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MANAGERS

Your Accounting System Can Do A Lot For You
(Accountants, You Can Do A Lot For Your Managers)



By The Comptroller General Of The United States



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Managers

Accounting Systems Can Help You:

- Plan and control agency operations**
- Decide on the best ways to use resources to achieve goals**
- Keep within appropriations and other legal requirements**
- Safeguard agency resources**
- Evaluate accomplishments**

By The Comptroller General Of The United States



FOREWORD

Our growing Federal budget and national debt are a concern to both taxpayers and public administrators. We in Government must do all we can to achieve our goals at the least practicable cost and, more than ever, we must weigh the financial consequences of each decision we make.

Accounting systems can and should give managers the information needed to conserve, control, protect, and wisely use resources. Accounting systems have become even more essential in view of recent acknowledgements that fraud in the Federal sector is a problem of critical proportions and that the opportunities for fraud are virtually limitless because of the number, variety, and value of Federal programs.

Responsibilities of Federal Managers

Section 113 of The Accounting and Auditing Act of 1950 (31 U.S.C. 66a) requires the head of each executive agency to establish and maintain systems of accounting and internal controls that provide for:

- Full disclosure of the results of financial operations.
- Adequate financial information needed in managing operations and formulating and executing the budget.
- Effective control over revenues, funds, property, and other assets.
- Reliable financial information for use by the legislative and executive branches of Government.
- Suitable financial information for central reports on overall results of Government operations.

The act also requires that the accounting systems of executive agencies conform to the principles, standards, and related requirements prescribed by the Comptroller General.

Some agencies are doing a good job in designing, implementing, and operating accounting systems, but others are experiencing serious problems in these efforts. Our work in evaluating the operations of agency accounting systems shows that most systems with serious problems have not been approved by GAO. Of course, approved systems can have problems too—changes can occur in computer programming, new programs can be added, or prescribed procedures can be ignored. On the whole, however, we have found that agencies who devote adequate time and effort designing and implementing good systems and who involve managers in the design effort, generally have fewer problems and their systems better support managers' information needs.

At September 30, 1978, 326 agency systems were subject to approval. We have approved the principles and standards for 323 of these systems and the designs of 195 systems. Our goal is to have all systems fully approved by the end of 1980.

Purpose of Booklet

This booklet highlights our experiences in auditing accounting systems and the experiences of agencies and consultants in designing and operating accounting systems. It builds on our August 1976 booklet, "Lessons Learned in Acquiring Financial Management and Other Information Systems."

This booklet is our way of telling Federal managers at all levels about problems and success some agencies have had in designing and operating accounting systems and in using the financial and related quantitative information produced. We believe managers can draw on these lessons as a means to avoid previously encountered problems and achieve or surpass the successes of others.

The discussions and case studies in this booklet highlight how an accounting system can get the right information to managers at the right time to

- trigger actions to assure resources and assure conformity to plans, and
- integrate financial and management information into decisions.

The ideas in this booklet better use their accounting information they produce work with agency systems made by agency officials a accounting and consulting Institute of Certified Public Accountants of Government Accounting Society for Public Administration of this booklet and made 1 studies were also reviewed involved.

While this booklet is directed to managers and accountants, it will be valuable to consulting firms that assist Federal agencies in designing, implementing, and operating accounting systems in the management and local government market from this publication.

In closing, I urge all Federal managers, accountants, auditors, computer scientists, and others involved in the use and operation of accounting systems to work together to achieve efficient and economical systems.



Director
of the
General Accounting Office

- trigger actions to assert control over resources and assure that agency operations conform to plans, and
- integrate financial and related quantitative information into decisionmaking.

The ideas in this booklet on how managers can better use their accounting systems and the information they produce came from our own work with agency systems and from suggestions made by agency officials and representatives of accounting and consulting firms. The American Institute of Certified Public Accountants, Association of Government Accountants, and American Society for Public Administration reviewed a draft of this booklet and made helpful suggestions. Case studies were also reviewed by the agencies involved.

While this booklet is directed primarily at Federal managers and accountants, we believe it will also be valuable to consulting and public accounting firms that assist Federal agencies and others in designing, implementing, and using accounting systems in the management process. I believe State and local government managers can also benefit from this publication.

In closing, I urge all Federal managers, accountants, auditors, computer system personnel, and others involved in the use, design, development, and operation of accounting systems to work together to achieve efficient, effective, and economical systems.



Comptroller General
of the United States

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Financial Information Managers Need

Chapter 1

The manager's job, basically, is to achieve goals at the least practicable cost, to make the best possible use of the resources entrusted to him or her, and to stay within spending and other limitations. To do this job, managers need timely, complete, and accurate information on:

- Legal limits and resources available.
- Obligations and costs incurred and their relationship to budgeted amounts.
- Work goals achieved and their cost.
- The degree to which work goals are met.
- Opportunities to achieve goals at a lower cost.

These basic kinds of information must be tailored to the needs of managers at different levels in the organizational hierarchy:

- Top agency executives need summaries of allotments, obligations, and disbursements to help them keep the agency within the limits set by the Congress.
- Operating managers need comparisons of estimated costs versus costs incurred to help them keep within spending plans in the operating budget.
- Financial managers need detailed analyses of allotments, obligations, and disbursements for each unit in the agency.

This is where the accounting system comes into play. It should serve the information needs of each level of manager in the agency by summarizing information so that each manager is not burdened with extraneous information.

Some managers might contend that we have described the outputs of a management information system (MIS) instead of an accounting system. The accounting system is an integral part of the MIS, but to pinpoint just where a good accounting system stops and the larger MIS starts is difficult. Our purpose in this booklet is not to settle the accounting system versus MIS question. Rather, we will define, as accounting system outputs, the financial and related quantitative information and

analyses managers need to use their own and other resources, (2) determine how to use these resources to achieve their goals, and (3) evaluate program accomplishments.

The accounting system cannot do the management job, but it should produce and deliver information that managers need, but from which they must use this information to be done to keep operating. Financial reports and analyses are prompt, decisive management

This booklet highlights the information managers need from the accounting system, (2) how to use this information, and (3) how to use this information effectively in financial management.

Topnotch accounting system should record and report financial information. They also (1) provide information on funds and other resource allocation, (2) provide alert managers when operating financial plans, (3) produce information on spending levels with obligations, (4) contrast planned work with actually done, and (5) provide information needed to predict the firm's future performance and alternative courses of action.

Our reviews of agency financial systems show that some agencies have good systems and can and do use the information while many other agencies have poor systems or make scant use of the information that is available.

Accounting systems that result from poor system design, poor controls as designed, inadequate controls—particularly inadequate controls for computer processing of errors and unreliable data—underlying cause of these

analyses managers need to (1) control public funds and other resources, (2) decide how best to use these resources to achieve goals, and (3) monitor and evaluate program accomplishments.

The accounting system is there to serve managers but cannot do the manager's job for him or her. It should produce and deliver information the manager needs, but from there on the manager must use this information in deciding what needs to be done to keep operations on track. In short, financial reports and analyses must be coupled with prompt, decisive managerial action.

This booklet highlights examples of (1) the kinds of information managers can get from their accounting system, (2) how managers can use the information, and (3) how managers can promote effective financial management in their agencies.

Topnotch accounting systems do more than just record and report financial and related quantitative information. They also (1) signal when controls over funds and other resources have broken down, (2) alert managers when operations deviate from financial plans, (3) produce comparisons of planned spending levels with obligations and costs incurred, (4) contrast planned work units with work units actually done, and (5) provide financial analyses needed to predict the financial consequences of alternative courses of action.

Our reviews of agency accounting systems show that some agencies have sound accounting systems and can and do use the information produced, while many other agencies maintain marginal systems or make scant use of the financial information that is available.

Accounting systems that are only marginal are a result of poor system designs, failure to implement systems as designed, incomplete files, inadequate controls—particularly edits of information submitted for computer processing—or poor followup of errors and unreliable reports. In most cases the underlying cause of these problems is managers,

accountants, auditors, and computer professionals not working together to develop and operate systems that give managers the information they need to do their jobs.

In many cases executives do not foster, get involved in, or actively support changes needed to improve their accounting systems and computer operations. For example, operating and financial managers often do not work closely with the system design team to help assure that designers know and understand financial information needs. Accountants many times do not try to view financial reports from the manager's perspective, and computer professionals often do not take time to understand accounting and managerial principles and techniques.

Weak accounting systems coupled with a lack of a team spirit among managers, accountants, auditors, and computer professionals have caused agencies to:

- Incur excessive costs to achieve goals.
- Overobligate and misuse public funds.
- Lose control over cash, property, and other assets.
- Fail to collect accounts receivable.
- Unnecessarily delay collection of receivables.
- Lose control over accounts payable and, as a result, fail to identify and pay debts on time.

How GAO Tries to Help Agencies Improve Financial Management

GAO seeks to improve the responsiveness of accounting systems by (1) participating in Government-wide activities and (2) furnishing assistance to individual agencies.

GAO's Government-wide Activities

Activities intended to reach the entire Federal Government include:

- Publication and maintenance of a Policy and Procedures Manual for Guidance of Federal

Agencies, which sets standards, and procedure and financial reporting agencies and the financial responsibilities of Federal operating personnel. several volumes and agencies.

- Participation in the Management Improvement Office of Management Treasury Department Personnel Management studies are made of such as cash management Government.
- Participation in the Management Improvement technical assistance planning and implementing financial management systems
- Participation with the advisory committee of accountants, economists, and other experts to develop meaningful statements for the Federal effort is an attempt to improve the Government's financial control operations, and future management and resource easily understandable those used in business. The committee hopes to coordinate a business plan for the Government for the Government.

GAO's Assistance to Individual Agencies

We work with individual agencies to design, implement, and improve accounting systems. This work includes agency accounting system of the implementation and systems.

Agencies, which sets forth the principles, standards, and procedures for accounting and financial reporting in the executive agencies and the financial management responsibilities of Federal managers and operating personnel. This manual consists of several volumes and is available to all agencies.

- Participation in the Joint Financial Management Improvement Program along with the Office of Management and Budget, the Treasury Department, and the Office of Personnel Management. Under this program studies are made of specific financial topics, such as cash management in the Federal Government.
- Participation in the Joint Financial Management Improvement Program to provide technical assistance to agencies in developing and implementing accounting and financial management systems.
- Participation with the Treasury on an advisory committee of distinguished accountants, economists, and business people to develop meaningful, comprehensive financial statements for the Federal Government. This effort is an attempt to present the Government's financial condition, results of operations, and future financial commitments and resources in plain language using easily understandable formats which relate to those used in business. The advisory committee hopes to complete its work and develop a business type of financial statement for the Government early in the 1980s.

GAO's Assistance to Individual Agencies

We work with individual agencies to help them design, implement, and use sound accounting systems. This work includes review and approval of agency accounting system designs and evaluation of the implementation and operation of these systems.

Financial Information Control Public Funds

1. We review the designs of accounting systems prior to implementation to assure that the requirements set forth in our Policy and Procedures Manual are met. Design approval is a two-stage process; first, the accounting principles and standards are reviewed and approved, and then the overall system design is reviewed and approved.
2. We follow up with reviews of the operation of these systems to assure that they are implemented as designed, properly controlled, and satisfy the information needs of managers and operating personnel and other agencies and individuals outside the organization. System weaknesses and deficiencies observed in our various reviews are reported to the agencies and the Congress along with recommendations to effect needed corrective action.

Structure of Booklet

This booklet highlights our experiences in reviewing agency accounting systems. Managers can draw on these experiences for ideas on how to make their systems more responsive to their financial information needs and how to creatively use the information already produced by their systems.

For ease of discussion and presentation of case studies, we have divided the booklet into two basic discussion areas: how financial information can be used to better control public funds and resources and how financial information can be used to better decide how to use resources to achieve program goals at the least practicable cost. The distinction between these two subject areas is minor, of course, but this division allows us to better emphasize the fine points of managers' use of financial information. Then, as a wrap-up, we will concentrate on how managers can foster the development of more effective accounting systems and promote better cooperation between themselves and the accounting and computer support staffs.

Funds and other resource managers are a public trust; managers are accountable.

- Spending limits are
- Presidential, legislative requirements are met
- Resources are not misstolen.

Accounting systems can help managers do these jobs and management troubles by accurate status of allotted resources. The various types of specific information from

Top echelon managers summarizing appropriate obligations, and expenditures

- Stay within spending
- Use funds and resources for purposes only.
- Report accurate accounting and expenditure information for Management and for inclusion in Government statements.

Financial managers should receipts, deposits certify reconciliations of receipts; they assure that cash is deposited with the Treasury; receive reports on accounts to help them to make sure

- Receivables are collected
- Special followups on delinquent receipts
- Bills are paid when due after.
- The Treasury does not excessive interest cost to meet the Government needs because receipts are collected or bills due.

Financial Information Can Help Managers Better Control Public Funds and Resources

Chapter 2

Funds and other resources given federal managers are a public trust. Therefore, the managers are accountable for seeing that

- Spending limits are not breached
- Presidential, legislative, and agency budget requirements are met.
- Resources are not misused, wasted, lost, or stolen.

Accounting systems can and should help all managers do these jobs and avoid financial management troubles by giving them the current, accurate status of allotted funds and other resources. The various types of managers will need specific information from the system.

Top echelon managers should get reports summarizing appropriations, allotments, obligations, and expenditures to help them:

- Stay within spending limits.
- Use funds and resources for authorized purposes only.
- Report accurate appropriation, obligation, and expenditure information to the Office of Management and Budget and to the Treasury for inclusion in Government-wide financial statements.

Financial managers should get reports on cash receipts, deposits certified by the Treasury, and reconciliations of receipts with deposits to help them assure that cash is promptly collected and deposited with the Treasury. They should also receive reports on accounts receivable and payable to help them to make sure that:

- Receivables are collected in full and on time.
- Special followups are made promptly for delinquent receivables.
- Bills are paid when due and not before or after.
- The Treasury does not have to incur excessive interest cost to borrow money to meet the Government's short-term cash needs because receivables are not promptly collected or bills are paid before they are due.

Property managers should get property reports showing the dollar value, number of items, location, and status—idle or in-use—of agency property to help them assure that property is protected and fully utilized and that unnecessary purchases are avoided.

The following five case studies highlight how some agencies ran into financial management troubles because their accounting systems were not up to par and their managers did not pay enough attention to signals from the systems that controls over funds and resources had broken down. The sixth case study points out how an agency's managers used their accounting system and the information produced to effectively control resources. A valuable lesson can be learned from each study.

1. Case study 1 points out how an agency overobligated its appropriated funds by more than \$200 million because the accounting system did not effectively tell managers how much money was left to spend.
2. Case study 2 tells how managers allowed appropriated funds to be used for unauthorized purposes even after they received early warning signals from their auditors that breakdowns had occurred.
3. Case study 3 shows how an agency's control over appropriated funds was weakened because agency people ignored the discrepancies between Treasury and agency records.
4. Case study 4 points out how an agency lost control over cash receipts for four years because its automated accounting system could not match cash receipts with deposits certified by the Treasury.
5. Case study 5 tells how an agency lost control over billions of dollars of equipment because its property accounting system was ineffective.
6. Case study 6 highlights how the agency collected accounts on time because managers what re they were due, a needed special a

This agency runs a mul
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Procurement authority is
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6. Case study 6 highlights how an agency collected accounts receivable in full and on time because its accounting system told managers what receivables they had, when they were due, and which receivables needed special attention.

Control over Appropriated Funds (Case Study 1)

This agency runs a multibillion dollar procurement program through subordinate operating units. Procurement authority is allocated to the operating units by the agency headquarters from various appropriations.¹ Operating units get substantial additional spending authority in the form of reimbursable orders from organizations outside the agency. Operating units periodically report the status of their obligational authority, including the value of orders received, to headquarters which determines the overall appropriation status and identifies funds that might be available for transfer, when authorized by law, to other appropriations.

The agency experienced a general breakdown in its financial management system which ultimately resulted in overobligations of procurement appropriations by about \$225 million. The two main factors that caused the problem are discussed below.

Operating units made a variety of errors in recording and controlling orders, including:

- Recording orders that did not materialize.
- Failing to record valid orders.
- Recording orders in the wrong appropriation.
- Failing to process order cancellations.
- Failing to periodically reconcile accounting records with source documents.

The inclusion of erroneous receivables in the appropriation accounts increased the obligational authority on the books of operating units. Conse-

¹ To provide better control over procurement funds, the Congress recently split this agency's single procurement appropriation into several separate appropriations.

quently status reports sent to headquarters overstated obligational authority. The errors were eventually discovered and corrected by the operating units, but the correcting entries reduced the remaining obligational authority. It was then that the overobligations came to light.

The headquarters office used the inaccurate status reports in conjunction with other information to identify apparently excess funds in some appropriations and to transfer hundreds of millions of dollars of excess funds to other appropriations, when authorized by law. In addition to the bookkeeping errors made by operating units, the headquarters office made a major error by not notifying these units that obligational authority had been transferred out of the overstated appropriations. Unaware of these fund reductions, operating units continued to incur obligations which caused several procurement appropriations to be overobligated.

The agency has taken steps to tighten control over appropriated funds by:

- Setting up a program for better reconciliation of accounting records with orders from other organizations.
- Establishing procedures to insure that the obligational authority proposed for transfer is actually available.
- Setting up a management task force to review and improve agency procedures for controlling appropriated funds.
- Increasing internal audit coverage of appropriated funds from about 10 percent of internal audit workload to about 50 percent.

The agency spent millions of dollars to audit and reconcile customer accounts, to determine the extent of overobligations, etc. Had this reconciliation not been necessary, the money could have been spent to design an effective system.

Lesson learned

Basic recordkeeping errors and management attention can cause fund control problems. Most of their accounting systems give false and accurate readings on how much to spend. Any system that fails.

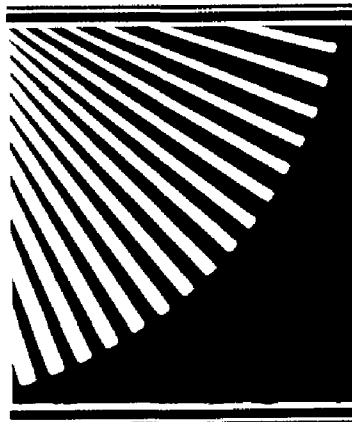
The agency in this case industrial funds that sell services to other agencies at recover costs. Industrial funds annual appropriations; the charge to give them the operations.

The President and the funds through appropriated agencies. Included in the specific amounts of money value goods and services from effect, the customer agencies fulfill the ultimate purpose funds can spend money.

The internal auditors report that many industrial transfers of costs between report stated that of 313 than \$60 million, 40 percent invalid and in another 45 transfers could not be determined improperly transferred because (1) some written operating personnel for include enough information personnel to evaluate the accounting personnel directions to determine whether proper and should be applied.

Lesson learned

Basic recordkeeping errors coupled with a lack of management attention can be the path to serious fund control problems. Managers must insist that their accounting systems give them clear, current, and accurate readings on how much money is left to spend. Any system that falls short of this is a failure.



Cost Accounting for Industrial Funds (Case Study 2)

The agency in this case operates a number of industrial funds that sell commercial type of services to other agencies at rates that should fully recover costs. Industrial funds usually do not get annual appropriations; they rely on the fees they charge to give them the money needed to conduct operations.

The President and the Congress control industrial funds through appropriations given to customer agencies. Included in these appropriations are specific amounts of money which are provided to buy goods and services from the industrial funds. In effect, the customer agency appropriations establish the ultimate purposes for which industrial funds can spend money.

The internal auditors reported on several occasions that many industrial funds made improper transfers of costs between customer orders. One report stated that of 313 cost transfers for more than \$60 million, 40 percent of the transfers were invalid and in another 45 percent the propriety of transfers could not be documented. Costs were improperly transferred between customer orders because (1) some written justifications prepared by operating personnel for the cost transfers did not include enough information to enable accounting personnel to evaluate the justifications, and (2) accounting personnel did not review all the justifications to determine whether the transfers were proper and should be approved.

Despite the internal auditors' warnings, managers did not listen. Although they received reports that costs were being improperly transferred between customer orders, they did not take effective action to make sure these improper practices ceased.

A later GAO review of cost transfers made by one of the involved industrial funds showed that conditions there had not improved. Seventy-five percent of the costs were first charged to the correct customer order but later improperly transferred to another order to

- avoid showing a loss on an order where there was a cost overrun and
- retain funds that otherwise would have been returned because the customer's order was expiring.

In other cases, costs were incurred for new work even though no customer order had been received.

Besides the obvious violations of regulations, improper transfers defeat the purpose of the industrial fund because they

- result in fees unrelated to costs being charged customers thus impairing the ability of customers (1) to relate costs to benefits and (2) to select the most economical sources of supply and
- result in distortion of actual costs thus precluding managers from being able to analyze costs in relation to budget amounts and to identify cost overruns.

In response to GAO's report, agency internal auditors increased their coverage of industrial fund operations focusing their efforts on disclosing to management cases of improper cost transfers between customers' orders.

Lesson learned

People and procedures in an accounting system and auditing information on how that system works. Auditors find that people do not follow the procedures or that the procedures do not work. A smart manager will take the needed corrective action.

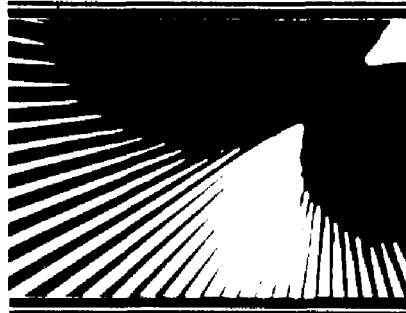
The reconciliation procedure is an internal control feature because that similar information in the accounting records is the same.

Government-wide appropriations records, reports, and controls are part of the Treasury Department accounting system. Agency appropriation accounting reports their obligations, expenditures, and disbursements to the Treasury accounting records.

Agencies are required to reconcile their unexpended balance in their annual year-end. To facilitate the reconciliation, the Treasury tells each agency the amount of funds shown for each year. The Treasury's central accounting system is supposed to compare the agency's accounting records to see if they agree. When differences are found, the agency analyzes the differences and corrects the error. If the agency cannot correct the error, it must get the Treasury's unexpended balance difference from the Treasury's books.

Lesson learned

People and procedures are key parts of any accounting system and auditors are a key source of information on how that system is operating. When auditors find that people do not follow procedures or that the procedures do not go far enough, the smart manager will take steps immediately to effect needed corrective action.



Accounting for Differences Between Treasury and Agency Records (Case Study 3)

The reconciliation process is a fundamental internal control feature because it helps guarantee that similar information in independently kept accounting records is the same.

Government-wide appropriation accounting records, reports, and controls are maintained by the Treasury Department through its central accounting system. Agencies must keep their own appropriation accounting records and monthly report their obligations, expenditures, and reimbursements to the Treasury for posting to its central accounting records.

Agencies are required to reconcile the unexpended balance in their appropriations at fiscal yearend. To facilitate the yearend reconciliation, Treasury tells each agency the unexpended balance of funds shown for each appropriation in the Treasury's central accounting records. The agency is supposed to compare this information with its own accounting records to see whether the records agree. When differences do occur, the agency must analyze the differences and adjust its records if in error. If the agency cannot account for differences, it must get the Treasury's permission to report an unexpended balance different from that shown in the Treasury's books.

One agency recently discovered that its records showed available funds that were quite different from the Treasury's records for the balance remaining in its previous fiscal year appropriations. These differences resulted from many accounting errors made throughout the year. The errors were not found and corrected because agency accounting units did not routinely compare their records with the Treasury's records. Accounting units did not make monthly comparisons, as required by regulations because, according to the agency, they did not have enough people to do the job.

Instead of identifying the errors and correcting the records, the agency's accounting staff simply accepted the Treasury's balances as correct and made more than \$16 million in unsupported adjustments to its appropriation accounts. These adjustments included establishing fictitious accounts receivable and payable. To compound these errors, the agency told the Treasury that the receivables had been collected and the payables paid. This, in turn, resulted in improper transfers of \$2 million in funds between appropriations.

The agency repeated the error in the next fiscal year. It made additional unsupported adjustments of more than \$190 million to force agreement between agency and Treasury balances.

Agency accounting personnel did not tell top management or the Treasury about these differences and made no attempt to reconcile them because they had no instructions on what to do if differences occurred or how to reconcile the accounts.

In response to our report, the agency set up a special task force to research the differences between agency and Treasury appropriation data and to correct the agency's records. Procedures have been established to guide accounting personnel in routinely reconciling agency and Treasury appropriation data and in correcting the agency's accounting records when differences are disclosed.

Lesson learned

A reconciliation can identify system problems. If two systems do not reconcile, management should identify and correct the weaknesses.

This agency sells coupons to purchase food items. It used an accounting system to keep records and control cash inventory.

For a number of years, the agency could not control cash receipts. The system did not guarantee that cash receipts were properly recorded.

—All cash receipts were not recorded in the Treasury.

—Cash receipts were not recorded in the automated accounting system.

—Thefts of cash were not detected.

The end result: cash receipts were not reconciled for 4 years.

Managers knew this, yet they did not try to fix it. Instead, they took steps to cover up the problem. They could have identified the problem earlier.

The automated accounting system was designed to match cash receipts with certified deposits. In reviewing this system, we found it could not do this simple task.

First, coupon vendors supply a list of deposit tickets preprinted on the ticket stubs. The agency's supply of deposit tickets was not sufficient to cover the supply of deposit tickets.

Lesson learned

A reconciliation can isolate major accounting system problems. If two sets of accounting records do not reconcile, management must act quickly to identify and correct the errors and the system's weaknesses.



Control over Cash Receipts (Case Study 4)

This agency sells coupons to program participants to purchase food items. It uses an automated accounting system to keep program accounting records and control cash receipts and coupon inventory.

For a number of years the accounting system could not control cash receipts. Specifically, the system did not guarantee that:

- All cash receipts were promptly deposited in the Treasury.
- Cash receipts were properly recorded in the automated accounting records.
- Thefts of cash were immediately reported.

The end result: cash receipts were not fully reconciled for 4 years.

Managers knew this, yet did not find out what was wrong or try to fix the system's problems. Had managers taken steps to diagnose the problems, they could have identified and cured the following.

The automated accounting system was designed to match cash receipts reported by coupon vendors with certified deposits reported by the Treasury. In reviewing this system, we found that the computer could not do this simple job for two reasons.

First, coupon vendors did not receive the proper supply of deposit tickets with their vendor numbers preprinted on the tickets. Many vendors exhausted their supply of deposit tickets before they got more

tickets. To make deposits, many vendors borrowed tickets from another vendor making it impossible for the computer to match vendor cash receipt reports with corresponding certified deposit tickets.

Secondly, all cash receipt reports and certified deposit tickets were not processed through the computer in the same run. The master file was broken up into fiscal year segments, and each segment was updated in a separate computer run. If a cash receipt was reported in one fiscal year and the corresponding deposit certified in the next fiscal year, the computer could not match the two transactions.

Before our review, the computer rejected about 30,000 transactions a month. The agency's accounting staff had a major task in sorting out simple mismatched cash receipts and deposits from true deposit discrepancies requiring followup. Consequently, cash receipts and deposits were not fully reconciled for 4 years.

We suggested that:

- The automated deposit ticket supply system be revised to assure that coupon vendors got all the deposit tickets they needed.
- The fiscal year segments of the master file be combined into a single file and that cash receipt reports and certified deposit tickets be processed through the computer in a single run.

The agency accepted our suggestions and, as a result, eliminated their backlog of cash reconciliations.

Lesson learned

An automated accounting system is asking for help when it cannot do a simple job that computers were designed to do like matching cash receipts and certified deposits. Managers must respond to this call for help. If they do, they will usually find that relatively straightforward improvements in the computer system will solve the problem.



This agency develops an vehicles. The job requires personal property ranging sophisticated test equipment. property is located at both installations.

The agency lost control billions of dollars because did not follow established accounting records and b sonnel did not notify the when equipment was dis Further, managers did no breakdowns in the accou controls over equipment. not have an effective pro As a result, the agency h: \$3.2 billion investment in

Originally, the agency accounting system consis control accounts and var porting accounts. Separat (1) inexpensive and expe bolts, and paint and (2) r durable capital items, su electronic test gear.

The system was design periodic inventory repor and their dollar value, l idle, or excess to needs) available inventory befo Property records were to periodic physical counts custodians were to repo department those items the agency's needs.

From a design standp have worked effectively make the best use of th

Inventory Management and Controls (Case Study 5)

This agency develops and builds special purpose vehicles. The job requires a wide variety of personal property ranging from general supplies to sophisticated test equipment and vehicles. This property is located at both agency and contractor installations.

The agency lost control over equipment worth billions of dollars because accounting personnel did not follow established rules in maintaining accounting records and because operating personnel did not notify the accounting department when equipment was disposed of or transferred. Further, managers did not follow up on reported breakdowns in the accounting system and physical controls over equipment. In short, the agency did not have an effective property accounting system. As a result, the agency had problems controlling its \$3.2 billion investment in equipment.

Originally, the agency set up a good property accounting system consisting of general ledger control accounts and various subsidiary and supporting accounts. Separate accounts were set up for (1) inexpensive and expendable items, such as nuts, bolts, and paint and (2) more expensive and durable capital items, such as machines and electronic test gear.

The system was designed to give managers periodic inventory reports showing items on hand and their dollar value, location, and status (in use, idle, or excess to needs). Managers could then use available inventory before buying anything new. Property records were to be verified through periodic physical counts of the inventory. Property custodians were to report to the accounting department those items that were idle or excess to the agency's needs.

From a design standpoint, the system should have worked effectively and helped managers make the best use of the agency's investment in

inventory. However, management prevented the system from working by not demanding that accounting personnel follow established rules. Here is what went wrong.

Accounting clerks improperly classified capital items as expense items and, as a consequence, these items were not properly recorded in the accounting records. The clerks bypassed normal procedures for recording inventory transfers between contractor and agency locations, and, as a result, the transfers were not reflected in the accounting records. Operating personnel did not prepare reports identifying idle or excess inventory. They did not monitor contractor use of Government-owned property and did not promptly report inventory losses. Managers did not analyze inventory reports to determine why items found were not shown on the accounting records or why items shown on the accounting records could not be located.

For several years, the agency's internal auditors as well as us reported to agency management that the system was not working to minimize losses of equipment and to prevent purchases of unneeded items. But management did not react to overcome the problems identified. Management should have taken steps to assure that accounting and operating personnel followed established rules and procedures.

A followup on the GAO review showed that certain deficiencies persisted:

- Equipment acquisitions were not being recorded promptly. Over \$140 million worth of equipment was not picked up in the accounting records until several years after its receipt.
- Equipment in an idle or excess status, amounting to over \$47 million was not identified.
- Equipment worth millions of dollars was, according to accounting records, on hand but could not be located.

In response to our report,

- tightened controls regarding capital equipment
- improved accounting transferred to contractor
- promptly investigated equipment, and
- set up procedures to investigate property contractor location

Lessons learned

The best designed system only on paper. Managers is put into action and we can help the manager do gaps between system designation.

This agency sells highly vices to commercial customers and in foreign countries. large volume of accounts at the end of a recent fiscal reported more than \$319 from the public.

The agency runs a high system which:

- Records amounts accurately.
- Generates timely services are rendered
- Produces followup after invoices are
- Refers accounts to overdue to the ledger
- Charges customer annum for all inventory days of the billing

In response to our report, the agency

- tightened controls and procedures for recording capital equipment,
- improved accounting controls over property transferred to contractors' installations,
- promptly investigated cases of unrecorded equipment, and
- set up procedures to promptly report and investigate property losses at agency and contractor locations.

Lessons learned

The best designed system is worthless if it exists only on paper. Managers must see that the system is put into action and works as intended. Auditors can help the manager do this job by pinpointing gaps between system design and system implementation.



System for Managing Accounts Receivable (Case Study 6)

This agency sells highly technical, scientific services to commercial customers in the United States and in foreign countries. These sales generate a large volume of accounts receivable. For example, at the end of a recent fiscal year, the agency reported more than \$319 million in receivables from the public.

The agency runs a highly effective accounting system which:

- Records amounts due and paid promptly and accurately.
- Generates timely invoices to customers when services are rendered.
- Produces followup letters at 30-day intervals after invoices are overdue.
- Refers accounts that are more than 180 days overdue to the legal department.
- Charges customers interest at 12 percent per annum for all invoices not paid within 30 days of the billing date.

Financial Informatic Decisions on How to Program Goals

The agency's accounts receivable system helps managers collect amounts due the Government in full and on time. For example

- 95 percent of all bills were paid within 30 days of the invoice date.
- Followup on overdue accounts is highly effective; in a recent fiscal year, the agency wrote off only one account, amounting to \$5,000.
- \$724,000 in interest on overdue invoices was levied on and collected from customers by one of the agency's installations in a recent fiscal year.

Lesson learned

A topnotch accounting system for accounts receivable will tell managers what is owed the agency, who owes the money, when payment is due, and which accounts are delinquent. Armed with this information, managers can take prompt action to collect amounts due by isolating problem accounts and thus heading off bad debts.

The successful manager resources to produce the practicable cost. The account managers financial reports these basic but crucial que

- Did we produce pr the least practicable
- How can we change accomplish more fo

Specifically, the account together financial reports

- Expenses and oblig relationship to avail allotments.
- Projected work uni costs.
- Actual work units c costs.
- Comparisons betw units and anticipate completed and cos

Armed with this informati measure the:

- Products or services
- Extent that work go
- Opportunities to pr the same or lower i

For example, the manag the volume, dollar value, services produced. This in track the agency's produc ensure that the Governm the least cost. Such repor (1) making "make or buy" prices to charge others fo sold.

The reports the managi work units to be done an work units done and cost tion would help the man.

Financial Information Can Help Managers Make Better Decisions on How to Use Resources to Achieve Program Goals

Chapter 3

The successful manager gets results by using resources to produce the most benefit at the least practicable cost. The accounting system should give managers financial reports and analyses to answer these basic but crucial questions:

- Did we produce products and/or services at the least practicable cost? If not, then
- How can we change our operations to accomplish more for each dollar spent?

Specifically, the accounting system should put together financial reports and analyses that show:

- Expenses and obligations incurred and their relationship to available appropriations and allotments.
- Projected work units tied to anticipated costs.
- Actual work units completed tied to incurred costs.
- Comparisons between (1) projected work units and anticipated costs and (2) work units completed and costs incurred.

Armed with this information, the manager can measure the:

- Products or services produced and their cost.
- Extent that work goals are being met.
- Opportunities to produce more benefit at the same or lower cost.

For example, the manager should get reports on the volume, dollar value, and cost of products or services produced. This information will help him track the agency's productivity and help him ensure that the Government gets the job done at the least cost. Such reports could be the basis for (1) making "make or buy" decisions and (2) setting prices to charge others for products or services sold.

The reports the manager gets should contrast work units to be done and anticipated costs with work units done and costs incurred. That information would help the manager:

- Assign people to work tasks.
- Measure the amount of products or services produced against costs and obligations incurred to determine whether more output could reasonably be produced for the same money.
- Determine whether work unit and cost targets are being met
- Develop future work plans and budgets.

The following case studies show how some agency accounting systems help managers do a good job in achieving program goals while others fall far short of giving managers the essential information needed to guide their programs.

1. Case study 7 shows how an agency did a good job in building an automated accounting system to give managers at all levels measures of work to be done and anticipated costs and work actually done and costs incurred so they could better plan and run future operations.
2. Case study 8 points out how one agency underbilled its customers by \$12 million a year because its accounting system did not collect and report the full cost of sales.
3. Case study 9 shows how an agency developed an effective accounting system that integrates financial and related quantitative information on work done under the agency's programs. Because the system provides for recording financial and related quantitative information in the accounting records, it can give the Congress and agency managers the information and analyses needed to measure whether program goals and financial plans were being met and whether changes were needed to achieve more at a faster rate.
4. Case study 10 focuses on how an accounting system fell short of giving managers information to evaluate whether a loan refinancing program was effective.

5. Case study 11 shows how one agency can use its financial and management information already present in its accounting system to assign people to productive tasks.
6. Case study 12 shows how the agency's management's budgeting, cost accounting, cost measurement, and personnel management systems can be used to improve the agency's performance.

The agency helps process agricultural products and provides fair prices for their consumers. It also provides inspection, storage, regulatory, and other services for farm commodities.

The agency is organized into headquarters, regional, and field offices located throughout the country. It is divided into a series of commodity divisions. Each part of the agency's management divisions provide services. At the regional level, the offices are responsible for carrying out the program in the field. Some offices actually deliver services to the agricultural community.

The agency's financial management is centralized at its headquarters.

- Accumulates, analyzes, and reports financial and related information on work done for the agency.
- Provides complete and accurate track operating information.

5. Case study 11 highlights how managers in one agency capitalized on and used financial and related quantitative information already produced by the accounting system to assign people to the most productive tasks.
6. Case study 12 shows how top management's failure to set uniform budgeting, cost accounting, and workload measurement requirements resulted in the Department not delivering medical care to its personnel at the least practicable cost.

Accounting for Costs by Responsibility Center (Case Study 7)

The agency helps producers and handlers of agricultural products run orderly markets and get fair prices for their commodities. It does this job by providing inspection, standardization, marketing, regulatory, and other related programs for certain farm commodities.

The agency is organized into a Washington, D.C., headquarters, regional offices, and field offices located throughout the country. The headquarters is divided into a series of divisions, generally on a commodity basis. Each division carries out a specific part of the agency's many programs. Four management divisions provide management support activities. At the regional level, individual managers are responsible for carrying out each division's program in the field. Staff assigned to the field offices actually deliver program services to the agricultural community.

The agency's financial management system is centralized at its headquarters where it:

- Accumulates, records, and reports all financial and related quantitative information on work done for all organizational units in the agency.
- Provides complete cost data to prepare and track operating budgets.

- Provides timely, complete, and accurate financial and related quantitative information on work done so managers can constantly check the quality of their operations.

The tool that makes this system work to deliver needed information to managers is the account code. This code—called the Cost Responsibility Center Code—links the account structure and the agency's organizational hierarchy. A cost responsibility center is a specific operation, program, or administrative function under the control of a single manager who is given the authority to incur costs, and is responsible for planning and controlling costs for program operations. Cost-based financial plans are developed at this level and entered into the accounting records. A cost responsibility center is made up of one to several subcenters which are subordinate operating units or activities of a cost responsibility center. For example, a subcenter could be a field office that delivers a specific program service to the agricultural community, a specific activity within a particular program, or a separate, special fund under a cost responsibility center.

All financial and related quantitative information is accumulated, recorded, and identified in the accounting system by the cost responsibility center/subcenter code. This coding structure makes it easy for the accounting system to satisfy the information needs of all levels of managers in the agency.

Internal management reports are produced every 28 days. The financial report structure is based on the pyramidal reporting concept, that is, information detailed in lower level reports is summarized for reports prepared for the next higher level.

Each report in the series of internal management reports produced by the accounting system is tailored to meet the specific financial information needs of a particular level manager. The Subcenter Payroll and Detailed Cost and Cost Responsibility

Center reports help cost managers keep tabs on terms of keeping costs shown in their operating managers identify units cost and producing too program report shows h tors the costs incurred t quantity of product pro

In summary, the accountant the financial report of the agency's manager controls with extraneous information compare the results achieved products or services produced plan—the operating budget and future program operations track with plans.

Lesson learned

If the goal of producing least practicable cost is the financial results of a manager who has the authority over operations.

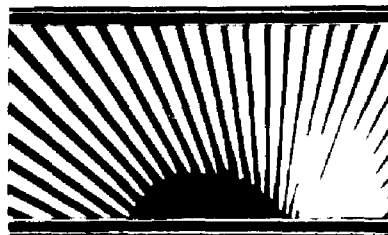
This agency spends at operate a number of military overseas locations where provided to military personnel dependents. People who or dependents can also they have to pay for it. percent of the medical related regulations which medical care require that cover the full cost of pro

Center reports help cost responsibility center managers keep tabs on how well they are doing in terms of keeping costs in line with projected costs shown in their operating budgets. They also help managers identify units that are incurring too much cost and producing too little output. The division program report shows headquarters division directors the costs incurred by their divisions and the quantity of product produced.

In summary, the accounting system gives each manager the financial results of operations for the part of the agency's many programs that the manager controls without burdening that manager with extraneous information. The managers (1) compare the results achieved—costs incurred and products or services produced—with the financial plan—the operating budget and (2) adjust current and future program operations so achievements track with plans.

Lesson learned

If the goal of producing the desired output at the least practicable cost is to be achieved, reports on the financial results of operations must get to the manager who has the authority to act and change operations.



Pricing of Services Sold to the Public (Case Study 8)

This agency spends about \$200 million a year to operate a number of medical facilities at various overseas locations where free medical care is provided to military personnel and their dependents. People who are not military personnel or dependents can also receive medical care but they have to pay for it. They account for about 8 percent of the medical care workload. The law and related regulations which authorize providing this medical care require that reimbursement rates cover the full cost of providing the services.

Fees charged for reimbursable medical care did not cover costs. Fees in many cases were completely inadequate and were always low compared to what was charged by commercial facilities. Agency policies contributed to this situation as well as the fact that medical activities did not uniformly account for and report medical care costs. We estimated that rates calculated to recover full costs would increase reimbursements to the agency by almost \$12 million annually.

In computing standard medical care reimbursement rates, many elements of cost were excluded. The computations were made by agency headquarters based on budget submissions by subordinate medical activities. But these presented an incomplete cost picture because some cost elements were not included in the budgets. The medical activities had a variety of automated and manual accounting systems to accumulate costs and workload data, but the systems were not uniform. As a result, inconsistencies between the systems made determining the total cost for care at each medical facility difficult. For instance,

- Some hospitals did not report millions of dollars in food purchase costs for inclusion in the rate computation.
- Patient care costs in general were understated by millions of dollars.

In addition, the headquarters office did not consider all indirect costs in setting the reimbursement rate computation.

The upshot of all this was that reimbursement rate calculations were made using incomplete data resulting in rates inadequate to cover the cost of services provided. The agency needed to do two things. First, it needed to clearly define to the medical activities the direct operating costs they must report to headquarters. Secondly, headquarters had to decide for itself what indirect costs it must add to those direct costs reported by each activity to set reasonable reimbursement rates.

In response to our recommendations, the agency is improving its medical facilities to better serve military personnel and is developing systems to provide the data needed to develop more accurate rates. After the new rates were implemented, the agency expected a \$4.4 million increase in reimbursement revenue.

Lesson learned

Managers cannot begin to understand the services sold to customers unless they capture, summarize, and analyze the appropriate factors for those services.

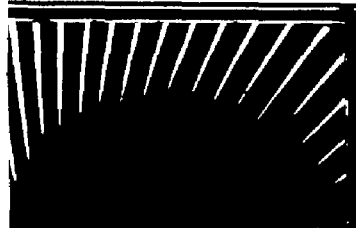
This agency manages its lands to make sure that resources are conserved and used. It is organized into headquarters and nine regions which are subdivided into districts. The officer-in-charge of each district converts the paper plan into action by planting tree seedlings, lakes, streams, and river recreation areas.

The growing, across-renewable and nonrenewable intensified congressional programs to protect, conserve, and develop natural resources. To carry out these responsibilities, the agency is developing a law requiring the agency to submit an annual report to Congress.

In response to our report, the agency instructed its medical facilities to increase rates charged non-military personnel and to revise their accounting systems to provide the necessary cost information to develop more accurate reimbursement rates. After the new rates were put in effect, the agency expected a \$4.4 million increase in medical care reimbursement revenues for the first year.

Lesson learned

Managers cannot begin to set the right prices for services sold to customers unless the accounting system captures, summarizes, and reports all appropriate factors for computing the full cost of those services.



Reporting to the Congress on Goals and Accomplishments (Case Study 9)

This agency manages large tracts of open Federal lands to make sure that renewable natural resources are conserved, protected, and wisely used. It is organized into a Washington, D.C., headquarters and nine regions. The land tracts in the regions are subdivided into administrative units which are in turn divided into districts, or cost centers. The officer-in-charge of each district converts the paper plans and budgets into actual planted tree seedlings; healthy grasslands; clean lakes, streams, and rivers; and new outdoor recreation areas.

The growing, across-the-board shortages in both renewable and nonrenewable natural resources intensified congressional interest in Federal programs to protect, conserve, and manage our natural resources. To effectively carry out its oversight responsibilities, the Congress recently passed a law requiring the agency, in this case, to give Congress annual reports showing

- work planned to preserve renewable resources and the projected costs,
- work done and actual costs, and
- variances between planned and actual work units and costs.

The Congress uses these reports to (1) track the agency's accomplishments in preserving our renewable natural resources—in terms of work done and costs—with congressionally set production goals in legislation and appropriations and (2) set future work production goals and funding levels.

This mandate required the agency to develop a new accounting system to tie costs to specific accomplishments. The new system uses a 6-digit account number—called a management code—to identify the different kinds of work done in the districts. Directories built into the computer relate the 6-digit code to the proper appropriation and Treasury symbol, functional area of work, category of work, collection account, specific work project and program budget activity, and work process code. Briefly, the system works as follows.

Plans

Yearly, each district officer-in-charge prepares multiyear project plans which include information for the coming year, as well as for the additional years required to complete the project. A separate plan is prepared for each project and shows the following information by organizational unit (region, administrative unit and district; and related State congressional district):

- Projected multiyear accomplishment in such terms as volumes of timber harvest, number of visitor-days of recreation use, etc.
- Multiyear resource (money and people) requirements in relation to the accomplishment of specific units of work, such as volume of timber to be prepared for sale, miles of trail to be constructed, etc.

The district project plan, regional project plans, and agencywide project plans are combined into agencywide project plans and submitted to the Office of Management and Budget for review in the

After Presidential review, the project plans are submitted for approval by the agencywide project plans approved annual budget and multiyear plans.

All the project plans are entered into the agency's computer master file and the central accounting system.

Management Reports

The district officers-in-charge prepare monthly accounting source documents (for example, time and attendance vouchers, contract purchase orders, invoices, etc.). The accounting system identifies the new 6-digit management code.

The information on the management code is entered into the departmental accounting system which maintains a record of the management code and prepares the financial statements.

Monthly summary accounting data is transferred from the departmental accounting system to the agency's accounting system. The agency's system then maintains a record of actual costs and produces reports comparing work done with planned work. Managers use the reports for planning and for evaluation of budget alternatives.

Agency managers at all levels (1) measure their accomplishments in terms of work done and resource use, (2) compare actual work done with planned work, and (3) set future estimates.

The district project plans are combined into regional project plans, and finally, regional plans are combined into agencywide plans which are submitted to the Office of Management and Budget for review in the form of a budget.

After Presidential review the project plans are submitted for approval by the Congress. The agencywide project plans become the agency's approved annual budget for the first year of the multiyear plans.

All the project plans are entered into the agency's computer master file and the department's central accounting system.

Management Reports

The district officers-in-charge send the normal accounting source documents to the departmentwide accounting system as work is done (for example, time and attendance records, travel vouchers, contract purchase orders, vendors' invoices, etc.). The accounting documents are identified by the new 6-digit management code.

The information on these source documents is entered into the departmentwide accounting system which maintains all the accounting records and prepares the financial reports for the Treasury.

Monthly summary accounting reports are used to transfer data from the departmentwide accounting system to the agency's accounting system. The agency's system then matches work plan data with actual costs and produces various reports comparing work done with projections that agency managers use for planning purposes and projection of budget alternatives.

Agency managers at all levels use these reports to (1) measure their accomplishments—in terms of work done and resources used—against program plans set by them and approved by the Congress, (2) focus their attention on those aspects of program operations that deviate significantly from plans, and (3) set future work plans and budget estimates.

Reports of Goals versus Attainments

At yearend, the accounting system prepares the reports the Congress asked for on approved resource conservation work programs—that is, reforestation, rangeland maintenance, watershed maintenance, and development of recreational areas. The system can produce these reports because the system integrates in the accounting records both financial and related quantitative information on units of work. The reports show:

- Planned work units to be done and costs—for example, number of seedlings to be planted and costs, and acres of brush to be removed and costs.

- Actual work units done and costs incurred.

The Congress uses these reports to evaluate the agency's work plans and funding requests for subsequent years' operations and to monitor our efforts to achieve administration and congressionally set goals for preserving renewable natural resources.

Lesson learned

How well an agency has achieved goals can only be measured if reports on the financial results of operations show:

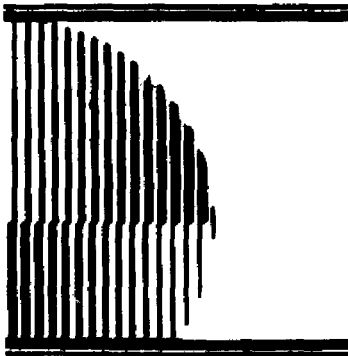
- Projected work units to be done tied to anticipated costs.
- Actual work units done tied to costs incurred.
- Comparisons of projected work units to be done and anticipated costs with actual work units done and costs incurred.

The agency uses a computer system to gather, process information needed by loan programs are carried on a calculable cost. It was a well-produced useful external reports. However, as previously identified new information system remained static. pace with managers' growth even though the basic is the agency's manual file

The agency's direct loans, current, delinquent, deferred loans. The computerized managers information on and delinquent loans, to and refinanced loans, the short of meeting managers

The system was designed to refinance loans as current trouble. For deferred loans suspends principal payments by loan. Refinanced loans which borrowers use to As a result, managers could were deferred or refinanced balances are, or how many have been deferred or they cannot determine experienced with individual categories (that is, whether deferred or refinanced meaningful assessment trends for these loans. knowing whether the refinancing policy is sound

Seven data elements have been incorporated into the system. This new system means to evaluate the



Managing Problem Loans (Case Study 10)

The agency in this case runs a variety of loan programs which include direct loans to the public and guarantees of the payment of interest and principal on loans made by banks and other financial institutions.

The agency uses a computerized accounting system to gather, process, and record the financial information needed by managers to assure that loan programs are carried out at the least practicable cost. It was a well-designed system that produced useful external and internal financial reports. However, as programs grew and managers identified new information needs, the accounting system remained static. It was not changed to keep pace with managers' growing information needs even though the basic information was available in the agency's manual files.

The agency's direct loan portfolio includes current, delinquent, deferred, and refinanced loans. The computerized accounting system gives managers information needed to manage current and delinquent loans, but in the case of deferred and refinanced loans, the accounting system falls short of meeting managers' information needs.

The system was designed to classify deferred and refinanced loans as current instead of as loans in trouble. For deferred loans, the agency temporarily suspends principal payments or decreases the payment amounts by lengthening the term of the loan. Refinanced loans are usually larger loans which borrowers use to pay off delinquent loans. As a result, managers cannot tell how many loans were deferred or refinanced, what their principal balances are, or how many times particular loans have been deferred or refinanced. Consequently, they cannot determine the seriousness of problems experienced with individual loans in these categories (that is, which loans had been repeatedly deferred or refinanced), nor can they make any meaningful assessment of collection patterns and trends for these loans. Thus, they have no way of knowing whether the agency's deferral and refinancing policy is successful in reducing losses.

Seven data elements relative to deferral actions have been incorporated into the agency's accounting system. This new data will give the agency the means to evaluate the effectiveness of the deferral

program. Specific reporting requirements have been determined and are being incorporated into the computerized reporting system. With respect to refinanced loans, the information needed to manage these loans is being collected, but specific reporting requirements have not as yet been set.

Lesson learned

Good accounting systems are flexible and adaptable to changing business conditions. Managers must make sure their systems evolve to keep pace with changing information needs mandated by changing programs, new financial management techniques, developments in the computer sciences, and changing business practices.

To establish the best audit, the agency developed and correlate:

- The time needed to complete the audit, such as in
- The number of audits collected for each

The information required for calculations comes from the system.

For several years, the information on (1) the salary spent in audits, (2) the number and type of audits, and (3) amounts of additional audits. This information prepared statistical reports on information as the basis for the following:

- The agency selected time as a base for productivity index for each type of return of audits performed. Hours spent. Index were computed and plotted on a graph to show the relative of each type of return.
- The agency compared return showing resulting from each spent. This information graph to show where the most additional revenue.
- The two graphs showed the best combination of return that would yield additional revenue.

The initial analysis of interesting results. For 5-year period of the audit.

Using Financial Information in Making Work Assignments (Case Study 11)

This case shows how managers in one agency capitalized on and used financial and quantitative information already produced by the accounting system to assign people to the most productive tasks.

A bureau in a city government has the job of collecting taxes due from individuals, corporations, and other businesses. To assure that taxes are properly collected, the city relies primarily on voluntary compliance with tax laws, backed up by selected audits of tax returns.

The agency's staff is small and only a fraction of the large number of tax returns filed each year can be audited. In selecting returns for audit, agency managers have to assure that:

- An appropriate number of returns from each type of tax return is audited to encourage a satisfactory degree of voluntary taxpayer compliance.
- The audit staff is assigned to reviewing the returns that would provide the greatest potential for additional tax collection.

To establish the best combination of returns for audit, the agency developed a system to measure and correlate:

- The time needed to audit each type of return, such as individual and corporate.
- The number of additional tax dollars collected for each audit dollar spent.

The information required to make these calculations comes from the agency's accounting system.

For several years, the agency accumulated information on (1) the number of staff-hours and the salary spent in auditing each type of tax return, (2) the number and types of returns audited, and (3) amounts of additional taxes resulting from these audits. This information had been used primarily to prepare statistical reports. The agency now uses this information as the basis for cost/benefit analyses as follows:

- The agency selected a representative period of time as a base period. Base period productivity indexes were computed for each type of return by dividing the number of audits performed by the number of staff-hours spent. Indexes for subsequent periods were computed in the same way and were plotted on a graph for each type of audit to show the relative amount of time the audit of each type of return required.
- The agency computed a ratio for each type of return showing the additional taxes resulting from each dollar of audit salary spent. This information was plotted on a graph to show where audits were producing the most additional tax revenues.
- The two graphs were analyzed to establish the best combination of audits by type of tax return that would yield the maximum additional revenue.

The initial analysis of the graphs disclosed some interesting results. For example, an analysis over a 5-year period of the audits of one type of return

showed that (1) the average amount of taxes collected for each audit dollar spent ranged from a high of \$1.12 to a low of \$0.02 and (2) it cost the agency more in audit salary than it realized in additional taxes in 4 of the 5 years. This disclosure resulted in a management decision to shift some of the staff to higher revenue producing audit areas, with auditing in the low-payoff areas limited to the minimum needed to sustain voluntary taxpayer compliance.

The agency found that staff productivity and audit effectiveness measurements had to be considered together if sound staff allocation decisions were to be made. For example, if emphasis were placed only on improving staff productivity (the number of audits performed per staff-hour), the staff might do only easy audits, which would likely be those that produce less tax revenue. Thus, in deciding how best to use the audit staff, agency managers not only had to consider the need for increased staff productivity but also had to make sure that audit effectiveness (tax revenue generated in relation to audit cost) did not suffer. The productivity and cost data available through the accounting system provides a sound basis for these decisions.

Lesson learned

Financial information can help the sharp manager pinpoint opportunities for increased productivity.

Cost and Workload Reports as a Management Tool (Case Study 12)

The Federal Department in this case is composed of three large agencies. These agencies have a number of similar missions and personnel support services. One of the personnel support services is to provide medical care to military personnel. Consequently, the agencies run a large number of

medical facilities ranging from outpatient clinics to large modern hospitals. These facilities provide a wide range of dental, medical, and other health services. These services are provided at the Department spent \$2 billion alone on medical care programs.

As the parent organization develops overall policies, guidelines, and standards for subordinate agencies, including accounting and financial management and measuring work done, it assures that the budget, reports prepared and submitted by the subordinate agencies reflect the results of program operations. These reports give Department officials cost and productivity information to compare the results of one program with another and to decide where to focus its efforts. Costs are kept down and

In the case of the medical departmental accounting system, standards. It did not set policies, guidelines, and standards for subordinate agencies to use in estimating, accounting for, and measuring work done on programs. As a result, the Department medical care reports that were not uniform. The Department could not see the results of medical programs to see

- each agency was to provide care at the least possible cost
- efficient medical care was the best run agency was to provide efficient sister agency

A GAO review highlighted shortcomings in the budget and workload measurement systems of subordinate agencies. These shortcomings prevented top management from

medical facilities ranging in size from small outpatient clinics to large modern hospitals offering a full range of dental, medical, surgical, and psychiatric services. These services are expensive. For example, the Department spent \$2.3 billion in fiscal year 1976 alone on medical care programs.

As the parent organization, the Department sets overall policies, guidelines, and procedures for its subordinate agencies, including those governing accounting and financial reporting, staffing levels, and measuring work done. Accounting guidance assures that the budget, cost, and productivity reports prepared and submitted to the Department by the subordinate agencies present the results of program operations on a common basis. These reports give Department top management cost and productivity information needed to (1) compare the results of operations of similar programs run by each subordinate agency and (2) decide where to focus its attention to assure that costs are kept down and productivity is kept high.

In the case of the medical care programs, Departmental accounting guidance did not meet these standards. It did not set uniform accounting policies, guidelines, and procedures for the subordinate agencies to use in preparing budget estimates, accounting for and reporting costs, and measuring work done under medical care programs. As a result, agencies submitted to the Department medical care cost and productivity reports that were not uniform. Consequently, the Department could not effectively monitor agency medical programs to see that

- each agency was delivering required medical care at the least practicable cost and
- efficient medical care techniques used in the best run agency were transplanted to its less efficient sister agencies.

A GAO review highlighted examples of the shortcomings in the budgeting, cost accounting, and workload measurement systems used by the subordinate agencies. These accounting shortcomings prevented top management from identifying

opportunities to increase the efficiency of agency medical care programs because costs to do specific medical jobs reported by each agency were not computed on the same basis. Consequently, top managers could not make interagency cost comparisons to identify efficient practices. Illustrations follow.

- One agency's budget did not include the costs to run small outpatient clinics; as a result, about \$2 million was excluded from the medical care budget.
- Another agency's medical program budget did not include the cost of support services—heat, light, custodial services, building maintenance, etc.—provided by host bases for medical facilities.
- One agency accounted for dental laboratory costs separately from other dental care costs, while its two sister agencies lumped laboratory costs with other dental costs.
- Two agencies measured radiological workloads and costs by tracking the number of X-ray exposures, while the other agency recorded the number of X-ray films used—normally more than one exposure is made on a single sheet of film.

The accounting system problems were exacerbated by the fact that the subordinate agencies lacked uniform criteria for staffing medical facilities and measuring work done. We found, for example, that two agencies assigned staff to medical facilities based on periodic staffing studies while the other agency assigned staff on a case-by-case basis.

These differences in (1) accumulating and presenting medical care budgets, costs, and workload information and (2) staffing and measuring work done at medical facilities made it impossible to effectively compare the results of operations of medical care programs between agencies.

We analyzed the medical care cost and workload reports submitted by the Department's subordinate agencies and recast the information

presented so each agency's information was presented on the same basis. Some interesting results from our cost analyses follows.

Analysis of Workload Facilities at Medical

Hospital	Weighted number of work units completed (not)
Agency No. 1	167,818
Agency No. 2	103,171
Agency No. 3	81,784

^a One agency uses a weighted workload. This procedure gives complex dental procedures—simpler procedures—such as procedure was used in expressing units accomplished by all agencies.

Analyses of this type of management to find out per dental procedure is of Agency No. 2 and No.

The Department, in redeveloped a uniform hospital system and is testing this hospitals before implementation on a departmentwide basis.

Lesson learned

Cost and workload reports are useless. Top management accounting and financial and workload organizational units are reports, top management questions that will lead the same or less money

presented so each agency's cost and workload information was presented on a common basis. Some interesting results were noted. An example of our cost analyses follows.

Analysis of Workload and Costs of Dental Facilities at Medium-sized Hospitals

Hospital	Weighted number of work units completed (note a)	Total operating cost	Cost per weighted work unit
Agency No. 1	167,818	\$864,000	\$5.15
Agency No. 2	103,171	353,962	3.43
Agency No. 3	81,784	323,960	3.96

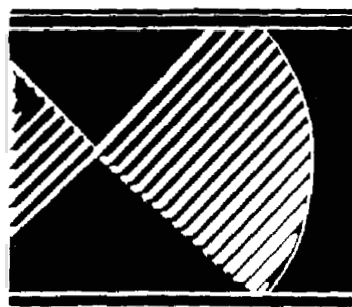
^a One agency uses a weighted procedure to measure dental workload. This procedure gives greater weight to the more complex dental procedures—such as, root canal—than to the simpler procedures—such as, fillings. This agency's weighting procedure was used in expressing the number of dental work units accomplished by all agencies included in this review.

Analyses of this type could allow Department top management to find out why Agency No. 1's cost per dental procedure is significantly more than that of Agency No. 2 and No. 3.

The Department, in response to our report, developed a uniform hospital cost accounting system and is testing this system in 10 major hospitals before implementing the system on a departmentwide basis.

Lesson learned

Cost and workload reports that compare unlike items are useless. Top managers must require uniform accounting and reporting to insure that financial and workload reports for different organizational units are comparable. With these reports, top management can start asking the questions that will lead to better performance at the same or less money.



Steps Managers Can Take to Foster Effective Accounting Systems in Their Agencies

Chapter 4

Managers will get good financial information only if their agency has designed and put an effective accounting system in motion. However, effective accounting systems do not just happen. They result when managers, accountants and auditors, and computer professionals work as a team to develop and operate systems that give managers the information they need to do their jobs and do them well. Managers have to take the initiative to build this team spirit. They must:

- Recognize that accountants, auditors, and computer professionals are there to help them get the information needed to run the agency.
- Make accounting and computer support staffs part of the management team.
- Make sure that accounting systems are properly designed.
- Make sure that accounting systems are working properly.

In the same spirit, accountants, auditors, and computer specialists must respond positively to managers' invitations and initiatives to make them part of the decisionmaking process in the agency.

Make Accounting and Computer Support Staffs Part of the Management Team

Accounting and computer support staffs can be key members of the agency's management team, but managers must take the initiative to make these staffs part of the team. To do this managers should:

- Open up and maintain communications with their accounting and computer staffs.
- Provide the controller and his or her staff the opportunity to participate in the agency's decisionmaking process.
- Provide continuing education programs in the accounting and related areas for themselves, accountants, auditors, and computer professionals.

- Welcome the use of computer software systems to obtain and analyze information and make decisions.

Open up and Maintain Communications with Accounting and Computer Staffs

Many managers do not acquaint themselves with computer systems—how they work, how financial information is processed, and how financial information jobs are done. This inattention disconnects managers from accounting and computer staffs from information needs. When a problem follows a chain reaction, managers claim that the accounting staffs do not give them the data they need, blaming staff frequently for incorrectly processing the information. Computer staff blames accountants for not understanding the system, a tendency for placing blame instead of constructive dialogue to find solutions. Both managers and staffs have to respond to open up lines of communication.

Managers and their accounting and computer support staffs must stay open to each other's perspectives when the agency is computerized accounting. The management team must build needed computer support staffs into the system to guarantee that the system is added to, or improperly processing. Each group must respond.

Managers must ask:

- What financial information do I need?
- In what format should I receive financial information?
- What financial information do I receive?
- Do I receive useful information?

- Welcome the use of new computer and software systems to obtain the financial information and analyses needed in making decisions.

Open up and Maintain Communications with Accounting and Computer Staffs

Many managers do not take enough time to acquaint themselves with their accounting and computer systems—how their systems operate and how financial information can help them do their jobs. This inattention discourages the accounting and computer staffs from trying to satisfy managers' information needs. When problems arise the blame follows a chain reaction. The managers frequently claim that the accounting and computer staffs did not give them the data they needed, the accounting staff frequently blames the computer staff for incorrectly processing the information, and the computer staff blames both managers and accountants for not understanding the computer. The tendency for placing blame must be replaced with constructive dialogue to identify problems, causes, and solutions. Both managers and their support staffs have to respond to each others' initiatives to open up lines of communication.

Managers and their accounting and computer support staffs must stay attuned to one another's perspectives when the agency is moving from one computerized accounting system to another. This management team must work hand in hand to build needed computer edits into the automated system to guarantee that information is not lost, added to, or improperly manipulated during processing. Each group must ask certain questions:

Managers must ask:

- What financial information do I need?
- In what format should I receive the needed financial information?
- What financial information do I currently receive?
- Do I receive useless information?

- How should I use the financial information I currently receive?
- How should I use the additional financial information I need?
- How can the automated system be designed, developed, and implemented to deliver complete, accurate, and timely information in the proper format?

Accountants must ask:

- What financial information do managers need?
- What format is required for that financial information?
- How often is the information required?
- How can this information be better integrated into the total decisionmaking process in my agency?
- What traditional manual controls and other manual tasks can be automated?

Computer professionals must ask:

- How can automated data processing systems be designed to deliver more timely financial information and reports to the managers?
- How can we improve the automated financial reporting systems to remain current, and even to anticipate future changes with the managers financial reporting needs.
- How can we assure that the information received and processed generates valid data?
- How can we help the managers determine the best report format and data fields to meet the manager's analysis needs?
- How can we automate the analysis of financial data so the manager's decision-making task is expedited?

Encourage Participation by the Controller and His Staff in Decisionmaking

The cost of Government grows each year. Consequently, managers must, more than ever, weigh the financial consequences of each decision made so goals can be achieved at the least

practicable cost. This is why their help. In most agencies the controller is responsible for accounting, financial auditing, and other special projects, and that person's expert advice is often the last word under consideration.

The controller should be more than a financial watchdog. He should be encouraged and expected to participate in the decisionmaking process. The controller, however, should not be passive, but should anticipate managers' information needs and provide the data needed to make decisions.

- Develop operating procedures
- Control and account for expenditures
- Make day-to-day decisions
- Optimize the use of resources
- Monitor the results of operations

The controller can better manage the agency by viewing financial information from a broader perspective, (2) presenting financial data in a simpler than accounting and statistics into trends and patterns, and following up on suggestions for management.

Meetings with managers and controllers to take the input of their expertise to the decisionmaking process.

Provide Continuing Education Programs for Managers, Auditors, and Computer Professionals

Advances in computer technology and financial analysis techniques create new opportunities to create new systems and financial information. Managers must wisely use resources to take advantage of these advances as they are being developed. Continuing education programs for managers, auditors, and computer professionals are essential.

practicable cost. This is where the controller can help. In most agencies the controller is responsible for accounting, financial reporting, budgeting, auditing, and other specialized financial activities, and that person's expertise can be used to help managers evaluate alternative courses of action under consideration.

The controller should be given the opportunity to be more than a financial scorekeeper. He or she should be encouraged and in fact should be expected to participate in the decisionmaking process. The controller, on the other hand, should strive to meet managers halfway. He or she should not be passive, but should take initiatives to anticipate managers' information needs and give them the data needed to

- Develop operating plans and budgets.
- Control and account for resources.
- Make day-to-day operational decisions.
- Optimize the use of resources.
- Monitor the results of operations.

The controller can better serve managers by (1) viewing financial information from management's perspective, (2) presenting information in language simpler than accounting jargon, (3) translating facts and statistics into trends and relationships, and (4) following up on suggestions made by the controller to management.

Meetings with managers are opportunities for controllers to take the initiative and contribute their expertise to the decisionmaking process.

Provide Continuing Education Programs for Managers, Accountants, Auditors, and Computer Professionals

Advances in computer technology, accounting, and financial analysis techniques have opened up new opportunities to creatively use accounting systems and financial information to control and wisely use resources to achieve goals. These advances are being developed at a very rapid pace. Continuing education programs are a must for

managers, accountants, auditors, and computer professionals to keep them current on advances in their disciplines and to enable them to apply new techniques to their day-to-day work.

Managers and their accounting and computer support staffs need to continually update their particular skills. For example:

- Managers must learn how to use financial statements and special reports to evaluate the financial results of past decisions and predict the financial consequences of decisions they are making today.
- Accountants and auditors must learn how computer and software systems can be used to quickly accumulate, record, manipulate, and report financial information, so they can better give managers the financial summaries and analyses they need to make operating decisions.
- Computer professionals need to (1) keep current on the state-of-the-art in the computer sciences and (2) learn accounting and managerial techniques, so they can design, implement, and operate accounting systems that give managers the financial information they need when they need it.

Use Computer and Software Systems to Produce the Financial Information and Analyses Needed in Making Decisions

Computers—with their ability to rapidly accept, store, manipulate, summarize and print data—can provide more meaningful information for use in making decisions. Special features can be added to a computerized accounting system to make the best use of information in the accounting records.

These special features include data retrieval and analysis systems, accounting models, and decision-making systems.

- Retrieval and analysis, via cathode ray tube terminals, give managers almost instantaneous access to the latest accounting information.

—Accounting models for future financial information are considered.

—Decisionmaking models to select the best combination of alternative accounting and computer optimization techniques to determine the types of the medically important largest number of medical facilities

Managers must participate in accounting systems to produce reports and analyses that are useful. To assure that systems are designed to meet their needs, support the project team in improving current systems, setting data base and or enhanced systems.

Managers Must Support Accounting Systems Team Designing New Systems

Effective accounting systems—computerized ones—will help managers fully support the design of new systems and existing systems.

Agency accounting systems produced are costly and take a lot of time and money to develop, and implement. Managers must defer for much of the information to conserve, and protect to decide how best to achieve goals.

- Accounting models can help estimate the future financial impact of decisions being considered.
- Decisionmaking systems can help managers select the best course of action from a series of alternative actions. For example, a computer optimization model could help determine the types of medical help programs for the medically indigent that would serve the largest number of people based on available medical facilities, costs of care, and budget.

Make Sure Accounting Systems Are Properly Designed

Managers must participate in the design of new accounting systems to make sure that the financial reports and analyses they receive are complete and useful. To assure that accounting systems are designed to meet their needs, managers should (1) support the project team designing new or improving current systems, and (2) participate in setting data base and report requirements for new or enhanced systems.

Managers Must Support the Project Team Designing New Systems

Effective accounting systems—especially computerized ones—will be developed only if managers fully support and become involved in the design of new systems and major modifications of existing systems.

Agency accounting systems and the information produced are costly and valuable agency resources. A lot of time and money will be spent to design, develop, and implement a new accounting system. Managers must depend on their accounting system for much of the information they need to control, conserve, and protect agency resources as well as to decide how best to use these resources to achieve goals.

Managers Must Participate in Setting Information Requirements for New Systems

Managers must actively support and be involved in the design of new systems or the modification of existing systems from the start to help assure that the system, when implemented, will give them the information they need when they need it.

Managers must participate in setting information requirements for new systems to help assure that their information needs are met. In short, managers should require that new accounting systems be designed, built, and run to produce reports that show accurately and completely, in financial and corresponding quantitative terms:

- Planned work and projected costs and obligations.
- Work done and costs and obligations incurred.
- Significant deviations between planned and actual work accomplishments and costs and obligations.
- Current status of appropriated funds.
- Value of agency assets, liabilities, and Government equity.
- Expected revenues and revenues received.

Points to Keep in Mind

In moving a system from concept to reality, managers should keep the following points in mind.

1. Early and continuous involvement of an agency's top management is important. Their positive commitment to a system development effort will set the tone for accelerating the project. Top management must participate in selecting the project coordinator, committing resources, and making contract decisions. Top management should arrange for periodic reviews and briefings to keep abreast of the projects, evaluate problems and progress, and make key decisions.

2. The project leader should be the most important individual in the project. He should have the full support of the agency and be fully attentive to the needs and desires of the project team.
3. An important success factor is to precisely define the project. Not only must the project be defined, but the objectives must also be defined and the project team must be able to communicate and circulate information and decisions adequately.
4. During each project phase, project team members and decisions must be open so that they can be free to bring up problems to the project team. Managers must project team a
5. Communication is essential. The project team must be open so that they can be free to bring up problems to the project team. Managers must project team a
6. The systems project team must include the views and users inside the organization and agency who can have an impact on the project. Outside the agency, the Office of Management and General Services, and GAO did not consider the project outside the agency development project. The system was a computer

2. The project leader or coordinator is one of the most important individuals in system development and implementation. This individual should be selected early and have the full support of top management and be fully attuned to managers' information needs and desires.
3. An important step in developing a system is to precisely determine its requirements. Not only must problems be identified and defined, but top-level and other key officials must agree on the problems defined and the scope of the system needed.
4. During each project phase, various alternatives and constraints will be considered and decisions and commitments made. Adequate records of these should be kept and circulated to assure effective communication and coordination.
5. Communication between the system project team and agency top managers must be open so that the project team will feel free to bring design and implementation problems to the attention of managers. Managers must be willing to listen to the project team and help to solve problems.
6. The systems project team must consider the views and information needs of all users inside the agency as well as organizations and individuals outside the agency who could have an interest in and an impact on the system. Interested parties outside the agency could include the Office of Management and Budget, General Services Administration, the Congress, and GAO. One agency, for example, did not consider all interested parties outside the agency during the design and development phase of the system project. The system was conceived and designed to use computer terminals in all of the

agency's 1,780 field offices. General Services, the Office of Management and Budget, and a congressional committee objected to the use of so many computer terminals for a variety of reasons, and the agency had to modify the new system after much of the design work had been completed.

7. The project team must guard against overselling the system to affected organizational units and individuals inside and outside the agency. In short, the project team should promise only what it can deliver and deliver what it promises.
8. Top managers must also realize, however, that before analysts can start to build the detailed system specifications, they have to know the computer hardware that the system will run on and that programming will be delayed pending hardware selection. For example, one agency's project team estimated that it would take 10 months from the time the computer equipment contract was awarded until the system could be programmed and made ready for field test.
9. Top managers must understand that the Federal procurement process for buying computer equipment and related software is a long, complex, and time-consuming process and that the procurement lead-times must be factored into any schedule for system implementation.
10. System design must be frozen at some point so that programmers can build the needed computer programs. Programmers cannot program against a system design that is constantly changing. Yet, design changes mandated by changing business conditions must be considered. One agency solved the problem by accepting suggestions for design changes from users and other interested parties after the

system design was evaluated priority and incremental while final system

11. Organizations and individuals outside the agency should have interest in and participate in the system test and evaluation. Interested parties of the test and evaluation should assure that they understand the test results.

12. The system can be used by the people. It must be understandable, a

Most of these points are elaborated upon in our

The best designed system is of little use if it exists only on paper. It must be designed with the continuing changes in managers' information needs and business practices. That systems are well designed, and continue to be designed, during the life of the system, managers should:

- Require internal and external evaluation of design and all phases of development.
- Measure periodically the usefulness of the system.

Managers Should Require Evaluation of the Design and System Operations

Managers should require that (1) participants in the design and (2) review on a regular basis of system operations. This will help

system design was frozen. The changes were evaluated and put in an order of priority and included in the system design while final system field tests were run.

11. Organizations and individuals, inside and outside the agency, who could have an interest in and an impact on the new system should participate in designing the system test and evaluation plan. Having all interested parties participate in the design of the test and evaluation plan will help assure that they will be willing to live with the test results.
12. The system cannot be all things to all people. It must be kept as simple, understandable, and useful as possible.

Most of these points and other guidance are elaborated upon in our previous booklet.¹

Make Sure Accounting Systems Are Working Properly

The best designed accounting system is worthless if it exists only on paper and does not keep pace with the continuing changes in programs, managers' information needs, and general financial and business practices. Managers must make sure that systems are well designed, put into place as designed, and continue to meet their information needs during the life of the system. To do this job managers should:

- Require internal auditors to evaluate the design and all phases of system operations.
- Measure periodically the quality and usefulness of accounting system outputs.

Managers Should Require Internal Auditors to Evaluate the Design and All Phases of Accounting System Operations

Managers should require their internal auditors to (1) participate in the design of new systems and (2) review on a regular basis accounting system operations. This will help assure that

¹ "Lessons Learned About Acquiring Financial Management and Other Information Systems," Aug. 1976. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 020-000-00138-1.

- Needed controls and audit trails are included in the system designs.
- Design weaknesses are identified and corrected.
- Internal controls are implemented as designed and remain effective.
- Accounting procedures are followed.
- Transactions are recorded promptly, completely, and accurately.

Managers must go further. They must see that all system weaknesses found by their auditors are corrected as rapidly as possible. If managers do not correct system deficiencies disclosed by auditors, they may be making operational decisions based on incorrect information. This, in turn, will most likely lead to loss of control over resources and excessive use of resources to achieve goals.

Managers Must Look at the Effectiveness of Accounting Systems and the Quality of Information Produced

Periodically, managers must take a hard look at how well their systems are performing. Even the best accounting system can lose its effectiveness over time if the system is not evaluated and updated on a regular basis. A good accounting system is dynamic; that is, it keeps pace with changes in (1) programs, (2) general business practices, (3) managers' information needs, and (4) accounting and recording—computer hardware and software—techniques. Managers must insist that their accounting system keep pace with the evolution in the agency's programs and operating procedures.

The system evaluations should help managers answer such questions as

1. Do we know our current obligations, expenditures, and unobligated balances for our appropriations and/or allotments? (Case Study 1)

2. Are we warned of expenditures incurred and exposures other than Congress? (Case Study 2)
3. Are the financial statements of our accounting system complete for inclusion in consolidated statements? (Case Study 3)
4. Are cash receipts routinely reconciled by the Treasury?
5. Are property reports do they show all are, where they are, and whether they are? (Case Study 5)
6. Do we have control receivable and not collect accounts? (Study 6)
7. Are accounts payable produced that show when bills should be paid?
8. Are we considering elements of cost of accomplishing? (Case Studies 7 and 8)
9. Can we compare actual costs and obligations done and costs? (Case Studies 7 and 8)
10. Can we measure services/goods produced by assigning people to them?
11. Do we know the services/goods customers are receiving? (Case Study 8)
12. Do we get the feedback to help us decide management decisions? (Case Studies 10 and 11)

2. Are we warned before obligations are incurred and expenditures made for purposes other than those authorized by the Congress? (Case Study 2)
3. Are the financial statements prepared by our accounting system accurate and complete for inclusion in the Treasury's consolidated statements? (Case Study 3)
4. Are cash receipts deposited quickly and routinely reconciled with deposits certified by the Treasury? (Case Study 4)
5. Are property reports used and useful and do they show all items onhand, what they are, where they are, how much they cost, and whether they are being fully utilized? (Case Study 5)
6. Do we have control over our accounts receivable and make adequate efforts to collect accounts that are overdue? (Case Study 6)
7. Are accounts payable reports routinely produced that show what we owe and when bills should be paid?
8. Are we considering all appropriate elements of cost in computing the expense of accomplishing a specific unit of work? (Case Studies 7 and 9)
9. Can we compare work goals and projected costs and obligations with actual work done and costs and obligations incurred? (Case Studies 7 and 9)
10. Can we measure the dollar value of services/goods produced with the cost of producing them so we can effectively assign people to tasks? (Case Study 11)
11. Do we know the full cost of producing our services/goods so we can charge our customers an equitable price? (Case Study 8)
12. Do we get the financial information to help us decide whether program management decisions we have made are sound? (Case Studies 10 and 12)

Your Accounting System Can Do A Lot for You

In this booklet we hope we have achieved our objective of convincing managers at all levels that an effective accounting system can help them:

- Plan and control agency operations.
- Decide on the best ways to use resources to achieve goals.
- Keep within appropriations and other legal requirements.
- Safeguard resources.
- Evaluate accomplishments.

Remember, however, it's up to the manager to make sure that accounting systems are developed and operated effectively.