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Towards The Development of An Integrated Financial Management System

Blue Wooldridge

In order for a financial management system to better meet the needs of policy makers, program managers, front-line supervisors and other users there must be greater compatibility between the budgeting, accounting, and auditing components of the system. Each of these should be supportive of, and in turn be supported by, the other major components. The resultant integrated system of financial management would be responsive to increased demands for greater efficiency, effectiveness, and accountability in public sector programs.

The importance of this topic was stressed at a 1978 national conference titled the Financial Management Needs of Local Government, sponsored by HUD's Office of Policy Development and Research. Participants in the conference included representatives of virtually all of the major national public interest groups representing local officials.

At the conference, participants set priorities on the needs they felt to be most critical to local fiscal management. Ranked second among all of the issues listed by the conference was the need to integrate local budgeting, accounting, performance measurement, and auditing. The need for better forecasting of revenues and expenditures was the only issue that outranked fiscal integration. The conference report went on to say:

The basic problem revolves around the fact that budget accounting and performance functions in local governments are not sufficiently integrated. Each function of local government produces one piece of the financial system, but frequently there is no connection between the pieces. The result is that top elected and appointed officials cannot determine actual program costs, the department and employee performance, and how these are related to the service provided and their impact on the community. Personnel in these functions don't 'talk' to each other.¹

This recognition has led to a new concept making the rounds in public administration/public finance—Integrated Financial Management Systems. This type of system could be defined as the complete, harmonious, and coordinated process of designing, implementing, and evaluating those policies and practices that deal with the raising, storage, and use of money. The purpose of this paper is to develop a conceptual framework that will assist in the designing of integrated financial management systems.

The Municipal Finance Officers Association (MFOA) suggests that a financial management
system consist of nine components: budgeting, accounting, auditing, treasury and cash management, debt management, public pension fund management, local fiscal policy, performance evaluation, and intergovernmental fiscal relations. Since a major focus of integrated financial management systems is the tying together of budgeting, accounting, and auditing, emphasis will be placed on these three components.

In talking about a complete, harmonious, and coordinated financial management system (FMS) this author finds it useful to talk about integration taking place along two separate dimensions. The first dimension concerns integration within each component: that there should be intra-component integration. The second is inter-component integration: that is, integration among the components. This paper will suggest how this two-dimensional integration can be developed.

First we need to define the common link, the thread that will serve to integrate the financial management components of budgeting, accounting, and auditing as well as provide insight into organizational performance. This author suggests that the integrating link will be the selection and presentation of appropriate information. That is, an integrated FMS will exist when appropriate information is identified within each component and each component is designed to track and report on this information throughout the Financial Management System.

In order to discuss inter- and intra-component integration, however, a more detailed discussion is needed on each of the three relevant components of a financial management system: the budgeting component, the accounting component, and the auditing component.

Budgeting

There are probably no activities that take up the time of the elected and appointed officials of any local government that are more important than those involved with the budget process. A recent MFPOA resource paper stated that "the budgeting process represents the heart of local government financial management." (underline mine)

Too many individuals, unfortunately including many public officials, consider the purpose of a budget to be the presentation of a list of proposed expenditures and the required revenues. As we shall see, however, the purposes of budgets can be as varied as the purposes of individuals. These purposes of budgets will serve as the criteria for the selection and presentation of the information, i.e., the thread, that will make our integrated financial management system work.

Writers have identified many different purposes sought by public officials and the citizens that budgets can serve. These include serving as a contract, a management tool, a vehicle for communication, a control mechanism, a planning, an instrument of democracy, and the major policy-making tool of the jurisdiction.

A budget format contributes to a given purpose by the type of information that is identified in the budgeting process and the budget document, the way in which this information is presented, and the emphasis that is placed on this information. In other words, budgets can be classified according to what type of information is presented and how expenditures are aggregated.

It is also possible to relate the four "pure" forms of public budgeting—line item, performance, program (PPBS) and zero-based—to these purposes.

Each of the four "pure" types of budget formats focuses on different types of information and presents this information in a unique way. Line item budgets, for example, focus on input measures (indicators of resources consumed) and aggregates this data by objects of expenditure within organizational sub-units. The performance

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budget presents information grouped by activities and tasks also within organizational sub units and emphasizes output measures (volume of goods or services produced or of work to be done) and efficiency measures (usually expressed in unit cost estimates).

Information in a program budget quite naturally is aggregated by "program" (grouped according to the goal to which it relates). Great stress is placed in program budgeting on the identification of appropriate impact measures (measures of effectiveness and benefit measures). Finally, information in zero-based budgeting is aggregated by decision units which usually include input, output, efficiency, and more rarely impact measures.

The relationship between fundamental purpose of budgets, the "pure" formats and the information each format emphasizes is summarized in the table below.

<table>
<thead>
<tr>
<th>Budgetary Purposes</th>
<th>Budget Format</th>
<th>Focuses Mainly On these Programs Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Line item: object expenditure</td>
<td>Input</td>
</tr>
<tr>
<td>Communication:</td>
<td></td>
<td>Efficiency</td>
</tr>
<tr>
<td>- tells how many and how much resources will be utilized</td>
<td>Performance</td>
<td>Output</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- workload</td>
</tr>
<tr>
<td>- lets citizens know what products they will receive and the relative efficiency of their government</td>
<td></td>
<td>- product</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td>- program size</td>
</tr>
<tr>
<td>- provides information that allows manager to assess efficiency of their agency</td>
<td>Program/PPBS</td>
<td>Impact</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td>- measures of effectiveness</td>
</tr>
<tr>
<td>- shown basis of estimation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- provides information as to what is being produced</td>
</tr>
<tr>
<td>Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- shows the goals and objectives to be achieved</td>
<td>Zero-base</td>
<td>Output</td>
</tr>
<tr>
<td>Policy</td>
<td></td>
<td>- product</td>
</tr>
<tr>
<td>- allows choice between different policy goals and between alternative means of reaching these goals</td>
<td></td>
<td>- costs</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td>- perhaps impact</td>
</tr>
<tr>
<td>- shows the purpose of expenditures, the policies and priorities of the government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- lets citizens see what objectives are achieved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- allows choices between different levels of output associated with each funding level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the previous discussion, it should be obvious that different kinds of budgets serve different purposes depending on their orientation, the information they contain, and how it is presented. A Financial Management System that is integrated within the budgeting component should contain information that will contribute to as many different purposes of budgets as possible. This belief leads us to propose a fifth type of budget format, the comprehensive budget, which combines the strong points of each of the previous formats into what we feel is a useful and workable format.

The Comprehensive Budget. The basis of the comprehensive budget is a program structure in which resources are grouped by program and the
programs are ranked vertically depending on the priority given to each of the community's strategic goals and objectives. Different alternatives for achieving each objective are presented as well as the decision packages to facilitate a comparison of different funding levels for each chosen alternative. In this way, different alternatives and different levels of funding for each alternative can be coordinated in an overall plan in the budget to achieve the community's stated objectives and goals.

The comprehensive budget can be used as a management tool because it contains elements of performance budgets: output, workload, and efficiency measures. It also contains line item allocations by program which provides the element of control.

We envision that the comprehensive budget would make use of all of the different types of program measures. It would utilize input measures for control purposes, process/efficiency measures in the determination of program estimation and assessment of agency performance, output measures to demonstrate what the agency produces, and impact measures to demonstrate the results of program efforts. This concept is summarized below:

<table>
<thead>
<tr>
<th>Budgeting Purposes</th>
<th>Budget Format</th>
<th>Focuses Mainly On These Program Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Management</td>
<td>Communication Contract</td>
<td>Input Output</td>
</tr>
<tr>
<td>Planning Policy</td>
<td>Instrument of Democracy</td>
<td>—workload —product Impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>—measures of effectiveness</td>
</tr>
</tbody>
</table>

A single budget document can integrate the characteristics of the different budget types, and thus contribute towards several purposes. The City of Lakewood, Colorado, stated in a recent annual budget document:

The new Annual Budget for 1976 is classified as a program-performance budget. This technique of budgeting is new but is based on proven principles of business administration. The principles of program budgeting have been consolidated in one process in order to take advantage of the strengths of each different approach.

Other jurisdictions such as Downer Groves, Illinois; Iowa City, Iowa; Palo Alto, California; and Plain Field, New Jersey, report the development of budgeting systems that are composites. They contain elements of line item, performance, program, and zero-base budgeting. For example, Palo Alto prepares goals, objectives, and performance measures as part of the annual budget process. Iowa City's budget contains goals and objectives set by the city council and the departments. The budget is presented in terms of service levels which include a description of the program to be funded and its performance measures.

Assuming those descriptions are accurate, it would appear that at least several jurisdictions have successfully produced a budgeting system that meets the characteristics of intra-component integration.

Since this paper takes as given the statement that the budget is the heart of the financial management system, the first step in developing an Integrated Financial Management System would be a detailed analysis of the existing budget and budget development procedure. Modification should be made to the existing document to ensure that it includes adequate information presented in a manner to respond to the purposes of its users.

**Accounting**

The Municipal Finance Officers Association suggests that accounting is the process of keeping financial records in order to provide information needed for management, accountability, and the status of financial condition. Accounting is important to local officials for three significant reasons. First, accounting can provide local...
cials with a high level of confidence that local
government resources are being properly used.
Through sound accounting procedures (and per-
iodic audits), assurance is gained that the resources
of the local jurisdiction are properly used. Sec-
ond, and perhaps more important from the stand-
point of management, accounting reports can
provide local officials with the information they
need to evaluate local government performance
and to plan for future action. Last, the process
provides data about the flows of income and
expenditure and balances of assets and debts
needed for reporting the solvency of the unit.
A discussion of an accounting system can also
describe the purposes (needs of users) to which
it must respond and the different types of
accounting systems. The fact that financial
accounting systems need to be responsive to the
needs of their users is well documented by an
article in Government Finance by Robert N.
Anthony. Anthony writes, “Financial account-
ing reports exist to meet the needs of users, thus
the obvious first two steps in developing financial
accounting concepts are to answer the questions:
(1) who are the principal classes who use the
financial accounting report, and (2) what informa-
tion do those users need that can be met by
such reports.”
Anthony suggests that there are five classes of
users: the governing bodies, investors and credi-
tors, resource providers, oversight bodies, and
constituents. He indicates that each of these groups
have specific informational needs that can be met
through the financial accounting system. These
needs appear to fall into four major types. The
first of these is financial viability; the second,
fiscal compliance; thirdly, management perfor-
mane; and finally, cost of service provided.

1. Financial viability. Financial accounting
users need information that indicates the or-
ganization’s ability to continue to provide the
services for which it exists.

2. Fiscal compliance. The management of a
non-business organization ordinarily must com-
ply with a number of spending mandates. Some
of these are legally prescribed by external parties
e.g., by appropriation, by condition of grants).
Users want assurances that these mandates have
been complied with and that resources have been
used for the intended purposes. This seems to be
the predominant purpose of financial reports cur-
rently prepared by many non-business organi-
zations.

3. Management performance. Management’s
responsibility is greater than merely complying
with the rules. Management is fundamentally
responsible for spending money wisely. Users
are interested in how efficiently and economi-
cally the money was spent. The “stewardship”
can be reflected through the accounting system.

4. Cost of service provided. In most organi-
izations the amount of spending for various pro-
grams is important information. Users want to
know how much a recreation program costs, how
much of a program’s budget spent on administra-
tion as compared to the costs of services deliv-
ered.
Anthony says that another potential use of
financial accounting information, that of goal
attainment, is extremely important. However, he
concludes, that at the present state of the art it
is not possible in many organizations to devise
measurement of the degree of attainment. While
recognizing that it is highly presumptuous to dis-
agree with one who makes so many contributions
to this field, this author feels that if one links a
discussion of specific program objectives and the
corresponding measures of effectiveness and data
source described by Haity, the task of identifying
and tracking progress towards goal attainment
is possible.

Accepting that there are at least five (5) pos-
sible purposes an accounting system can serve,
a review of the literature suggests that there are
at least three types of accounting. An accounting
system that provides the means for accumulating
and reporting financial data and information within
a defined fund structure in compliance with legal
requirements and Governmental Accounting,
Auditing and Financial Reporting, could be re-
ferred to as Financial Accounting. Management
Accounting (Moak and Hillhouse) would focus
on performance standards and unit pro-
gram costs, and Kenneth Caldwell’s Program
Accounting would provide a means for accumu-
lating program costs and information needed for
planning and evaluating the government pro-
grams. The relationship among the purposes an
accounting system can serve, the types of
accounting available, and the categories of infor-
mation each type tracks, is shown below:
Accounting Systems

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Type of Accounting</th>
<th>Program Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial viability</td>
<td>Financial Accounting (Caldwell)</td>
<td>Input</td>
</tr>
<tr>
<td>Financial compliance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management performance</td>
<td>Management Accounting (Moak &amp; Hillhouse)</td>
<td>Output Efficiency</td>
</tr>
<tr>
<td>Cost of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal attainment</td>
<td>Program Accounting (Caldwell)</td>
<td>Impact</td>
</tr>
<tr>
<td>All of the above</td>
<td>Integrating Financial Management &amp; Program Information System</td>
<td>Input Efficiency, Output Impact</td>
</tr>
</tbody>
</table>

Thus, it has been shown that an accounting system can also serve many purposes. It should meet the informational needs of its users as identified by Anthony and should be integrated with the basic budget format as suggested by Kenneth Caldwell.

The need for the design of an accounting system that meets the needs of the policy-makers and the operating managers is not new to the public finance profession. In an article entitled "A Multi-Purpose Budgeting and Accounting for Government," E. Reece Harrell wrote, "To be truly effective, any information system must serve all levels of management and operations." Again, as the publication Current Approaches to Financial Management: A Directory of Practices points out, several jurisdictions have developed systems with features that respond to several of the uses of financial accounting information. For example, the City of Anaheim, California, as part of its Municipal Financial Information System, has a general ledger system which provides management data for evaluating performance based on program planning and modified zero-base budgeting techniques. This evaluation can be applied to dollars appropriated and expended, hours allocated and expended and the unit cost of services provided. It would appear that Anaheim has at least achieved an FMIS that has integrated the characteristics of the financial and management accounting systems.

To bring about integration within the accounting component we obviously need an information system that tracks and reports on financial viability, compliance, management performance, cost of service, and goal attainment. Only this integrated information system meets the needs of all of its intended users and responds adequately to the full range of purposes of accounting. Once we have recognized the possibility of an internal component integrated accounting system, we must design this system to reflect the information present in the budget process. The need to make the accounting system compatible to the budget system is the focus of Caldwell's article.

Now that we have developed a process for linking the budgeting and the accounting components of the financial management system, the last component, Auditing, will be discussed.

Auditing

Auditing performs an appraisal of financial activity. It examines the adequacy of internal control, verifies and safeguards assets, checks on the reliability of the accounting and reporting system, ascertains compliance with established policies and procedures, and appraises the performance of activities and work programs. Auditing is a significant part of the financial management process and is essential for ensuring the accuracy and reliability of financial information.
may be performed internally on an ongoing basis to keep a check on process and performance. It may also be performed by independent public accountants to give an outside opinion about the operations and condition of the unit.12

Historically, in local government the audit function has been largely restricted to ascertaining that the balance sheet represents a proper statement of the government's financial condition, a determination that money received has been properly recorded and deposited to the government's accounts, and that expenditures made are in accordance with authorizations under state law, local ordinances, and directives which govern the use of funds.

Some students of public finance believe that the post-audit function needs to be extended to include management issues and an assessment of program results.

This full scope audit of a governmental program, function, activity, or organization would encompass:

a. An examination of financial transactions, accounts and reports, including an evaluation of compliance with applicable laws and regulations.

b. A review of efficiency and economy to include inquiry into whether, in carrying out its responsibilities, the audited entity is giving due consideration to conservation of its resources and minimum expenditure of effort.

c. A review to determine whether desired results are effectively achieved.19

These three types of auditing, financial and legal compliance, efficiency and economy, and program effectiveness, each have their own data base and management information needs.

Financial and Legal Compliance. In order to determine if the audited entity is maintaining effective control of expenditures information would be required on the amount of appropriation for each specific item. This information, of course, can be found in a line item budget. A financial reporting system would provide a means for accumulating and reporting financial data in compliance with legal requirements and thus support the financial and legal compliance audit.

Economy and Efficiency. In order to determine if the audited entity is giving due consideration to conservation of its resources and minimum expenditure of effort, the workload and standard cost program measures, as identified in a performance budget are required. A managerial accounting system would be necessary for accumulating the performance information required for this type of assessment.

Program Effectiveness. If an assessment is to be made as to whether desired results are effectively achieved, the desired results first must have been articulated. This identification is carried out in program and ZBB program budget. A program accounting system would be required in order to accumulate information on degree of, and cost of, goal attainment.

An audited system that focuses on the efficiency and economy and program effectiveness components is usually referred to as a performance audit. Whereas an audit that is full scoped, that is, includes the activities of both the financial and legal compliance audit and the performance audit, will be referred to in this paper as a comprehensive audit.

Two major cities that appear to integrate the purposes of financial and legal compliance and performance auditing into an audit system that is comprehensive are Seattle and Dallas.

The relationship between the types of audits and their informational needs is shown below:

<table>
<thead>
<tr>
<th>Auditing System</th>
<th>Program Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial and Legal Compliance</td>
<td>Input</td>
</tr>
<tr>
<td>Economy and Efficiency</td>
<td>Output Efficiency</td>
</tr>
<tr>
<td>Program Effectiveness</td>
<td>Impact</td>
</tr>
<tr>
<td>Comprehensive Audit System</td>
<td>Input Efficiency</td>
</tr>
<tr>
<td></td>
<td>Output Impact</td>
</tr>
</tbody>
</table>

Summary and Conclusion

It would appear that the various separate elements, at least in some versions of an integrated financial management system, are in place in local governments.

What is needed is a "link-up" between an integrated budget system as practiced by Downer Grove, Iowa City, etc., with the integrated accounting system used by Anaheim and the Comprehensive Audit System of Seattle and Dal-

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las. In all probability, each of the jurisdictions are already starting this expansion.

What would an integrated system do for public officials and the citizens? A system that linked the accounting component to the budgeting would not only allow the users to track the rate of consumption of resources but also the rate of production of intended goods and services. Not only would the users be able to compare the actual performance against the planned performance and have the data necessary to compare the performance of their organization with others, they would also be able to monitor actual progress towards goal attainment against projected progress. Tying a comprehensive audit system to these two components would allow an assessment of financial and legal compliance, economical behavior and efficiency, and above all program effectiveness.

Public officials work in an environment that increasingly calls for greater efficiency and accountability. An integrated financial management system would not only assist them in responding to these demands, but would provide the information base to build public acceptance of and appreciation for governmental programs.

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11. Caldwell, "The Accounting Aspects . . .".
12. "Introduction to the Elements . . ." MFOA.