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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 conferees 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 government 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.*

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 intergovernment fiscal relations.<sup>2</sup> 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 MFOA resource paper stated that "the budgeting process represents the heart of local government financial management."<sup>3</sup> (underlining 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 expenditures 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 iden-

tification 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.

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

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 effi-

ciency 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:

Budgeting Purposes		Budget Format	Focuses Mainly On These Program Measures	
<i>Control</i>	<i>Communication</i>	<i>Comprehensive</i>	<i>Input</i>	<i>Output</i>
<i>Management</i>	<i>Contract</i>		<i>Efficiency</i>	—workload
<i>Planning</i>	<i>Instrument of</i>			—product
<i>Policy</i>	<i>Democracy</i>			<i>Impact</i>
				—measures of effectiveness

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-components* 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 out-

cials with a high level of confidence that local government resources are being properly used. Through sound accounting procedures (and periodic audits), assurance is gained that the resources of the local jurisdiction are properly used. Second, and perhaps more important from the standpoint 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 accounting 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 information do those users need that can be met by such reports."<sup>3</sup>

Anthony suggests that there are five classes of users: the *governing bodies, investors and creditors, 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 performance*; and finally, *cost of service provided*.

1. *Financial viability*. Financial accounting users need information that indicates the organization's ability to continue to provide the services for which it exists.

2. *Fiscal compliance*. The management of a non-business organization ordinarily must comply 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 organizations.

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 economically the money was spent. The "stewardship" can be reflected through the accounting system.

4. *Cost of service provided*. In most organizations the amount of spending for various programs is important information. Users want to know how much a recreation program costs, how much of a program's budget spent on administration as compared to the costs of services delivered.

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 disagree 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 Hatry, the task of identifying and tracking progress towards *goal attainment* is possible.<sup>4</sup>

Accepting that there are at least five (5) possible 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 referred to as *Financial Accounting*.<sup>5</sup> *Management Accounting* (Moak and Hillhouse) would focus on performance standards and unit program costs,<sup>6</sup> and Kenneth Caldwell's *Program Accounting* would provide a means for accumulating program costs and information needed for planning and evaluating the government programs.<sup>7</sup> The relationship among the purposes an accounting system can serve, the types of accounting available, and the categories of information each type tracks, is shown below:

### Accounting Systems

<i>Purpose</i>	<i>Type of Accounting</i>	<i>Program Measures</i>
Financial viability Financial compliance	Financial (Caldwell)	Input
Management performance Cost of service	Management Accounting (Moak & Hillhouse)	Output Efficiency
Goal attainment	Program Accounting (Caldwell)	Impact
All of the above	Integrating Financial Management & Program Information System	Input Efficiency Output Impact

Thus, it has been shown that an accounting system can also serve many purposes. It should meet the informational needs of the 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 Hamill 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 intracomponent 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

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.<sup>12</sup>

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.<sup>13</sup>

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 scope, 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:

Auditing System	Program Measures
Financial and Legal Compliance	Input
Economy and Efficiency	Output Efficiency
Program Effectiveness	Impact
Comprehensive Audit System	Input Efficiency Output Impact

## 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-



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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6. Harry Harry, etc., *How Effective Are Your Community Services?* (Washington D.C.: The Urban Institute, 1977).
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