# APICS & IMA Working Together to Enhance Supply Chain Management with Better Costing Practices

Raef Lawson, Ph.D., CMA, CSCA, CPA, CFA Vice President-Research & Policy and Professor-in-Residence IMA® (Institute of Management Accountants)





The Association of Accountants and Financial Professionals in Business



# TABLE OF CONTENTS

About this Report	3
The Usefulness of Costing Information	4
Barriers to Creating a Useful Costing System	5
The Need for Better Costing Practices	9
Root Causes of the Problem	9
The Solution	11

# **ABOUT THIS REPORT**

Film lovers remember the line from the 1995 movie *Apollo 13* when astronaut James Lovell said, "Houston, we have a problem." He was alerting mission control that there was a technical failure with his crew's spacecraft that put the success of the mission in jeopardy. Today there is a similar problem with many organizations' costing practices. There are serious failures with the information that accountants provide to their line managers and executive teams in order to support decision making, and those deficiencies put the success of their organizations in jeopardy.

Costing systems, as the name might imply, are the means by which the cost of products and services are measured so that their sale may be profitable. More broadly, they involve cost modeling of an organization's resources and operations to generate internal decision-support information. This information is useful for managing the performance and profitability of products, service lines, channels, customers, and their supporting processes.

Previous studies indicate current costing practices at most organizations are not sufficient in providing decision-useful information to other departments. These studies also show that the high level of dissatisfaction with current costing systems is due to a variety of factors, including a disconnect between an organization's finance department and other departments in the organization. For example, an accountant may not properly cost or price a good without other factors, such as freight, packaging, and energy expended from factory operations.

To help promote the use of improved costing systems, (IMA®) Institute of Management Accountants formed a Strategic Cost Management Task Force, with the mission to educate professionals on the benefits of improved costing systems. Since information from costing systems can impact many decisions made by supply chain professionals, their input is needed for improvement of these systems. To obtain such feedback, IMA developed a questionnaire for nonaccounting industry professionals that APICS then distributed to upper management supply chain professionals.

# THE USEFULNESS OF COSTING INFORMATION

Survey respondents were asked several questions regarding the usefulness of the costing information they received (see Table 1). Each item was ranked on a scale of agreement from 1 to 7, and received an average weighted score between 1 and 7, where 1 means the sample strongly disagreed and 7 means they strongly agreed. Overall, costing systems are perceived as being somewhat useful; however, for some areas, there was substantial discontent. For a wide range of applications, including budgeting and planning, product decisions, process improvement, and customer profitability analysis, respondents only slightly agreed, on average, that the costing information they received was effective.

#### Table 1.

#### Usefulness of Internal Decision Support Cost Information

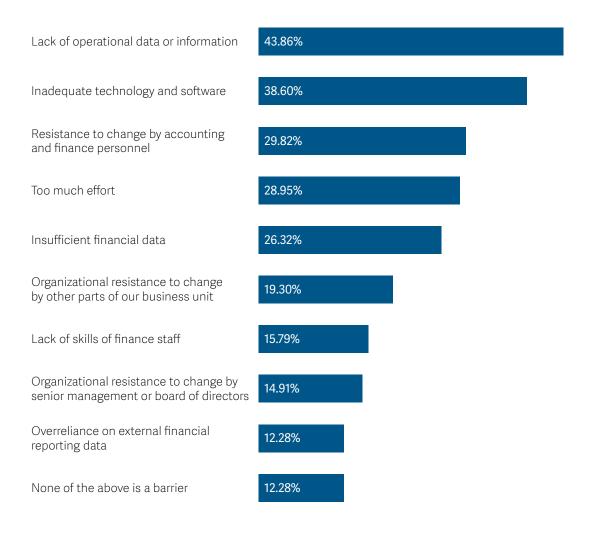
Questions about what is useful	Average weighted score 1-7
Our business unit's cost information is highly effective for budgeting, planning, and evaluation.	5.11
Our cost information is highly effective for product decisions (e.g., pricing, design, outsourcing).	5.10
Our cost information system provides an accurate assessment of costs in this firm.	4.97
Our existing cost information is the right tool for helping us manage costs.	4.34
Overall, I think the benefits of improving our cost information system would outweigh the costs.	5.63
Questions about what is not useful	Average weighted score 1-7
Our cost information is not at all helpful for process improvement.	2.99
Our cost information is not at all helpful for customer profitability analysis.	2.83
Our cost information is not at all helpful to me in my work.	2.84

Of all the statements regarding costing systems, the one with the highest level of agreement was one regarding improving cost information systems, with respondents agreeing, on average, that the benefits from improving their costing systems exceeded their cost. What is also telling from the results is that the lower weighted score for "Our existing cost information is the right tool for helping us manage costs," which would indicate improvement from the eye of a supply chain professional is needed. Considering that for each of the applications previously mentioned, slightly more than half of the respondents indicated they agreed or strongly agreed that costing information was useful, there is clearly a need and desire for more effective costing information.

# BARRIERS TO CREATING A USEFUL COSTING SYSTEM

If costing systems are to be improved in the eyes of supply chain professionals, the survey explored the barriers to making such improvements. The most commonly cited reason in this survey was the lack of operational data or information, reported by 44% of respondents. (See Figure 1.) Providing information only in financial, and not operational, terms is a common failure of accounting systems, resulting in nonactionable information and missed opportunities to generate needed conversations. The lack of adequate IT resources (reported by 39%) is also an issue. A third barrier, related to the previous two, is a resistance to change by accounting and finance personnel (30%). An accounting staff that is resistant to change will continue to employ outdated systems of limited operational usefulness and not be motivated to deploy the necessary IT resources. Improvement and change, however, is certainly possible, as fewer respondents (less than 20%) indicated resistance to change by senior management or lack of skills by the finance staff.

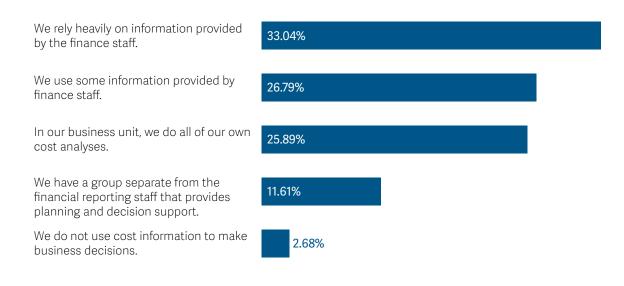
### Figure 1. Barriers to Creating Useful Costing Information



Note: Respondents were asked to select up to three responses.

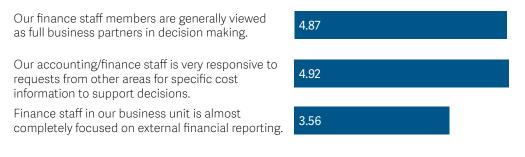
Who do supply chain professionals turn to for cost information when making business decisions? Survey respondents indicated only one-third rely heavily on information provided by the finance staff. This is not surprising given the perception that the information provided by costing systems is only somewhat useful. Another 27% use some information provided by the finance department, with the rest not relying on information provided by the finance department (see Figure 2).

# Figure 2. Sources of Information for Business Decision Making



The perception of the accounting and finance (A&F) function by supply chain professionals is similar to their view of their organizations' costing systems: There is slight agreement, on average, that the A&F staff is responsive to requests for specific cost information and that the A&F staff members are viewed as business partners. There is also basically a neutral feeling as to whether A&F is too focused on external financial reporting, to the detriment of providing information for internal decision making (see Figure 3). Yet, responses varied considerably, with the perceived role of the A&F function ranging from being that of "bean counter" and "profit police" to being a "business partner" and "part of the team."

# Figure 3. Perception of the Accounting and Finance Function



Note: 1=strongly disagree, 4=neutral, 7=strongly agree.

Survey respondents were asked their level of agreement (on the same 1 to 7 scale) with statements regarding their perception of the planning, budgeting, and forecasting (PBF) function in their organization as well as the costing information they receive in general. PBF appears to be an area where improvement is needed as respondents "somewhat agreed," on average, that it was a top-down exercise. (See Figure 4.) Furthermore, respondents neither agreed nor disagreed that it was an enterprise-wide process linking operations and the executive team's strategy with the finance department, showing a need to build a stronger relationship between supply chain and the finance department. This view of the PBF process is not confined to supply chain professionals: A recent survey of accounting and finance professionals concluded that too often the PBF process is "imposed on the enterprise by the Finance function with little alignment to the reality of day-to-day business operations." <sup>1</sup>

#### Figure 4. Perception of Planning, Budgeting, and Forecasting Process and Costing Information



With regard to the overall impression of costing information received, respondents were neutral as to whether it was poor, and only slightly agreed that it was always helpful. The general conclusion is that line managers and executives are being underserved, and in some cases misled, by the information they receive from their accountants. The survey results indicate a clear need for the supply chain and finance departments to work more closely.

<sup>1</sup>KPMG and ACCA, "Planning, Budgeting and Forecasting: An Eye on the Future," 2015.

# THE NEED FOR BETTER COSTING PRACTICES

One survey respondent noted, "Accurate costing is the base for all supply chain decisions." Another asked, "How do you know anything about the health of your business if you don't know your cost... you can't reallyit's just gut and guess." Yet the results of this survey show that supply chain professionals often view their company's managerial costing system as being only slightly useful for generating questions and for making managerial decisions.

Supply chain managers aren't alone in their view of their companies' costing systems. A survey conducted by IMA and Ernst & Young indicated that 80% of CFOs believe the cost information they provide to their organization's decision makers is inaccurate. More alarmingly, less than 20% have plans to do anything about it.

## ROOT CAUSES OF THE PROBLEM

So why aren't supply chain professionals receiving better costing information on which to base their decisions? Based on the results of the survey of supply chain professionals and other surveys, we find there are a few root causes.

#### An overreliance on external financial reporting systems.

Many organizations rely on externally oriented financial accounting systems to produce the information supporting internal business decision making. These systems are inadequate in that they employ oversimplified methods of costing products and services. They do not focus on modeling detailed operational cause-and-effect relationships, which creates distortions in product costs, and they misstate or don't include critical measures of performance, such as costs required to sell, market, distribute, and serve customers not included in traditional product costs.

Externally oriented reporting systems typically focus on costs above the gross profit margin line and fail to provide adequate information regarding customer and channel-related costs. The result is that most companies today do not have the ability to report channel and customer profitability. The lack of adequate cost information hampers supplier and vendor selection as well as in-sourcing, outsourcing and off-shoring decisions. For example, if a component or service is outsourced, which of an organization's expenses truly remain or are replaced by the new supplier or vendor? This is a concern given the increasing focus on channel optimization.

#### Using outdated costing models.

Despite significant changes in the way companies do business, the managerial costing practices followed by many organizations today are not very different than they were 50 years ago. While the world around the accountants has changed and other parts of the organization have reengineered themselves to meet the challenges of the new environment, many accountants have continued to follow traditional cost accounting practices in a world that minimally resembles the past.

Since the 1980s, many innovative managerial costing practices that more closely meet the needs of today's organizations have been developed. Among other things, these practices include a better linkage of operational and financial information, and a focus on the causal relationship between customers, the products and services they consume, and the supplier resources they consume.

Individuals use models to understand phenomena around them; businesses similarly do so. If an organization's cost model does not provide an accurate version of reality, the cost information on which it bases its decisions will not accurately mirror the outside world and will negatively impact the quality of its decisions. Effective, value-adding managerial cost information cannot be derived from the rules and regulations-driven, one-size-fits-none cost models of external financial accounting. It must come from economic reality-based models that reflect the fundamental economics that underlie an organization's actual operations. That is the purpose for internal managerial costing.

Common complaints from supply chain professionals with regard to poor costing systems were the inability to receive data in a timely manner, receiving inaccurate data, and a lack of transparency from the finance team. While implementation of an enterprise resource planning (ERP) system may help address these issues, it is not a catchall solution, as the inaccuracy of data was a grievance from those who claimed to have a proper IT infrastructure in place. Additionally, many ERP implementers do the minimum to make sure they can comply with external financial reporting requirements and do not implement the "Control" module (for SAP), which allows for the use of more sophisticated costing methods. While an ERP system can bring about improvements, a lack of knowledge can be considered a root cause of poor costing systems. One respondent, who is both a CPIM and CMA<sup>®</sup> (Certified Management Accountant), stated that costing systems can certainly be improved in terms of greater efficiency and reliability. This demonstrates the need for shrinking the knowledge gap between the financial staff providing cost information and the supply chain professionals.

#### Accounting and finance's resistance to change.

Financial executives who are responsible for these inadequate and misleading financial accounting-oriented costing models are generally aware of the problem, but many have chosen not to do anything about it. They appear to ignore the problem because there is little pressure from managers who use accounting information to improve its accuracy and relevance, and because accountants have so many other "mandatory" duties to perform related to external financial reporting for regulatory compliance. Left on their own and pressured by other demands, most accountants have been reluctant to promote new, more appropriate practices within their organizations. They have computerized their old practices, but have not changed them.

# **THE SOLUTION**

What can be done to address this situation? A necessary first step is for users of cost information to more aggressively demand more accurate and relevant, economic reality-based decision-support information from their accounting and finance staffs. It is important to understand that a wide array of solutions have been developed to address "the costing problem" over the past 30 years. These solutions have been well-publicized and proven successful at many firms.<sup>2</sup> The issue is not "Is there an answer?" The issue is "How do we get accountants to face the problem and implement solutions to create and improve cost information for internal decision making?"

From the standpoint of the supply chain professional, the breaking of silos is a first step toward improved costing systems. A greater relationship is important, as costing and supply chain overlap more than people realize, as expressed by the survey respondents. An improved costing system can allow for greater make-buy decisions, defining landed vs. delivery, and determine the realistic cost of holding inventory. A good costing system can also play a critical role for Sales and Operations Planning (S&OP). Given that costing has such an impact on supply chain, one solution might be to include supply chain elements in financial education regarding costing, while conversely include costing system practices in supply chain studies.

Survey participants who provided information on successful costing systems indicated that a good ERP software program that involves the finance team has allowed for greater information flow between the two departments. While better communication and the breaking of silos appear to be a given, greater IT infrastructure, based on appropriate modeling of an organization's costs, seems to play a significant role as well. Better communication may improve the accuracy of data and may also improve the speed of data being provided, which can have a positive impact on lead times.

Top management must take the initiative and demand their accountants adopt progressive, internal management decision-focused costing practices that represent the fundamental economics that underlie the operation of their businesses. They need to create a culture where the operational users of cost information "trust" the information provided by their accountants, see it as consistent and reflective of the resources and processes they manage, and, most importantly, use it to make better decisions to be more competitive. IMA's *Conceptual Framework for Managerial Costing* outlines the principles and concepts needed to support management decision making with cost information.

An executive management team with courage, determination, and leadership skills can shift its organization's costing practices from the status quo to progressive managerial costing practices. It will not allow its externally oriented financial accounting system to distort and impair the managerial cost information needed to obtain the insights required to make quality business decisions and thereby will enhance the company's value.

Raef Lawson, Ph.D., CMA, CSCA, CPA, CFA, vice president of Research & Policy and Professor-in-Residence for IMA, where he leads IMA's global thought leadership efforts and oversees student and academic relations programs.

The contributions by APICS Research Manager Matthew Talbert, MPA, and the author's colleagues at the Center for Managerial Costing Quality (<u>www.thecmcq.org</u>) are gratefully acknowledged.

# **ABOUT APICS**

APICS is the association for supply chain management and the leading provider of research, education, and certification programs that elevate supply chain excellence, innovation, and resilience. The APICS Certified in Production and Inventory Management (CPIM); APICS Certified Supply Chain Professional (CSCP); APICS Certified in Logistics, Transportation and Distribution (CLTD); and APICS Supply Chain Operations Reference-Professional (SCOR-P) designations set the industry standard. With more than 45,000 members and approximately 300 channel partners, APICS is transforming the way people do business, drive growth, and reach global customers. For more information, visit apics.org.

# ABOUT IMA® (INSTITUTE OF MANAGEMENT ACCOUNTANTS)

IMA®, named 2017 Professional Body of the Year by The Accountant/International Accounting Bulletin, is one of the largest and most respected associations focused exclusively on advancing the management accounting profession. Globally, IMA supports the profession through research, the CMA® (Certified Management Accountant) program, continuing education, networking, and advocacy of the highest ethical business practices. IMA has a global network of more than 100,000 members in 140 countries and 300 professional and student chapters. Headquartered in Montvale, N.J., USA, IMA provides localized services through its four global regions: The Americas, Asia/Pacific, Europe, and Middle East/India. For more information about IMA, please visit www.imanet.org.



The Association of Accountants and Financial Professionals in Business

