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BRUCE MICHELSON

## Auditing Financial Operations— A Systems Approach

*This article discusses a systems approach to auditing financial management operations and focuses on the procedures involved in obtaining, processing, recording, and reporting financial information.*

One of the primary purposes of auditing financial operations is to determine if the financial reports of an organization are reliable. In the past the auditor was able to focus attention on the financial reports, examine internal controls relating to line items on the reports, test a number of transactions, and gain confidence as to the reliability of the reports. However, since the processing of tremendous volumes of transactions has become commonplace in financial operations, the auditor has been forced to place greater reliance on the systems that generate financial information. Specifically, the auditor has had to direct attention to the procedures involved in obtaining, processing, and recording financial data from the point of initiation of a transaction until final disposition in a report.

Recognizing the need to emphasize processing systems and the necessity for innovative audit techniques, the Wash-

ington regional office has implemented a systems-based approach to review the major activities of an organization, such as purchasing, selling, or production, which have a direct effect on the financial reports.

### The Systems Approach

Systems are made up of sets of components that work together for the overall objective of the whole. The systems approach is simply a way of thinking about total systems and their components. Activities with financial significance have as an objective: the purchase of an asset or service, the sale of an asset or service, the production of an asset, the payment of employees, the issuance of a grant of subsidy, or the processing of a claim or default. For convenience, let's call the systems used to carry out these activities the buying system, selling system, production system, etc.

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Within each system financial data must flow through a set of related functions and be recorded in similar accounts. For example, within the buying system (e.g., purchase of inventory, fixed assets, services, supplies, investments, home mortgages, etc.) data generally flows through such functions as (1) establishing authority to purchase, (2) ordering, (3) receiving, (4) paying, and (5) recording. Accounts affected as a result of buying activity would normally include the specific asset account, accounts payable or other payables, and cash.

In this approach, the auditor evaluates the procedures in effect in each system and each function within the system. This evaluation is done to determine if the procedures provide adequate controls so that the system can be relied upon to produce reliable financial information, hence reliable financial reports. Because of the complexity of these systems, the auditor's effort is separated into two parts: the study of the system and the evaluation of the system.

### Study of the System

The study of the system is divided into three segments: (1) obtaining an understanding, (2) recording the understanding, and (3) confirming the understanding. During this study the auditor will also make a judgment as to whether the system itself is auditable.

#### Obtaining and Recording an Understanding

A detailed understanding of the system is required. Sources of information to obtain an understanding include: in-

terviews, location tours, review of accounting and procedure manuals and memorandums, and review of other documents, such as flow charts, and regulations.

Recording the understanding is accomplished through narrative writing, schedules, flow charts, or any combination of the three. The method used in the Washington regional office is the flow chart. The purpose of recording the understanding is that it: (1) serves as a communication vehicle among audit personnel, (2) aids in analyzing practices, (3) provides evidence for weaknesses to be disclosed in reports, and (4) provides a basis for reviewing system changes.

Regardless of which method is used to record the understanding, it must (1) describe the major functions within the system, (2) identify significant controls, (3) describe the initiation, processing, and ultimate disposition of important forms and documents, and (4) identify and describe the preparation and maintenance of journals, ledgers, and reports.

#### Confirming the Understanding

Confirming the understanding is accomplished by tracing a limited number of transactions through the system from origin to ultimate disposition in the accounts. Tracing transactions from beginning to end allows the auditor to verify that the flow of transactions and the operation of controls within each function in the system are consistent with the understanding as recorded. For example, in the buying system for inventory, the auditor will trace transactions through the authorizing, ordering, receiving, paying and recording functions.

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He or she will review such documents as purchase requests, purchase orders, receiving reports and payment vouchers, and review purchase journal or general journal entries. Information contained in these documents and journals will provide evidence to the auditor that the process and the controls were followed as recorded and that journal entries are consistent with the recorded understanding.

During the study, the auditor may be able to obtain, record, and confirm the understanding simultaneously, depending upon the system under review and the experience of the auditor. Using the buying system as an example, the auditor can obtain the understanding of the authorizing and ordering functions, select a transaction recently completed, and verify that the transaction is processed in accordance with the understanding. While verifying that the transaction is processed according to the understanding, the auditor can record the process.

### Auditability of the System

As the auditor proceeds through the study of the system, a judgment can be made as to whether the system is auditable or not. The auditor will obtain a good idea on whether adequate procedures are actually followed and effective controls exist to allow the system to produce reliable information. If, however, the auditor has noted that the system controls cannot be relied on or an insufficient audit trail exists, then the ability of the system to produce reliable financial information would be in serious doubt. Hence, the financial reports may be unreliable. It would be meaningless to fully complete the study and

evaluation of the system. The auditor would develop this reportable area and, if practicable, perform other audit procedures to verify the reliability of the financial reports.

### Evaluation of the System

The evaluation of the system involves: (1) ascertaining whether controls in existence are effective and (2) determining whether controls are comprehensive enough to allow the system to produce reliable information.

#### Effectiveness of Controls

To determine whether those controls as documented and confirmed in the understanding are effective, tests must be performed so that the auditor will be assured that: (1) controls found to be in existence at the time of the study have, in fact, been in existence throughout the period under review and (2) controls have been correctly performed in their entirety. Transactions in sufficient quantity should be selected and tested by the auditor.

In order to test whether controls have been in existence throughout the period under review, the sample selection of transactions must be representative of the entire period. For instance, in the buying system for inventory a number of purchase transactions occurring in each of the months within the period must be selected.

To determine whether controls were performed in their entirety, as documented and confirmed in the understanding, the auditor must examine the supporting documentation for the selected sample of transactions. This examination is done by inspecting

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**SUMMER 1977**

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Published quarterly for the professional staff of the U.S. General Accounting Office

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authorizations, reviewing desk audits, recomputing calculations, or reviewing output. Again using the buying system for inventory as an example, the auditor will inspect the purchase order for approval, review the payment voucher to determine if the inventory had been received by a receiving report, and recompute footings and extensions on the invoice.

#### Comprehensiveness of Controls

Deciding whether controls are comprehensive enough to meet intended objectives is perhaps the most difficult task and certainly the most subjective. The first task is to determine the objectives of the controls within the system.

Using the buying system as an example, specific objectives can be set out as follows: (1) only authorized assets should be ordered (purchased), (2) there should be a timely and accurate recording of the asset receipts, (3) assets should be adequately safeguarded from receipt to delivery to the ultimate user or custodian, (4) correct payment should be made, and (5) reliable accounting records should be maintained of purchases.

In order to achieve these specific objectives, various controls should exist. For example, to help achieve the objective that there should be a timely and accurate recording of asset receipts, the following controls should be present:

- The individual authorized to receive assets should be required to note quantity and quality of assets received in a timely manner.
- Assets received in poor quality should be segregated for subsequent return to supplier.
- The individual authorized to receive assets should be required to

forward receiving reports to the accounting section daily.

The method of documenting this phase of the evaluation of controls can be accomplished by either completing a narrative or a checklist—the latter referred to as a questionnaire. The use of a questionnaire is the most practical if properly devised. The questionnaire is divided into sections which address a particular objective. Under each section there are the controls generally thought to be necessary to accomplish the objective. Each control should be followed with a "yes" (in existence and found to be effective) or "no" (not in existence or in existence but ineffective) indication. The questionnaire acts as an "ideal" or "standard" with which the actual system in practice can be judged.

#### Results of the System Evaluation

Determining the effectiveness and comprehensiveness of controls within each system will permit the auditor to ascertain if reliable information is generated to produce usable reports. The stronger the controls in the systems, the greater the reliance the auditor can place on the system. The auditor may feel confident that transaction data has been processed accurately, timely, and properly. Conversely, if controls are weak, additional testing is necessary if the auditor wishes to form an opinion on the reliability of financial reports.

#### Conclusion

The Washington regional office has developed materials for the Field Operations Division which explain in detail the concepts behind the systems ap-



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preach to auditing financial operations.<sup>1</sup> The material includes techniques on documenting the study and evaluating a system. This reference material has been presented in a number of seminars, both in the Washington regional office and for other regional offices, during which case studies based on actual audits were completed by seminar participants.

It is felt that this approach facilitates understanding and documenting com-

plex agency financial management systems, aids in reducing the degree of testing previously done, improves the basis for identifying systems and control weaknesses, and allows for better planning of future audit efforts. It has also aided in creating uniformity in approaching and documenting audit work on financial operations. Over time it is anticipated that this systems approach will reduce the total time and effort needed to review financial operations and at the same time increase our confidence in the reliability of financial reports.

<sup>1</sup> Mr. Michelson was assisted in developing the materials by Frank Manganiello and Dave Witte, also of the Washington regional office.

**END**