

# MAINTAINING RELEVANCE IN THE DIGITAL AGE





**In the face of technological change, the management accounting profession needs to refocus on providing actionable cost information to support internal decision making—or risk becoming obsolete.**

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The accounting profession, like many others, faces challenges as disruptive technologies change its practices at an ever increasing rate. Technologies such as machine learning and robotic process automation are already eliminating the need for many entry-level positions, while these and other digital tools promise to soon make many higher-level positions redundant.

This calls into question the future role of the management accountant. A common line of thought is that by acquiring competencies in areas such as predictive analytics and by exploiting Big Data, management accountants can achieve the role of “business partner,” assisting in and supporting senior management in strategy formulation, validation, and implementation. Yet others—including those in operations, HR, and marketing—can make similar claims about the ability to offer strategic insights by exploiting the new sources of data available. So what added value do we as management accountants bring to the table? It’s that only management accountants can combine a holistic view of operations, mastery of quantitative and technological skills, and a unique understanding of costs—their behavior, their relevance, and their use in decision making.

But how well are we management accountants currently serving this role? Unfortunately, not well at all. An IMA® (Institute of Management Accountants) study of senior finance professionals found that while 80% believed that the Finance function adds a great deal of value to their organization, only 22% believed that those outside of Finance saw its role as adding a great deal of value (see <http://bit.ly/2pd8S8i>).

## IMA'S MANAGERIAL COSTING TASK FORCE

IMA's Managerial Costing Task Force aspires (1) to increase awareness among business decision makers that the costing practices on which they rely may be deficient and result in poor decisions and (2) to close the gap between the demand for, and the supply of, quality managerial costing models and solutions. It created the Center for Managerial Costing Quality ([www.thecmcq.org](http://www.thecmcq.org)) to:

- Establish managerial costing as a specific function and discipline within the accounting profession—with principles and requirements that are different from those used for external financial reporting and regulatory compliance,
- Develop tools to help organizations evaluate and improve their managerial costing systems,
- Serve as a resource for companies looking for guidance on how to improve their organization's decision making by implementing better costing practices and systems, and
- Engage and educate the broader business community—business leadership and nonfinancial professionals—to raise awareness of the need to implement better costing solutions.

This lack of perceived value in the information provided by Finance isn't unfounded. An ongoing survey by IMA's Managerial Costing Task Force of operations and supply chain professionals found that slightly more than half of the respondents believe that their organizations' cost information system fails to provide an accurate assessment of costs for internal decision making. Forty-four percent agree with the statement that “Our cost information is not helpful to me in my work.” And 83% believe that the benefits of improving their costing systems outweigh the cost of doing so. (See “IMA's Managerial Costing Task Force” for more about the task force itself.)

Why is there a disconnect between the value we believe we provide to others and the value they perceive we provide? In large measure, it's due to the information we provide. While the Finance function in many companies focuses on preparing costing information and financial reports according to Generally Accepted Accounting Principles (GAAP) or similar standards, other functional areas understand that managing operations based on such information is inadequate for decision support, planning, and control—and are finding alternate sources of information for making decisions.

## The Wrong Information

Basing critical business decisions on accounting information intended primarily for external financial reporting can have disastrous results. The reliance on financial accounting's oversimplified product costing practices caused one profitable manufacturer of highly engineered products to

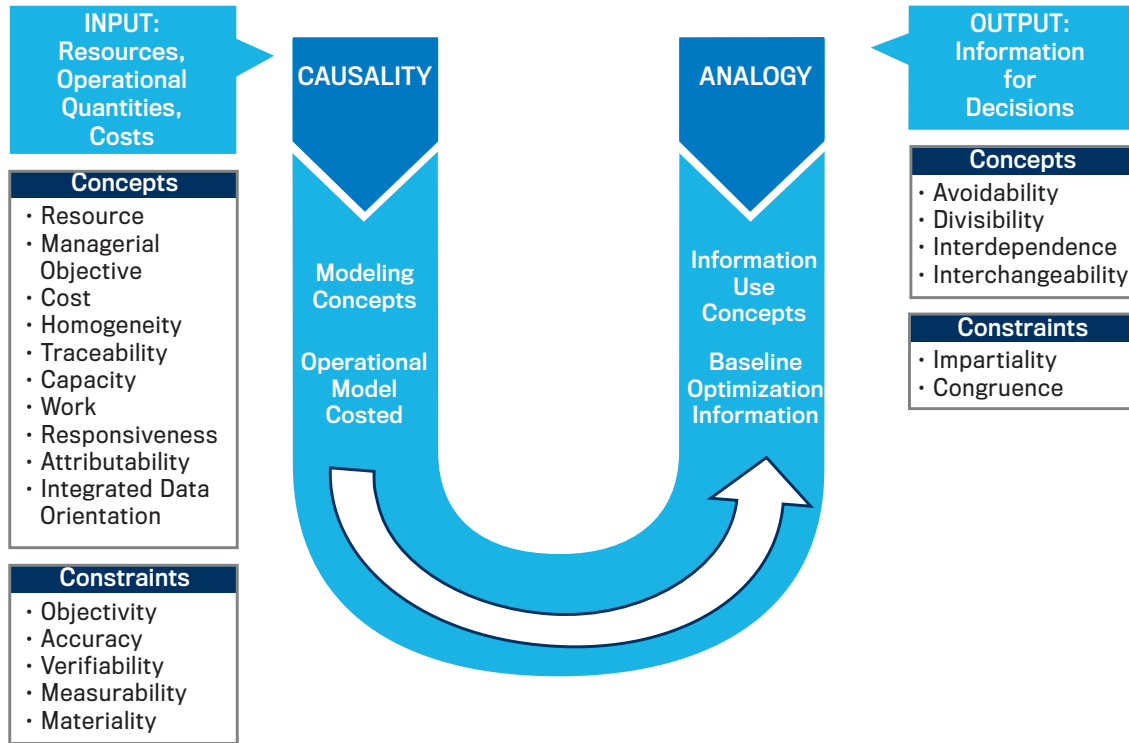
lose its manufacturing business and forced it to downsize and become an engineering services business. A nonprofit, long-term health-care provider's inaccurate measurement of resident service costs caused it to accumulate a population of residents that substantially eroded the endowment that made the attainment of its mission possible. Failure to accurately measure channel maintenance and fulfillment costs led to falling profits for a restaurant equipment distributor when it granted substantial discounts to high-volume customers with excessive channel maintenance and fulfillment costs. Offshoring appeared to enable an auto supplier to reduce the cost of a major component by \$3 million. Unfortunately, the \$3.5 million it spent to implement that decision wasn't reflected in the financial accounting system.

Examples such as these are endless, yet organizations continue to rely on oversimplified costing information to make critical business decisions.

Such is the state of cost information at the vast majority of today's organizations. And it isn't like financial executives are unaware of the problem. “Roles and Practices in Management Accounting Today,” a 2003 survey by IMA and Ernst & Young, found that approxi-

Figure 1:

# IMA'S CONCEPTUAL FRAMEWORK FOR MANAGERIAL COSTING



mately 80% of CFOs believed the cost information they provide to their organization's decision makers is inaccurate for internal decision making (see <http://bit.ly/2pfnXqy>). More alarmingly, less than 20% had plans to do anything about it. The 2012 update (<http://bit.ly/2GwafXD>) concluded the situation hadn't changed since the earlier study: "Accountants aren't deviating from inferior costing conventions." Financial executives appear to ignore the problem because there's little pressure from the managers who use accounting information to improve its accuracy and relevance (possibly because they're ignoring it) and because accountants have so many other "mandatory" duties to perform related to external financial reporting and regulatory compliance.

In the baseball book and movie *Moneyball*, Oakland Athletics' General Manager Billy Beane meets a recent Yale graduate who studies baseball statistics. The statistician tells Beane that "Baseball thinking is medieval." He convinces Beane that baseball scouts are too enamored with an individual player's talent rather than what it takes for a team to score runs and win games. The message of *Moneyball* is that there needed to be a mind-set change with how baseball teams are built to win games. Accountants today are like "old-school" baseball scouts. They are mired in an out-of-date, rules-and-regulations view of costing. By segregating compliance-oriented cost accounting thinking from economics-based managerial costing, accountants could

better support managers and executives in their quest to "score runs and win games."

## Fix the Profession, Fix Cost Modeling

The management accounting profession is in need of a framework to support the development of costing information that reflects economic reality and enhances internal decision support. IMA's Conceptual Framework for Managerial Costing (CFMC) is such a framework (<http://bit.ly/2IQ2eO8>). It identifies the principles, concepts, and constraints that need to be addressed and considered when creating a costing approach for an organization's decision support. It isn't a method—it's a framework to assess an organization's costing needs and to evaluate methods and systems against an organization's alternative solutions.

The CFMC replaces advertising hype with clear principles and concepts. For example, activity-based costing (ABC) can be implemented with an immense range of modeling techniques. At the simplistic end, an ABC solution may create as many distortions (for example, allocations of fixed costs) as insights. As an organization incorporates more CFMC concepts into its ABC solution, however, models generate greater insights and less distortion (but also require a higher level of modeling knowledge and systems support).

The CFMC focuses on two principles (see Figure 1). The

first is causality (or cause and effect), the foundational principle for creating better models that support internal decision making. Managerial costing models need to reflect the reality of resources and processes in the organization. The second principle is analogy, the logical use of information for decisions. The CFMC moves costing out a method-centric environment—where methodologies like ABC, Theory of Constraints (TOC), lean accounting, total cost of ownership, standard costing, and others compete for customers, consultants, software vendors, and managers—to a knowledge base grounded in principles and concepts.

Most cost models that accountants use are simply financial models that seek to generally reflect operations and resources. Models based on the CFMC focus first on building an operational model, then costing it in a manner that reflects causal relationships, and then applying resource costs without clear causal relationships to outputs in a manner that's appropriate for decision making. In other words, the CFMC requires that a cost model be an overlay of an operational model of an organization's resources and processes.

An example of an incorrectly applied noncausal cost is excess capacity in a work group or resource, such as a resource capacity for which there is no demand for creating additional output. The job of a good operations manager is to become more efficient and effective, which means he or she will create excess capacity. This should be recognized positively, but how often is it? Typically, a manager is penalized for not keeping the work unit busy, or the costs of idle capacity are applied to the work unit's output, thereby negating the efficiency improvement. Preferably, excess capacity costs should be applied to the business or, in the case of salable products or services, perhaps applied to the sales and marketing area since it failed to generate sufficient demand.

Increasingly, relevance for management accountants means focusing more on forward-looking information. Creating such information puts a premium on understanding causal operational resources, processes, market relationships, and more. The models needed to support projections must incorporate and reflect an organization's operating model before determining the monetary impact of a given decision, trend, scenario, or projection. IMA's CFMC is the only framework for creating decision-supportive models with principles, concepts, and constraints that apply equally to financial and nonfinancial modeling.

## Beware of Structural Resistance

While a focus on causality and projections is increasingly necessary, the accounting profession lacks general awareness of the need to develop financial models and provide decision-support information that goes beyond what's available under external reporting standards. Put simply, the necessary data—and the models to turn that data into information—haven't been created because the accounting

# TECHNOLOGY COMPETENCIES FOR THE DIGITAL AGE

To succeed in the Digital Age, finance and accounting professionals will need to master new skills in several areas, including:

### Information Systems and Data Architecture

- Use software tools to automate data collection, validation, and reporting.

### Data Governance

- Evaluate cost/benefits and recommend strategies for data management.
- Develop advanced risk mitigation data strategies and programs.

### Data Analytics

- Transform raw, unstructured data into a form appropriate for analysis (e.g., data wrangling).
- Mine large data sets to reveal patterns and provide insights.
- Analyze data using business intelligence software.
- Interpret results, draw insights, and make recommendations using predictive analytical techniques.

### Data Visualization

- Evaluate data visualization options and select the best tool for presentation to stakeholders.
- Utilize advanced visualization applications (such as Tableau).

profession hasn't put adequate emphasis on internal decision support as a distinct subject.

Management and most accountants are caught up in the fallacy that there's "one version" of the financial truth. Managers tend to believe the data they need is somewhere in the existing financial system. Most accountants either believe it's there as well, or they're hesitant to tell management that it doesn't exist. They often respond to what they believe is a onetime request for information with a special, ad hoc study or analysis and then create a spreadsheet model if they think the request may become ongoing.

A common request is for "true" or "relevant" cost information. What that request is really asking for is information—a number—other than what's being reported by the financial system, statements, or standard reports. Users want information that reflects the causal relationships of the business scenario being evaluated or the decision being made. Most financial systems are highly oriented toward the prepara-

tion of financial statements, which limits the information the systems collect. Even when an ERP (enterprise resource planning) system is in use throughout the organization, it typically is installed with financial specifications focused primarily on regulatory financial reporting. This limits the collection of information to the known and well-understood realm of financial accounting information and excludes other data useful for internal managerial decision making.

Managerial costing and managerial analytics for internal decision support should be as important to the accounting profession as external financial reporting. After all, more than 75% of accountants are employed as management accountants or accountants in business (as opposed to public accounting), and the profession needs organizations to look to them for information to compete successfully in the business environment. This means providing actionable, forward-looking internal reporting, analysis, performance indicators, and advice that guides good business decisions from the C-suite to the front-line employee, as well as high-quality external reports for stakeholders.

## Preparing for the Digital Age

The Digital Age is a risk and opportunity for the accounting profession. The first tasks that will be automated are those with the most structure, such as routine transaction processing, account reconciliation, financial report preparation, and auditing. Of course, all of these tasks have issues that require judgment, but materiality and risk assessments can be computed, recommendations calculated, decisions tracked, and total decision risk accumulated and assessed mechanically.

But can tasks associated with building and improving the performance of an organization be automated so readily? Will the need for people meeting to design strategies, tactics, improvements, and responses to market, economic, and other forces be eliminated through automation? As far as we know, a foolproof formula for business and organizational success has yet to be designed.

The issue is whether the accounting profession is well prepared and positioned to contribute in a world where financial statement prowess is available at the push of a button and the value an accountant adds is almost completely assessed by his or her ability to contribute to internal decision making and forecast the value of plans and strategies. How long will accountants be able to divert attention from the shortfalls of oversimplified costing systems that everyone ignores, knowing they provide no insights for long- or short-term business decisions? Accounting has been effective at becoming more efficient at performing routine tasks using technology, but, on a profession-wide level, this success will only shrink the need for accounting professionals.

The future of the accounting profession will require an aggressive reorientation toward management accounting and internal decision support. The profession needs to focus on its ability to build monetary models that do more than comply with regulations. Monetary models are needed to support a wide range of decisions, from minute-to-minute

# How long will accountants be able to divert attention from the shortfalls of oversimplified costing systems that everyone ignores?

operating decisions to improve process efficiency to long-term, forward-looking strategic decisions that incorporate asymmetric risks. One model alone won't incorporate the information needed for an organization's economic future viability and success.

Tools such as Big Data, robotics, and artificial intelligence (AI) capabilities enable management accountants to lend their financial and business expertise to internal decision support while maintaining their traditional mastery of regulated financial reporting. With the proper investment in technology and skills, maintaining and reconciling two financial views of the organization becomes increasingly achievable. The challenge is for the accounting profession and individual professionals to fully embrace the range of knowledge and skills needed to succeed in the Digital Age (See "Technology Competencies for the Digital Age").

Having a view of a business structured according to financial reporting rules and standards is important. Yet having accounting systems that deliver only such information is insufficient for providing the guidance enterprises need to succeed. In order to succeed in today's increasingly competitive environment, organizations will need to understand the need for cost modeling that adequately supports its managers' decision-making requirements. **SF**

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