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Activity-Based Costing: Is It Still Relevant?

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The popularity of activity-based costing (ABC) grew rapidly during the 1990s, and, in the following decade, many surveys reported usage rates of about 50%. Over the past 10 years, however, there has been debate about the overall relevance of this costing method. To investigate the current importance of ABC, we surveyed 348 manufacturing and service companies worldwide. Our results indicate that ABC continues to offer organizations significant value from strategic and operational perspectives.

Over the past several years, consultants, practitioners, and academic investigators have noticed that activity-based costing (ABC) methods, developed to improve decision support and the accuracy of cost- and profit-measurement systems, too often have yielded less than the desired results. For example, Robert S. Kaplan and Steven R. Anderson state, "Many companies abandoned activity-based costing because it did not capture the complexity of their operations, took too long to implement, and was too expensive to build and maintain."[1] Further criticism of ABC appeared elsewhere. "Straightforward in theory, ABC proved notoriously difficult in practice. It involved defining 'activities' and trying to judge (often subjectively) how much overhead each used. And it had to be done regularly. Companies got fed up, and many abandoned it. From 11th position in the 1995 annual survey of the most widely used management tools (Bain), it fell to 22nd place (in 2002)."[2]

Studies of ABC use have reflected this dissatisfaction with the technique. The Bain & Company annual tools surveys in 2003 and 2005 reported use of activity-based management (ABM) at 50% and 52%, respectively, with associated satisfaction scores below the average for all tools used. Similar results were reported in the SUNY-Albany, Hyperion, and Pepperdine Study (SHAPS surveys): During the same period, they found a decline in the perceived value of ABC compared to its usage.[3]

Despite the negative results of these studies, there are many case studies and anecdotal reports of organizations that have adopted ABC methods and reported sat-

isfaction with the value they provide. These companies consider their ABC methods an investment worth the time and resources committed to them. One motive for conducting this research was to seek an answer to the question: "What distinguishes successful implementations of ABC methods from those that have not succeeded?"

BRAG Survey

In order to study the use of ABC methods (and other issues related to the design and use of costing and profitability methods), we formed the Business Research and Analysis Group (BRAG) and conducted a survey sponsored by the Institute of Management Accountants (IMA®) and other professional associations.[4]

Table 1 shows the distribution of survey respondents by region, type of unit, and business sector. Of the 348 survey respondents, slightly more than half were located in North America. The survey was completed most frequently from the perspective of the respondent's organization as a whole. Fifty-four percent of the respondents were in the service sector, and 40% were from manufacturing. The positions held by respondents were fairly evenly distributed among executives (16%), directors (13%), senior managers (16%), analysts (19%), managers (23%), and others (14%).

Cost- and Profit-Measurement Methods Across the Value Chain

The assignment of costs to products, customers, or other cost objects has always been a thorny issue. For external reporting, production costs must be assigned to products for both income and asset reporting purposes. For operational cost control, strategic decision making, and performance measurement purposes, however, many organizations also capture and assign costs from the other functions in the internal value chain.

What methods are used to measure costs and profits across the value chain, and does their usage vary by function? We identified the most frequently used types of methods as:

- Actual costing,
- Normal costing,
- Standard costing, and
- Activity-based costing.

Table 1: Demographics of Survey Respondents

By geographic region:		
	North America	52.1%
	Europe	13.9%
	Middle East	12.8%
	Asia	12.1%
	Africa	6.8%
	South America	2.4%
By organizational level:		
	Whole company	54.8%
	Group/division	15.2%
	Department	9.0%
	Subsidiary	8.7%
	Plant	5.1%
	Unit	3.7%
	Branch	2.5%
	Other	1.1%
By business sector:		
Services	Financial	12.1%
	Wholesale/Retail Trade	8.2%
	Consulting	7.7%
	Business	6.6%
	Communications/Utilities	4.9%
	Computer/Software	4.7%
	Transportation	3.6%
	Healthcare/Medical/Legal	3.6%
	Education	2.5%
	Total	53.7%
Manufacturing	Metal/Rubber/Plastics	12.1%
	Machinery	7.4%
	Food/textiles	6.8%
	Electronics	6.8%
	Chemicals	6.0%
	Paper/Printing	2.7%
	Total	39.5%
Public Administration/Government/ Not-for-Profit	Total	6.0%
Conglomerate	Total	0.8%
Total		**100.0%**

While the set of costing method types is as diverse as the kinds of operating systems, most organizations in the survey chose from this short list. In fact, most companies used more than one of these methods. Figure 1 shows the use of these method types across the value chain. From Figure 1 we can reach the following conclusions:

- With the exception of production-related costs, a significant proportion of costs is not assigned to cost objects.
- For production costs, standard costing is still "king of the hill" with a usage rate of 42%.
- Contrary to common belief, ABC methods are used across the entire value chain at approximately the same rate. ABC is not a production-specific method.

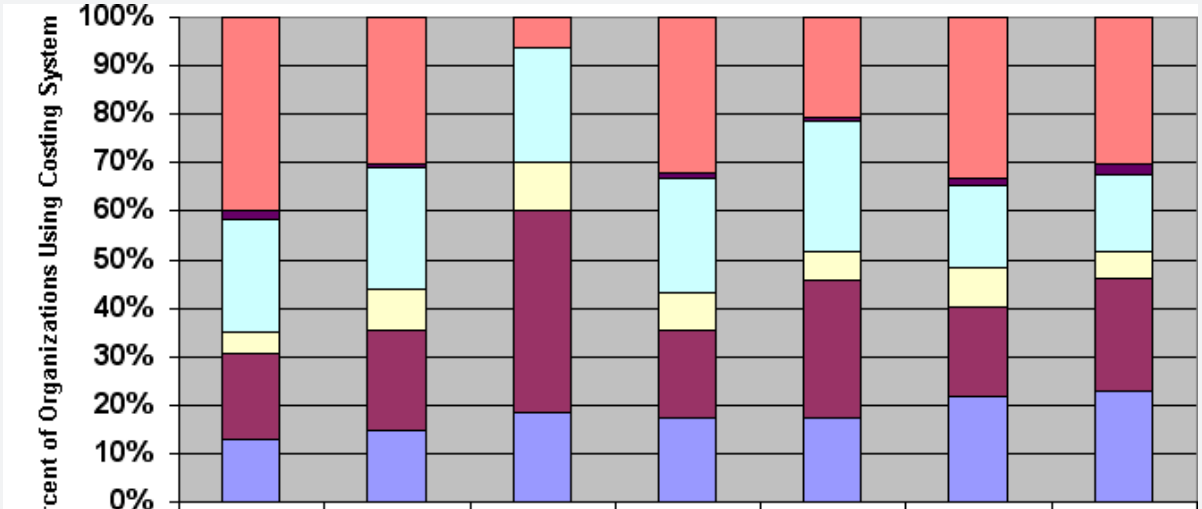
As to the overall satisfaction with the ABC method, our survey results refute many of the assertions that ABC increasingly is being abandoned. We asked 141 organizations to indicate their use or nonuse of ABC. Of these, only four (2.8%) previously used ABC but no longer use it, and 22 (15.6%) considered ABC but chose not to implement it. To explore the specifics in more detail, we looked at the benefits and concerns that respondents related about cost- and profit-measurement systems.

Benefits and Concerns about Cost- and Profit-Measurement Systems

In order to judge the value of ABC, it is helpful to identify commonly reported benefits of cost- and profit-measurement systems and their prevalence. Figure 2 shows the level of agreement and disagreement regarding benefits commonly reported by our survey respondents. The most frequently reported benefits include:

1. Useful for product decisions, such as pricing, design, and outsourcing.
2. Helpful for product/service profitability analysis.

Figure 1: Use of Costing Methods Across the Value Chain



	Research and Development	Product and Process Design	Production	Sales & Marketing	Distribution	Customer Service	Shared Services
Not Allocated	39.8%	30.2%	6.1%	32.3%	20.7%	33.1%	30.2%
Other	1.9%	0.9%	0.0%	0.8%	0.9%	1.6%	2.4%
Actual	23.1%	25.0%	23.7%	23.6%	26.7%	16.9%	15.9%
Normal	4.6%	8.6%	9.9%	7.9%	6.0%	8.1%	5.6%
Standard	17.6%	20.7%	42.0%	18.1%	28.4%	18.5%	23.0%
Activity-Based	13.0%	14.7%	18.3%	17.3%	17.2%	21.8%	23.0%

3. Helpful for making operational improvements.
4. Useful for performing budgeting, planning, and performance evaluation.

Figure 2 shows that managers agree that their cost- and profit-measurement systems provide a wide variety of benefits. The three lowest-scoring benefits relate to commonly claimed benefits of the ABC method: activity-cost information and accurate allocation of overhead (indirect) costs. More disagreed than agreed that their system was able to accurately trace activity costs to final cost objects. In a similar way, more disagreed than agreed with the statement that their system could accurately trace overhead costs to final cost objects. Overhead allocation and activity-cost measurement are clearly of concern to managers. To investigate whether ABC methods address these issues, we recast the responses into two groups: ABC users and ABC nonusers. Figure 3 makes it abundantly clear that ABC methods address these issues and constitutes strong evidence of the value of ABC methods. Only one in four nonusers agrees that the costs of activities are traced accurately to products or services, whereas almost 70% of ABC method users agree that this benefit is realized. Similar results apply to overhead cost tracing. Finally, less than 40% of ABC nonusers receive accurate costs of activities, while more than 70% of ABC users benefit from such cost knowledge.

It is not surprising that the two benefits directly related to activities—the focus of ABC—are realized to a greater extent in such systems, but overhead allocation to cost objects is important in non-ABC methods as well. The substantial difference in benefits realized from ABC makes it clear that ABC methods warrant serious consideration, especially in organizations with significant overhead costs.

Figure 2: Benefits of Cost- and Profit-Measurement Systems

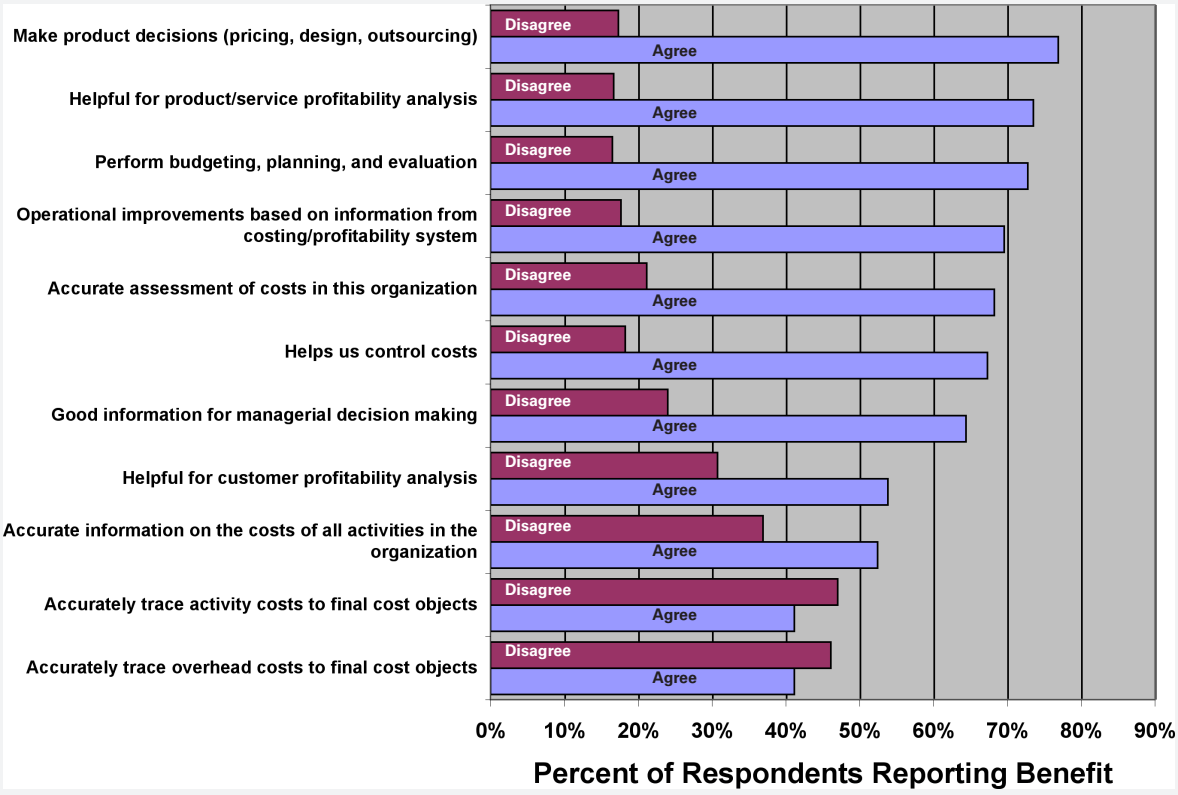
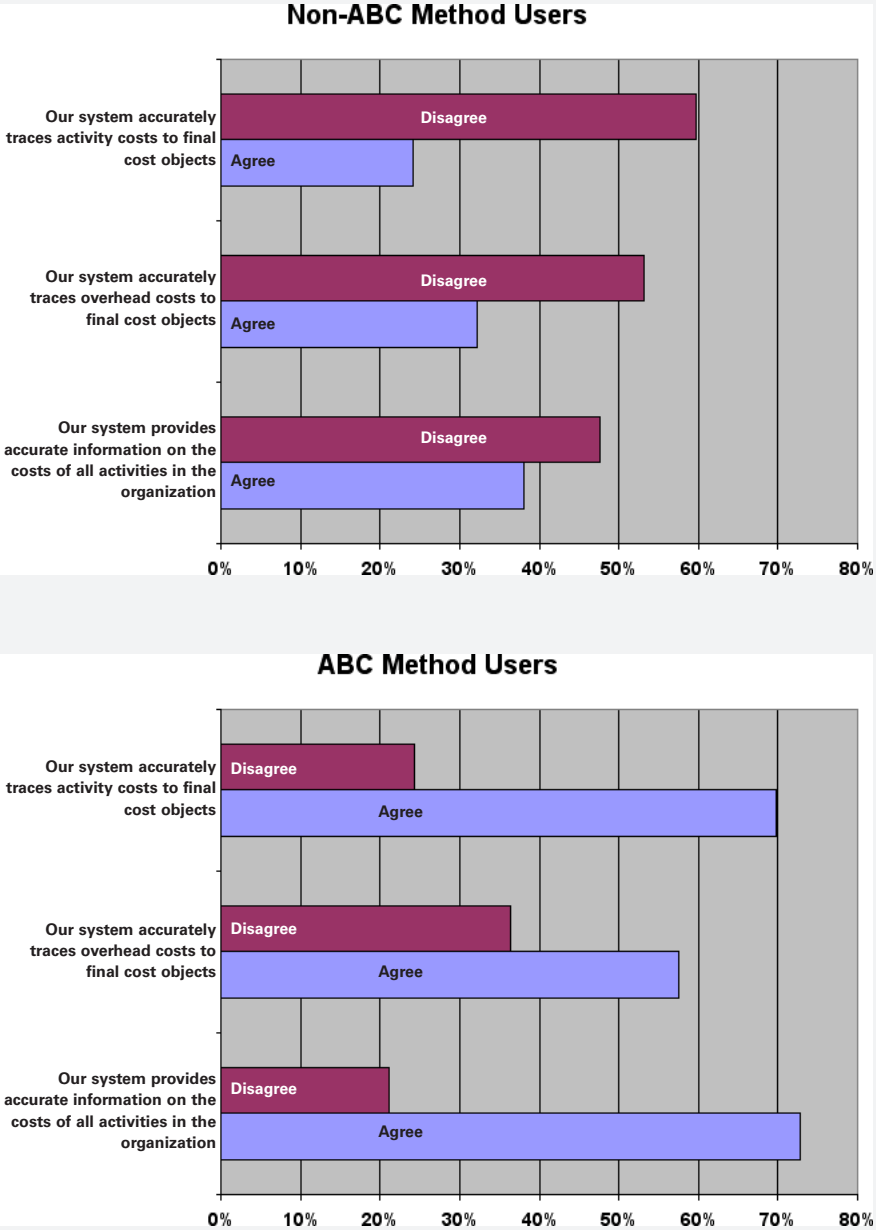


Figure 3: Comparisons of ABC to Non-ABC Users on Three Key Benefits



What are the main concerns of managers regarding their cost-measurement systems, and do ABC methods help alleviate these concerns? Figure 4 identifies a variety of possible concerns and tells how users of ABC methods and non-ABC methods view each. The major concerns for both groups include:

- Need to find a better way to allocate costs.
- Allocations do not reflect how resources are used (lack of cause-effect).
- Information is not timely.
- Updating the system is difficult.

While organizations that apply ABC methods share these concerns, the level of concern about these issues,

as well as the others listed in Figure 4, is uniformly less than expressed by those that use non-ABC methods. This finding indicates that use of ABC methods at least somewhat helps alleviate managers' concerns with their cost-measurement systems.

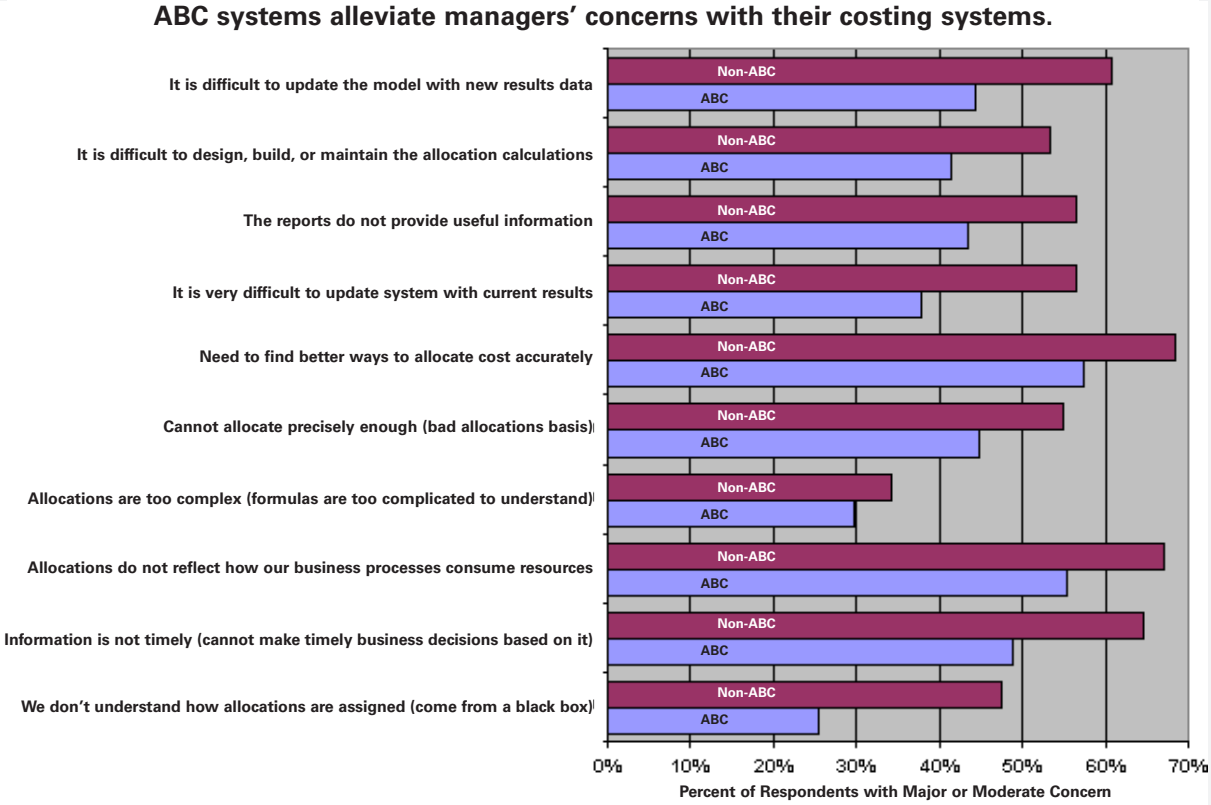
ABC and Cost Allocation: How Are Indirect Costs Being Assigned to Cost Objects?

Although ABC is more than an allocation method, the primary attribute differentiating it from other methodologies is how it accumulates and allocates resource costs. Our survey asked respondents to identify the methods used to allocate indirect costs. We presented three major methods of allocation along with the option to specify other methodologies in use. These three methods are:

- Equal allocation: Resource cost is allocated equally to all objects that consume the resources.
- Output-based allocation: Resource cost is allocated according to an output-related allocation base.
- ABC allocation: Resource costs are accumulated into activity cost pools. These cost pools are allocated to objects based on how much of the activity is consumed by the objects.

Among those surveyed, the most popular method is output-based allocation, with 60% of organizations using this method for part of their allocations. The second most popular method is ABC, with a usage rate of just under 50%.

Figure 4: Managers' Concerns with Their Costing Methods: ABC vs. Non-ABC Users



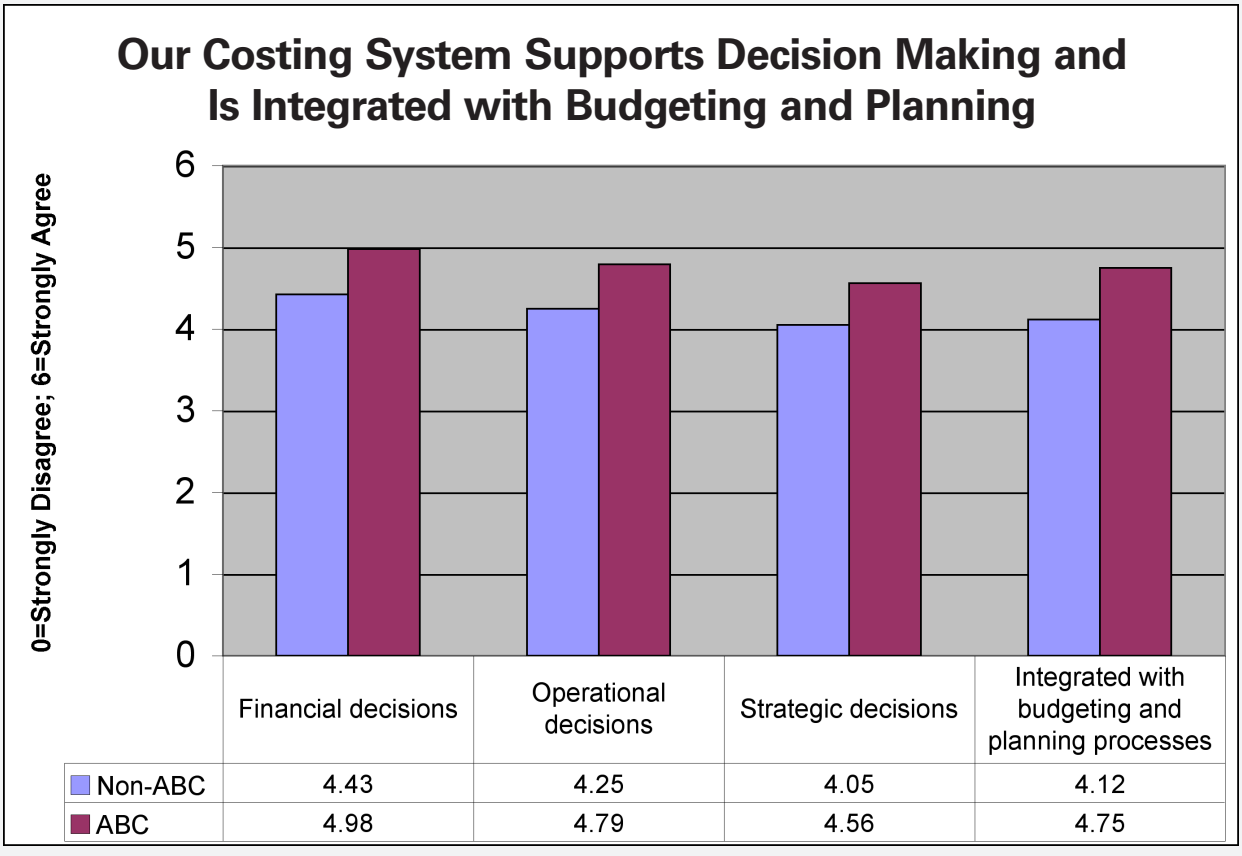
ABC is viewed as having value, even among firms that do not currently use that methodology. When asked to specify what the mix of allocation methods would be in the organization's ideal allocation system, managers surveyed had a significant bias in favor of ABC: More than 87% of organizations' ideal costing systems would include some form of ABC. Given that such a high number of respondents envision including ABC as part of their ideal cost allocation system than currently do so (about 50%), adoption of ABC may increase in the future.

Decision Support and ABC

The major types of decisions that are supported by cost- and profit-measurement systems are financial, operational, and strategic. How do ABC methods support these decisions compared to others? Figure 5 compares the perceived usefulness of ABC and non-ABC methods to support these decisions. It contains the mean response, on a scale of 0 to 6, to the statement that a given type of costing method supports a given type of decision making.

Figure 5 also shows that, in general, ABC methods provide greater levels of decision support than do non-ABC methods. This improved level of support spans the spectrum of decision making across financial, operational, and strategic areas. Furthermore, ABC methods are better integrated with budgeting and planning processes. All this indicates that companies using ABC feel better equipped to apply their results to management decision support (activity-based management).

Figure 5: Decision Support Comparison: ABC vs. Non-ABC Methods



Product and Customer Profitability Metrics

From a strategic perspective, an essential criterion for any decision support system is the accurate measurement of product and customer profitability. Strategic decisions such as pricing, product and customer mix, and product and customer rationalization are among the most vital to organizational competitiveness. Although product profitability has been the primary focus of management attention for many years, the identification of profitable customers has gained prominence recently. As shown in Figures 6 and 7, regardless of the type of costing method used (ABC versus non-ABC), almost all companies agree that both product and customer profitability should be measured. Whereas most (nearly 60%) ABC methods support both product and customer profitability decisions, most (approximately 60%) non-ABC methods do not.

Support for ABC

The value and usage rate of activity-based costing methods have recently been the subjects of debate among practitioners and academics. Prior surveys indicate that the usage rate of ABC has leveled over the past several years and that questions are being raised as to its value relative to its cost of implementation. In this study we examined the usage rate and relevance of ABC as a cost- and profit-measurement system. Our results are summarized as follows:

- ABC methods are deployed across the internal value chain, and the vast majority of organizations continue to use them.

Figure 6: Customer Profitability Measurement: ABC vs. Non-ABC

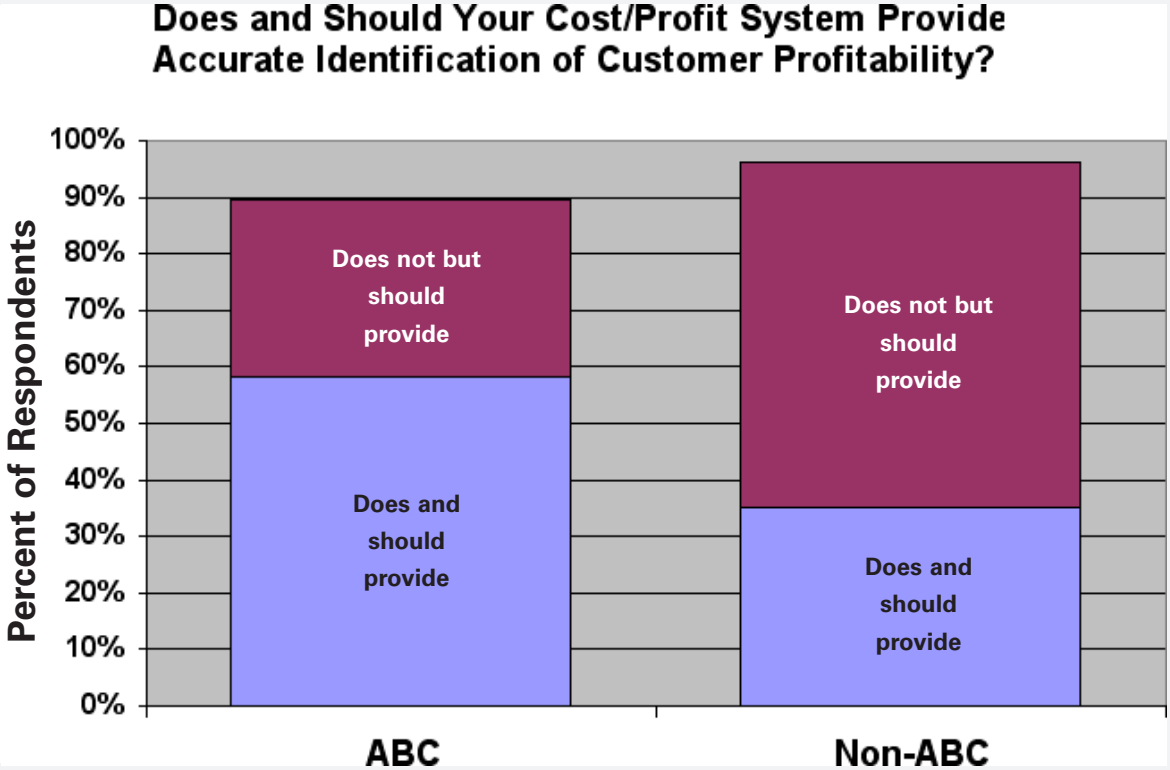
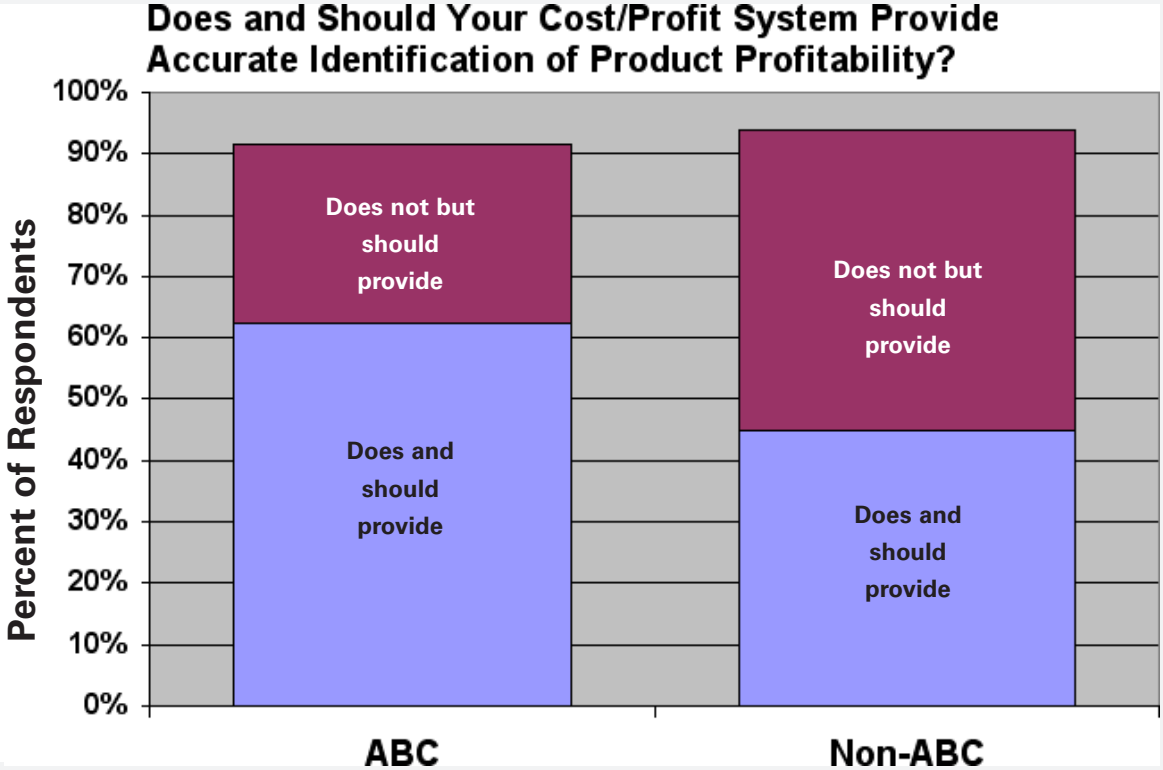


Figure 7: Product Profitability Measurement: ABC vs. Non-ABC



- Managers surveyed believe that accurate overhead allocation and activity cost information is lacking in non-ABC methods, while ABC methods address these needs.
- ABC methods alleviate managers' concerns regarding the accuracy of cost allocations, the cause-effect relationship between allocations and resources consumed, the timeliness of cost/profit information, and the capability to update systems.
- The substantial gap between current usage rates of ABC methods and their desirability in ideal systems may portend increased use.
- ABC methods provide greater support for financial, operational, and strategic decisions.
- ABC methods are better integrated into budget and planning processes.
- ABC methods support strategic product/customer emphasis decisions better than non-ABC methods.

Our results provide ample support for the conclusion that ABC methods do indeed provide significant value to managers. We believe the use of ABC provides companies with superior cost- and profitability-measurement systems. Perhaps it is time for more organizations to take another look at adopting activity-based costing methods? ■

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ENDNOTES

1 Robert S. Kaplan and Steven R. Anderson, "Time-Driven Activity-Based Costing," *Harvard Business Review*, November 2004.
2 "Easier than ABC," *The Economist*, October 23, 2003.
3 Raef Lawson and Toby Hatch, "Executing Strategy with Scorecarding: Best Practices from Around the World," Hyperion 2005 Global Solutions Conference.
4 The other associations included the Association of Chartered Certified Accountants (ACCA), American Institute of Certified Public Accountants (AICPA), Chartered Institute of Management Accountants (CIMA), Society of Management Accountants of Canada (CMA-Canada), CAM-I, Financial Executives International (FEI), and Oracle Corporation.