial statement?” Many might argue that a high-quality financial statement is “one that conforms to GAAP standards.” But modern data quality management provides a better definition:

“A high-quality financial statement is one that is fit for its intended uses by customers in operations, decision-making, and planning.”

Note that in this definition quality is in the eye of the “customer,” the person using the financial statement. No one who accepts this definition can hide behind the statement that “we followed all the
rules” if decision-makers, employees, and investors are misled. Meeting GAAP standards is of course necessary, but it is not sufficient.

There are many customers for financial statements. Shareholders use them to evaluate management’s performance, investors (i.e., the market) use them to make investment decisions, analysts use them to evaluate a company’s future prospects and compare the company with others in its industry, the SEC uses them to ensure that companies are following the law, and so forth.

Since customers use them in different ways, they have different needs of financial statements. Some customers require only high-level summaries, others want rich detail. Some customers concentrate on a few “facts” only, others want a more complete picture. Importantly, a company’s management is a customer of its own financial statements, using them both to run the company and to present it in its most favorable light. These needs are important—an earnings report that misses expectations by just a few pennies per share can devastate the share price.

The concept of a “customer” for a financial statement is at once threatening but compelling, daunting yet powerful. It is threatening because the concept has not been applied for financial statements as rigorously as it has for marketing, sales, and product development. Applying it will require finance departments to think and act differently. They will have to reorient their thinking. No longer will technical excellence suffice.

The concept of customer is compelling due to its utter simplicity. Though companies work with customers in different ways, they all recognize the importance of customers. And understanding their needs is critical to developing products and services that are sold to create revenue. Why not extend the concept to financial statements?

The concept of customer is daunting because acting on it involves a lot of hard work and hard choices. For, while customers have a few common needs, such as “accurate statements” and “protection from unscrupulous companies,” different customers truly do have vastly different needs. And, unfortunately, there is no silver bullet for understanding and satisfying all needs (see the sidebar “A Primer on Customer Needs”). A company must seek out customers of its financial statements and work closely with them to determine:

- Who uses financial statements,
- What they use them for,
- The degree to which current statements meet their needs, and
- The most important “gaps” in current statements.

Each customer is not entitled to his or her own custom financial statement, but the most important customer groups are. So the next steps are even more difficult. For, as a practical matter, there may be far too many customers and divergent, even contradictory, customer needs. And no one financial statement can possibly meet all the disparate needs. To complete the customer needs analysis, the company must decide who its most important customers are and which needs it will meet. It must then design and produce different financial statements to meet the needs of different customer groups. Importantly, each financial statement must clearly state its intended customers and uses.

The concept of customer is powerful because it helps align the work and adds purpose and meaning to financial reporting. Customers provide an important counterweight to management’s desire to loosely
interpret the rules. When customers are considered, the question becomes, “What will be best for shareholders?” not, “What will make us look best?”

Companies may argue that they cannot bear the added burden and costs of producing multiple statements. But this argument does not hold up under scrutiny because they produce multiple reports, for internal purposes, every day. Managers in every department, at every level always want to know “How am I doing?” “How am I doing compared to budget?” “How is this quarter compared to last?” “Has the financial picture changed since we implemented the new marketing program?” “What is the impact of our latest production project?”

This discussion underscores an important point. Finance departments are perfectly capable of meeting customers’ needs for financial reports. They simply must recognize that the CEO is not their only customer. When they do, the results are good. They most often do so with more mundane statements. For example, companies re-design invoices to make them easier to understand. Merrill Lynch has changed its rating system for securities. The previous system featured codes like “3/1.” The new simpler codes will be “Buy,” “Hold,” and “Sell.”[5]. A few companies beefed up and simplified their annual reports in 2002 to give more details and make the reports easier to read.[4].

---

3 See [3] for a discussion of the lack of customer focus in company-auditor relationships.

While the discussion above has focused on financial reporting, the notion of customer and the definition of quality that springs from it apply to all financial operations.

“A high-quality financial operation is one that produces results fit for its intended uses by customers in operations, decision-making, and planning.”

All financial operations have many customers. One obvious customer of a billing and collections operation is the person (or company) being billed. It requires an accurate, up-to-date, easy-to-understand statement of charges and payments. It is perfectly appropriate to view an invoice as a financial statement, making the comments above directly relevant. There are other customers as well. The customer service department, which responds to customer inquiries, is a second customer. “Management,” imposing a tight budget, is a third customer. The department that manages cash flow, wishing to keep receivables low, is a fourth. And so on.

Note that the customer concept applies in both directions. Just as financial reporting has customers, it too is a customer of many others. It receives revenue data from the billing and collection operation, expense data from accounts payable, and so forth. Indeed, all other financial operations, billing and collection, payments, budgeting, “feed” financial reporting. Similarly the billing and collection operation is the customer of many others. It receives pricing data from marketing, customer data from sales, tax data from government agencies, and so forth.

The “customer-supplier model” (Figure 1) summarizes the flow of financial data and information from supplier, through a financial operation, to customers, from the point of view of any operation.

To summarize, the first tenet of financial quality is that quality is determined by the customer. Those who are responsible for financial operations simply must identify their customers and their needs. They must judge “how they’re doing” by how well they meet customer needs. They must act like customers and specify their requirements of those who provide them financial data. These points are especially important for those who produce financial statements of any kind.
HOLD SOURCES ACCOUNTABLE FOR QUALITY
The second tenet of financial quality management is that people and departments that create complete financial transactions, make financial decisions, and in doing so create financial data must be accountable for the quality of those transactions, decisions, and data. In short, quality must be assured at the source, not downstream.

Like the tenet of customer focus, it is commonly violated. The violations occur countless times, many of them subtle, in every organization:
- It happens when administrative assistants correct expense reports for their bosses.
- It happens when staffers correct internal reports, prepared by others, in response to questions from the Senior Team.
- It happens when customer service representatives correct billing errors in response to customer complaints.
- It happens when the billing department seeks clarification on a customer order from the Shipping Department.
- It happens when Accounts Payable vets vendor invoices and makes corrections for the vendor.
- It happens when an auditor attests to the quality of a financial statement (see the sidebar “Pity the Poor Auditor’s Role in Quality”).

In many respects, completing such tasks is “just part of the job.” And they can even be justified.

No administrative assistant will tell the boss to correct her own expense report. Nor will any staffer tell an executive, “You’ll have to wait a week for that report you wanted until the XYZ Department fixes up its report.”

These seemingly innocent decisions mean that the simple flowchart for each financial operation looks like Figure 2. The shaded box is value-added work; the non-shaded box is non-value-added.
work. Companies spend an inordinate amount of time on the non-value-added work. Indeed the value-added work is comparatively easy when all the inputs are current and correct. The greatest expense is incurred reconciling errors received from upstream. Even in the best case, no errors are found, but the time and effort has been expended in checking and re-checking. Finally, a more subtle problem is that not all errors are found. That leads to even greater expense farther downstream. As an example, an error by the Shipping Department may not be found by Billing and Collections. When it is found by the customer, the cost to correct this error is even greater.

![Diagram](image)

**Figure 2:** In this figure, the middle triangle of Figure 1 is depicted as two steps. Frequently, an individual or department must check and correct the input data it receives from other departments before completing its (value-added) work.

Companies simply must hold those who conduct financial transactions responsible for their quality. Not only are those who try to pass responsibility downstream guilty of violating this tenet, so too are those who accept it.

Organizations can act on this tenet in many ways. First, financial statements should bear the name of the person responsible for the statement and he/she should attest to its quality. Second, they can define “financial data supplier programs” to ensure the quality of financial data received from outside. AT&T applied this thinking to charges it received from local phone companies for access to customers’ lines, saving itself tens of millions of dollars per year in the process [8]. Each department can use supplier management with other departments within the organization. Motorola did so with its business units so it could “close the books” faster and more accurately [2]. Finally, they can drive these efforts with policy and by creating a culture where bad financial data are not tolerated. One large company’s policy is informally stated as

> “Don’t accept bad data from others. And don’t pass bad data on to the next guy.”

**MEASURE AND IMPROVE: FOCUS ON ACCURACY AND SPEED**

The third tenet of financial reform is “publish quality results and demand continuous improvement.” No financial operation is perfect and improvement will take time. Improvement efforts should focus on the items most important to customers and we have noted that they have a wide array of needs. But two needs stand out. All customers want it “better and faster” (i.e., accuracy and cycle time) and they must demand that all financial operations be measured and improve. These demands are especially compelling for financial statements and should include:

- Financial statements must clearly specify the accuracy of revenue, expense, earnings, asset, liability, and any other important “facts.”
- Improvements must be made so that financial reports are made increasingly accurate.
- Simultaneously, improvements must be made so that financial statements are released sooner and sooner.

Importantly, the Sarbanes-Oxley Act demands that CEOs attest that financial statements contain “no untrue statements of material fact.” This clause almost requires that accuracy be measured. Consider a statement such as “Receivables = $10,000,000.” Is the statement:
Correct to the penny?
Correct to the dollar?
Correct within one hundred dollars?
Correct within ten thousand dollars?
Correct within a million dollars?

Without a measure of accuracy, a CEO has no basis for his/her attestation. Conversely, the accuracy measures proposed here allow him/her to do so with confidence.

The first step is measuring and publishing the accuracy associated with important data in the financial statement. Doing so will be relatively easy for some financial data and more difficult for others. And customers should expect some data (e.g., “cash”) to be more accurate than others. And owing to their newness, it will take customers time to learn to interpret accuracy measurements.

At the same time, organizations should demand rapid improvements. One way to set targets for implementing the improvements recommendations is based on the notion of halving the “inaccuracy” and reporting interval time requirements every year or two for the next five to ten years. For example, a financial measure on a Form 10-K that is now accurate within 2% and is made available 90 days after the end of the reporting period would improve according to the schedule of Table 1.

<table>
<thead>
<tr>
<th>Accuracy (all figures within stated %)</th>
<th>Reporting interval (days from end of reporting period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>90</td>
</tr>
<tr>
<td>1%</td>
<td>45</td>
</tr>
<tr>
<td>0.50%</td>
<td>23</td>
</tr>
<tr>
<td>0.25%</td>
<td>12</td>
</tr>
<tr>
<td>0.13%</td>
<td>6</td>
</tr>
<tr>
<td>0.06%</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 1: The schedule for improving accuracy and speed is based on "halving" the error rate and reporting interval on a continuous basis.

Measurement and improvement is required for all financial operations, not simply financial reporting. The ancient management dictum that “you can’t manage what you don’t measure” holds for financial operations. A fascinating phenomenon often occurs when an organization starts to measure something new. Results improve. To quote William Piatt, Chief Information Officer of the GSA [7]:

“We began measuring data accuracy in July 1999 and by September had already seen a reduction in rate of omissions of more than 95%. In October we initiated more sophisticated measurements of our data accuracy and our results have continued to improve.”

Further on measurement. Management is an important customer for financial operations and they almost always demand lower cost. So while one set of customers demands “better and faster,” a second set is demanding “cheaper” as well. Some may argue that quality, speed, and low cost are incompatible. But this argument is simply not true. In fact, just the opposite is true and Figure 2 illustrates why. The non-value-adding steps of any financial operation add inordinate time and expense (informal estimates are in
the 50% range). And of course they are only necessary because the quality of financial data coming into the operation is low. Said differently (see Figure 3), improving the quality of input data:

- reduces cost because less effort is spent finding and fixing errors.
- speeds the operation up for the same reason.
- improves quality by allowing the department to focus on its principle job.

Further, improving the quality of one operation improves the quality of input to the next operation, lowering its cost and increasing its speed. Creating the “virtuous cycles” of Figure 3 is the key to continual improvements in speed and accuracy, while simultaneously lowering cost.

**Figure 3:** The virtuous cycle of financial quality improvement yields higher quality, lower cost, and lower cycle time.

Continuous improvement has been the norm in the American manufacturing sector for years now. It works on financial operations as well. The AT&T and Motorola examples each feature lower costs, faster cycle time, and improved quality.

**THE WATCHWORD IS “PROCESS”**

The reader may note that we have used the term “operation” for the day-to-day work conducted by finance people. The fourth tenet of financial reform is “process.” Essentially a process is “a set of interrelated work activities, usually characterized by specific inputs and repeated value-added steps, which produce a specific set of outputs.” (Unfortunately perhaps) the term applies at all levels; from the way an individual does his/her job (I call this “little-p process”), the ways departments work (“middle-p process”), to the major cross-functional value chains by which the entire organization produces value (Big-P Process).

The distinctions between a “process” and an “operation” can be somewhat subtle, particularly with little-p process. But the terms must not be used interchangeably. The most important differences involve focus: “process” focuses on inter-relationships, between the process and its suppliers, between the steps of the...
process, between the process and its customers. “Operations” focuses internally on how the steps or functions are conducted. Process efficiencies are obtained by making the pieces fit together, operational efficiencies by conducting the individual steps more efficiently.

It is not surprising that the notion of “Process” becomes more powerful as it extends across organizational boundaries. Some of the reasons follow:

- It forces departments to realize that “the boss” is not the only customer.
- The process owner is indeed responsible for end-to-end quality.
- Managers of end-to-end processes are less tolerant of the non-value-added steps of Figure 2 than are the departmental managers of those steps (after all, the departmental manager has a personal interest in his or her span of control).
- Many of the best “opportunities for improvement” lie on the interfaces between departmental boundaries. By improving these interfaces, the end-to-end process can be made more effective and efficient. And these improvements are often less threatening than those within a department.

To implement process management, organizations must define where the process begins and ends. It then implements the first three tenets of financial reform. First, it vests management accountability for the process in a process owner. It then identifies customers and their needs. It communicates clear requirements to suppliers. And the process owner insures continuous improvement. It is easy to see why process is an important organizing paradigm for financial reform.

“Process” has permeated the financial landscape slowly compared to other areas of the business. Process management was a key ingredient in both the AT&T financial assurance and Motorola book closing examples cited earlier. Similarly, “process” is a key category of the Malcolm Baldrige Award. And at least six Service Category winners have applied the concept to financial operations. They boast results similar to those cited throughout this paper [13]. As these companies illustrate, it is important that the tendrils of financial processes reach deeply into the organization and, where appropriate, beyond organizational boundaries. For every financial activity, no matter how large or small, whether conducted by the finance department or not, impacts financial quality.

To summarize, organizations must manage their financial processes. They are well advised to define fewer, more comprehensive processes. And these processes must reach deeply into the organization.

LEADERSHIP

While these four tenets are compelling and there are plenty of isolated examples where they are followed, reform will not be easy. Organizations have been conducting their financial operations for too long to change overnight. Each manager can implement these tenets within the span of his or her influence. There will be hard technical issues aplenty in doing so. But the soft issues (politics, inertia, fear) will prove the most difficult. Therefore reform will be fastest and most certain when it is led from the top. This section describes a few of the more challenging issues that senior executives will face. Unfortunately there are no simple prescriptions for resolving them, other than patiently and diligently insisting that these tenets be followed. We should note that simply meeting the letter and spirit of the Sarbanes-Oxley Act does not, in and of itself, completely satisfy these tenets (see box entitled “How Does Sarbanes-Oxley Stack Up?”).

While the list of soft issues is endless, four stand out as both universal and insidious. The following paragraphs summarize them. Perhaps the most challenging issue will be misplaced management accountability for financial reports and processes. Why is it that the auditor, not the owner of the
Many factors contribute. Some of the answer lies in the press of day-to-day work. People and departments have to get their work done and, on any given day, it is just too hard to work upstream. Further it is they, not the people upstream, whose jobs are on the line.

A second issue will be fear of measurement. Quite simply, many (even most) people (and departments) do not like to be measured. That is only natural. For measurements may reveal problems—the data aren’t accurate, the process takes too long, productivity may be low, and so forth.

This fear is seldom expressed directly. Instead managers say things like “I’ve been doing this job for twenty years and let me tell you, it simply can’t be improved. Besides, I can’t spare staff to make any measurements.”

To address this fear, leaders must focus attention on the rate of improvement, not the current level of performance.

A third issue involves confusion about the role of computer systems. People may say, “I know this process doesn’t work very well, but it will improve when we get the new Turbo-Financial System installed.” Such claims almost never turn out to be true. Generations of quality gurus have advised against automating poorly-performing processes. To quote Dr. W. Edwards Deming, “They simply produce junk faster.” What was true on the factory floor is even more true for data and information. Witness the many failures in implementing enterprise systems, data warehouses, and CRM.

Note that we are not claiming that computer systems are not of value. They are enormously valuable when used correctly, specifically to automate well-defined and managed processes.

The fourth issue is a reluctance to engage customers and suppliers. Finance departments are neat and self-contained. Reaching out to customers and suppliers is

---

**How Does Sarbanes-Oxley Stack Up Against These Tenets?**

The Sarbanes-Oxley Act is the most far-reaching of the proposed reforms to date. How does it stack up against our five tenets of financial reform?

**Customer Focus:** Congress has clearly heard specific complaints of some customers. Provisions that require insider trades to be reported more quickly, the prohibition of loans to executives, provisions regarding material adjustments reflected by auditors, and whistle-blower protections are good examples. But the Act does not require corporations (or the SEC for that matter) to seek out customer input on a regular basis.

**Management Accountability:** Sarbanes-Oxley does not make clear who is responsible for financial processes or how these processes fit together.

**Measurement and Improvement:** As noted in the text, Sarbanes-Oxley does not make clear what an untrue statement is. It requires neither measurement of accuracy nor continuous improvement.

**Process Management:** Sarbanes-Oxley is silent on this subject.

**Leadership:** Sarbanes-Oxley does require executives to certify financial statements and to follow a code of ethics. It increases criminal penalties for those who violate its provisions. At the same time, we do not believe that real leadership can be legislated. It is unfair to judge Sarbanes-Oxley on this score.

Overall then, Sarbanes-Oxley provides some steps in the right direction. It is a good piece of legislation. But it does not go far enough.
hard work. Customers can’t precisely articulate what they want. And why bother to talk to suppliers, “They won’t listen to us anyway.”

These soft issues bring us full circle to financial reporting. The organization and its people take their cues from what senior management does, not just what it says. Starting the process of reform with financial statements, under the direct leadership from the top will serve as a beacon for the rest of the organization.

**FINAL REMARKS**

The main treatise of this call for reform is that financial reform is the direct responsibility of each organization. Others will certainly push for a variety of reforms, but the needed transformation is within each organization’s direct control. We have proposed five tenets to guide the transformation. These are:

1. The quality of any financial report or operation is determined by its customers.
2. Management accountability for financial processes, decisions, and reports must rest with those who own the processes, make the decisions, and produce the reports.
3. Measure and publish the accuracy, cycle time, and cost of each financial operation and report. Demand continuous improvement.
4. Manage end-to-end financial operations as processes.
5. The changes needed to implement these tenets must be led from the top.

An organization can of course implement them one-at-a-time, but they are mutually reinforcing. So they are best implemented together.

Further, doing so is of the greatest possible urgency. Organizations cannot survive, never mind thrive, if they are not trusted. And, given events of the past year, the public has every reason to withhold its trust until it sees solid evidence that financial statements are of high quality and improving.

**REFERENCES**