New Directions for Cost Reporting

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Introduction

Government organizations have made huge investments in better general ledger accounting. These investments include the development of new management information systems; addition and training of staff and consultants; and construction, review, and audit of financial statements.

Some are now seeking a return on these investments. Arguably, the most likely area for return lies in the arena of cost management and control. It is hard to dispute the idea that better accounting information ***should lead*** to better management: improving the efficiency and effectiveness of government operations.

Traditionally, policy setters have added reporting requirements in areas where increased management attention is sought. There seems to be an implicit assumption that organizations will intelligently use the information they report. The purpose of this paper is to list and describe the wide range of design directions possible for cost reporting requirements.

Design Dimensions to be Considered

Many people consider cost to be a simplistic concept. They are, of course, often thinking of the "price tag" on the garment at the department store or the food item at the grocery. While it is true that these are costs to the purchaser, it must be recognized that these are not costs or even cost measurements of the seller. The costs of the seller are undisclosed to the consumer and, for the most part, something less than the "price tag."

Cost measurement can be a complex and diverse undertaking and is a fundamental piece of an accounting major's curriculum. The typical accounting major first sees cost accounting in a sophomore level "fundamentals" course and must take a dedicated cost accounting course as a junior. This cost accounting course typically counts as the same number of credits as tax accounting or auditing courses. Advanced cost accounting and/or managerial accounting courses are often offered as electives for those who have completed the cost accounting prerequisite.

The rich diversity of cost accounting results from its multi-use nature. In addition to being a component of strictly defined external reporting, a wide variety of cost measures provide useful management insights helpful in improving organization performance.

Cost accounting's diversity poses a number of critical design issues for those considering added cost reporting requirements in government organizations. There are a number of design issues in cost reporting to be considered. These issues include frequency, scope, flavor, strategic view, fullness, and auditability. The wide range of choices makes specification of cost reporting requirements an important and challenging undertaking.

Frequency of Cost Reporting Considerations

If cost reports were issued every ten years they would be more of a historical record than a useful management tool. On the other extreme, cost reports issued every ten minutes would cost a lot and would probably provide masses of data of minimal use in most organizations. It is likely that the right degree of frequency lies somewhere in between these two extremes.

Annual reporting has limited cost management value. The cycle is simply too long to provide much process control feedback. It is hard to go back over a year's worth of activity to determine what caused the numbers to change in the way they did. The causes may well be moot a year after the fact. Furthermore, significant numbers of the accountable managers may have changed jobs or left the organization.

Some organizations might find quarterly cost reporting sufficient. Others might value monthly or weekly reporting. Cost reporting requirements will need to specify a minimum reporting frequency.

Cost Scope Considerations

Cost management ***is not*** limited to the most senior executives of the organization. In fact, it is likely that the vast majority of cost management's value will be found deep within the organization.

Large government agencies have many components and subcomponents and even some of the third and fourth level subcomponents would be large companies if they were in the private sector. If each node on the org chart managed five sub organizations the total number of lowest level reporting sub organizations would be 5 to the "n - 1" power with "n" representing the number of that lowest level. The table below illustrates how fast the total number of reporting organizations builds as deeper levels of reporting are required.

Depth in Levels	Orgs at Lowest Level	Total Number of Reporting Orgs
1	1	1
2	5	6
3	25	31
4	125	156
5	625	781

For example, an agency with four levels (each having five sub organizations) would find 125 sub organizations at the fourth level, 25 at the third level, and five at the second in addition to the agency itself. If each were required to comply with cost reporting requirements there would then be 156 total reports required.

Cost reporting policy seeking to stimulate better management decision making must inform levels below agency level. Moreover, some agency level reporting already exists in annual reports. Reporting policy must then consider scope: the depth into the organization where reporting is required.

Cost Flavor Considerations

Another complication in defining cost reporting requirements will be the number of different types of cost measurements possible. Consider the index of a popular cost accounting textbook.[1] It lists the following

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[1] Horngren, Charles; Datar, Srikant: Foster, George; Cost Accounting: A Managerial Emphasis; Twelfth Edition, Prentice Hall, Saddlebrook, New Jersey

variations of cost: actual, appraisal, average, budgeted, carrying, controllable, conversion, defined, differential, discretionary, engineered, external failure, facility-sustaining, fixed, incremental, indirect, infrastructure, internal failure, manufacturing, non-manufacturing, ordering, prevention, prime, procurement, product-sustaining, purchasing, quality, relevant, service-sustaining, standard, stockout, sunk, supervision, unit, and variable. This list is not all inclusive. Some have likened the choices as similar to the multiple flavors of ice cream that one might choose from.

All of these different “flavors” of cost measurement exist because each offers some useful insight relevant to a particular management driven need for information. Some of the flavors represent slight variations or refinements. For example, unit cost is an average cost where the denominator is output based and can be useful in those organizations with well defined and easy to measure outputs.

Some support specific analyses and management considerations. For example, an understanding of costs that are fixed and variable relative to output enables breakeven analysis. Likewise, incremental costs support an understanding of the dynamics of output expansion or contraction showing how much less the cost of incremental capacity is when compared to average cost.

The difference between incurred costs and standard costs yields performance and volume variances, rate and efficiency variances, and other more complex variances dealing with the absorption of fixed costs. These variances are often used to question and explain performance.

Indirect and direct costs are useful in understanding the relative resource consumption between core line functions and support staff functions. Inventoriable costs are useful in manufacturing environments where accrual accounting techniques recognize certain costs only when output is shipped. Opportunity costs and sunk costs are often used in evaluating long term cost tradeoffs. Internal and external failure costs are useful components of cost of quality measurement.

These and the other less used and more specialized cost measurement “flavors” exist because they support management decision making: ostensibly the same goal of cost reporting requirements. It is probably safe to say that no organization measures all of these “flavors.” Mandated cost reporting must choose the most meaningful “flavor” or “flavors” to be reported.

Strategic Cost View Considerations

It is also the case that numerous different overarching or strategic views of cost are possible. Activity based costing, for example, seeks to develop a cost view of the activities that an organization performs. Its range of options in defining activities for measurement is extremely large. For example, any government agency could be viewed as a single activity to accomplish its mission statement. On the other hand, each individual employee in the organization could be viewed as having numerous activities.

Other commonly useful strategic views of cost might be based on role, organizational entity, or output. Role based views of cost add value by defining the costs of organizations in the support role and allocating them to the consuming line organizations. Organizational views of cost, sometimes called responsibility accounting, take advantage of the organization chart’s explicit accountability hierarchy. Output based views of cost help with identification of non value added work and can also be critically important in the development of cost based user fees.

Some organizations will value a project costing view that supports their needs for earned value management processes. Others might find a process accounting view more useful based on the nature of their work. Mandated cost reporting requirements will seek to find a “common denominator” of usefulness that will not preclude the development of more organization specific cost accounting strategic views.

Cost Fullness Considerations

It seems that “full” cost is a popular notion these days. Perhaps it appears to some that cost reporting of anything less than “full” cost represents a misleading understatement. On the other hand, it should be clear that “full” cost may be an impossible abstraction.

For example, economists often cite “externalities:” costs outside of an organization and even its external reporting requirements. Furthermore, it should be clear that truly full costs of any government operation must include the costs of legislative functions that provide funding and oversight functions as well as cost of the executive offices (like the Executive Office of the President), pension liabilities, purchasing organizations (like the General Services Administration), and human resource organizations (like the Office of Personal Management).

Consider, for example, the Secret Service. The portion of its cost attributable to protecting the President would have to be allocated to the Executive Office of the President. The Executive Office of the President would then have to allocate its "full" cost to all other federal agencies that benefit from the Office.

This raises interesting theoretical questions. The Navy and Coast Guard have done an excellent job of curbing piracy. Should the relevant costs be allocated to the Commerce Department? Should some or all of the cost of the Department of Homeland Security be considered part of the "full" cost of Commerce, Transportation, Health and Human Services, etc?

Support interactions between support functions can lead to further complications in pursuit of theoretical fullness precision. Consider, for example, that the General Services Administration "uses" some of the resources from the Office of Personnel Management and at the same time the Office of Personnel Management "uses" buildings and contract services support from the General Services Administration. Similar support-to-support issues occur within any organization with support functions.

These questions, while interesting, may confound the issue of cost management but do illustrate the conceptual difficulties of requiring "full" cost. Cost reporting policy will need to bound reporting requirements in the fullness dimension.

Cost Auditability

It is likely that some degree of assurance will be required on cost reporting. Cost accounting auditing requires cost accounting standards. Cost reporting requirements that specify views and flavors may require extensive development of standards. The effort required to develop standards and to audit cost reporting will increase proportionately with the degree of detail required.

In many cases, however, standards will not provide definitive assurance. This is because cost building techniques like allocation rely on assumptions for cost drivers and their resulting allocation bases and cost distributions. Assumptions can always be questioned for reasonableness, and it should be clear that it is impossible to measure support cost consumption, for example, to the same degree of accuracy as expected in general ledger accounting.

It is also likely that standardization of measurement technique reduces management usefulness: defeating the goal of the process. See Geiger (1994)[2] for more discussion on the tradeoffs between comparable consistency and relevant customization.

Any cost accounting procedure, even the most useful, can be extensively criticized. Cost reporting policy should consider the degree to which cost reporting should be audited.

Discussion: Costs of Cost Reporting Versus Benefits of Cost Reporting

It can be argued that all accounting information adds value. However, management accounting only makes sense if the benefits from increased accounting exceed the costs of increased accounting.

Even very limited cost reporting requirements are likely to incur significant measurement costs. This is problematic if the goal of requiring increased cost reporting is to improve efficiency and effectiveness. It doesn't make a lot of sense to spend more for cost reporting than the organization benefits from that reporting: especially if seeking a return on accounting investment.

Geiger (2001)[3] postulated that managerial usefulness, technical credibility, and overall affordability were required for successful managerial costing.

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[2] Geiger, Dale R, "Tradeoffs Between Comparable Consistency and Relevant Customization in Federal Management Accounting," The Government Accountants Journal, Summer 1994, Volume XLIII, No. 2.

[3] Geiger, Dale R., "Practical Issues in Avoiding Pitfalls in Managerial Costing Implementation," (fifth in series) The Journal of Government Financial Management,

These attributes can be visualized as forming a cost benefit tradeoff. The cost expenditure to measure cost must provide credible information whose usefulness generates organization benefits. Figure 1 portrays a balance of the costs of measurement and the benefits from use over a foundation of credibility.

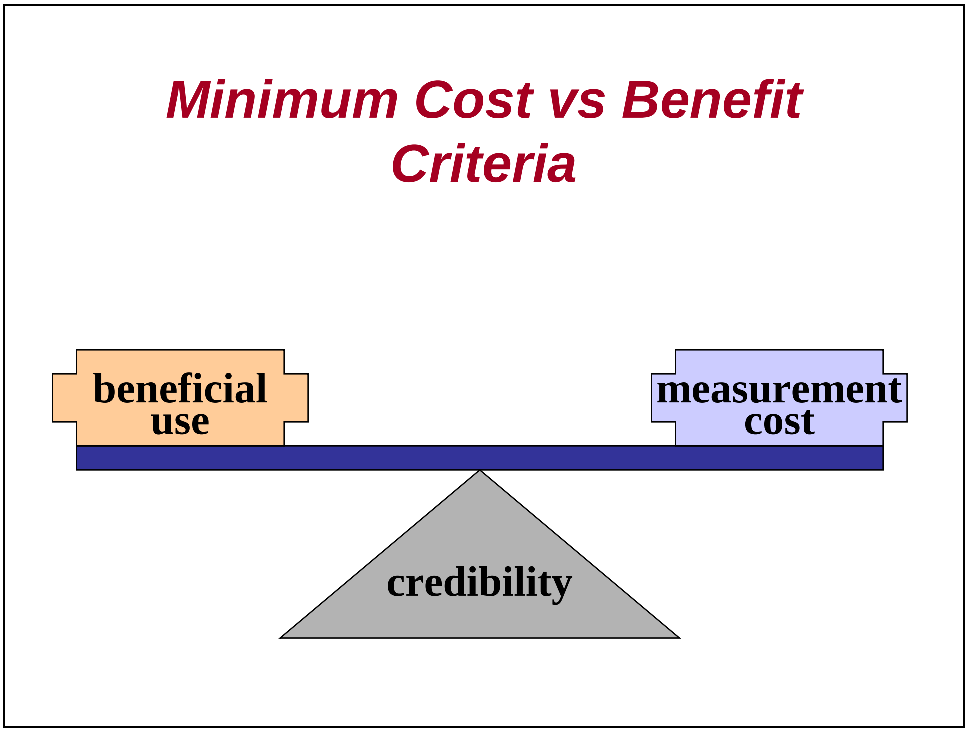

Figure 1 Cost benefit considerations demand that the cost of cost measurement be at least balanced by the beneficial use of that information.

Conclusions

Maximizing the value of accounting's return on investment suggests two simultaneous strategies. One is to limit the cost of required cost measurement and reporting. The second is to maximize the usefulness, usability, and ultimately the use of cost information by accountable managers in order to generate the benefits required by an attractive cost benefit balance.

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There is theoretically no limit to the cost of cost measurement. Measurements can always be done in greater detail, in multiple views, with multiple flavors, at greater depths in the organization, at greater frequency, and with varying degrees of fullness. The cost of reporting even a small subset of possible combinations and permutations could be enormous.

Costs of cost reporting would include cost accounting system development as well as ongoing maintenance. Cost accounting staffs would be needed as well as potentially significant amounts of management time. Furthermore, the costs of the oversight and management control processes could also be great and should be considered in the cost benefit calculus.

As stated earlier, it is commonly thought that better information ***should lead*** to better cost management. Perhaps it is more accurate to say that better cost information ***could lead*** to better cost management. The distinction is due to the fact that information merely informs and that only management manages.

Carefully limiting the costs of mandatory cost reporting will prove to be challenging. However, it may prove to be easy compared to the difficulty of motivating management in the beneficial use of the information. The popular public image of government management is that "beancounters" make all the decisions and that generally they don't do it well. The reality is that accountants are simply information gatherers and that beneficial use of cost information can only come from aggressive, accountable managers.