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What People Are Writing About

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what people are writing about

BOOKS

The Corporate Social Audit by Raymond A. Bauer and Dan H. Fenn, Jr., Russell Sage Foundation, 230 Park Avenue, New York, 10017, 1972, 102 pages, free upon written request (paperbound).

As a possible new field of professional activity for the CPA, the so-called corporate "social audit" seems at the moment to have more potential than the long-awaited management audit—mostly because of growing external pressures for corporations to demonstrate their social accountability. This book is the result of a year-long investigation of what is going on in this area.

The corporate social audit, as a way of measuring how well companies are fulfilling their noneconomic responsibilities, and at what cost, is a lively and controversial topic of current debate in the accounting profession and outside it.

For accountants the chief issue is how a meaningful audit of corporate contribution to pollution control, minority employment, worker job satisfaction, and a host of shifting social objectives could possibly be conducted. That issue is, inevitably, closely tied to the one of who should conduct the audit.

David F. Linowes has been arguing for an audit of corporate social expenditures and accomplishments measured in dollars and cents—obviously a task for the CPA. Some would settle for some sort of nonquantified qualitative evaluation of performance—a job that could be done by a social scientist. In an effort to stake out a franchise, the AICPA last year appointed a committee to help develop standards and techniques for "measuring, recording, reporting, and auditing social performance."

There is, of course, a broader field for debate. Most basic of all

REVIEW EDITORS

In order to assure comprehensive coverage of magazine articles dealing with management subjects, Management Adviser has arranged with fifteen universities offering the Ph.D. degree in accounting to have leading magazines in the field reviewed on a continuing basis by Ph.D. candidates under the guidance of the educators listed, who serve as the review board for this department of Management Adviser. Unsigned reviews have been written by members of the magazine's staff.

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is the question of whether businessmen should have other than economic motivations. Economists of the Adam Smith "invisible hand" school argue that the profit motive should be business's only concern; if the basic job of production and marketing is handled efficiently, the marketplace will automatically adjust everything else.

The authors of this book dismiss that point of view rather summarily. They point out that social goals and values have been an important part of business ethics throughout history—except for the relatively brief period since the rise of the Protestant Ethic. Furthermore, they think, the Protestant Ethic has lost its hold on the community at large.

". . . the preoccupation with social responsibility, which has been the plaything of the business community since World War II, has suddenly become a meaningful—and even angry topic of conversation in the community at large," this book reports. Furthermore, the authors believe, ". . . current intensity of interest seems to be supported by long-term social and economic trends." It is possible that we are "redefining the nature and role of the corporation."

Much activity—no consensus

Assuming the inevitability of some sort of social audit, the authors of this book, professors at the Harvard Business School, have concentrated their efforts on a survey of who is doing what as a guide to those who are thinking of taking some action of their own.

They find quite a bit to report, even though there is nothing even remotely resembling consensus on what should be evaluated in a social audit, much less how it should be done.

Some groups are taking specific selected areas of activity and reviewing them in detail. The Council on Economic Priorities, a Nader-like shoestring-run organization, has devised a methodology for assessing a company's performance in such areas as air and water pollution. The Conference Board rates corporate public affairs programs according to whether or not they include some five specific components. The Equal Employment Opportunity Commission has devised methods of measuring performance in minority hiring and promotion. A number of firms are using employee and community attitude surveys to measure progress in various aspects of human relations.

Quantitative measures sought

A few people are trying to develop sophisticated quantitative measures of social responsibility. In an article in the *Public Administration Review,* Todd LaPorte offered a scheme for "weighing technological alternatives in different areas as functions of the probabilities of achieving valued conditions such as certain political, social, psychological, and economic effects." Clair W. Sater, an account adviser with an investment advisory firm, has proposed a five-point rating system for various areas of social concern which would be summarized in a "three-dimensional rating matrix for an industry," which would compare the companies in the industry with each other and with others in the same geographic area against the backdrop of local legal requirements and "the potential for action." Dr. Clark Abt of Abt Associates has designed a preliminary plan for cost/benefit analysis of a company's actual and potential social programs. Benefits would be measured in terms of social programs' dollar contribution to the company's long-run profitability; costs would include both out-of-pocket costs of social programs and the opportunity costs of alternative programs foregone. The "Social Operations and Income Statement" on which Abt Associates modeled an audit of their firm is reproduced in this book.

The book also reports in some detail on the work being done by four companies (one working with an accountant, one working with Arthur D. Little, Inc.); two consultants (Little and Abt); two mutual funds "created to offer investors a socially responsible portfolio"; and two public interest organizations, the Council on Economic Priorities and the Corporate Information Center of the National Council of Churches.

Audits may, the authors note, be for three basic purposes: to influence behavior within the corporation; to influence decisions by investors; and to inform the public. They may be sponsored by the companies themselves, by investors, or by public interest groups. Since these purposes vary so widely, it is inevitable that the audits do, too. As a result, the authors are able to come to few conclusions.

There are some, however, that should be particularly welcome to accounting firms: "Corporations have an interest in making their own audits before they are audited by others." (Certainly they will need expert help.) Arriving at "true costs" of social programs is likely to be difficult. "Here we need some developmental work by the accounting profession." The full task of conducting "a social audit for 'optimizing' a corporation's profit would be formidable and is not likely to be undertaken in the near future by a well advised firm." Because individual value systems vary so greatly, the "notion of weighting areas of social performance to produce a composite index of social responsibility" is regarded by the authors as "a waste of time and a misuse of the social audit concept."

The authors themselves seem inclined to favor what they call "process audits." The auditor develops an analytical description of what the company is actually doing and a statement of what the best practice is so that the businessman can compare the two and decide whether to change his actions.

Meanwhile, there is much research to be done, and the authors end the book with a list of some of the major projects that need doing.

Although their opinions are useful, this book is primarily a piece of journalistic reporting rather than a think piece. As such it is invalu-

able. From it the individual who is thinking of designing a social audit can get a quick overview of the principal trends and problems plus a line on those who are doing the hard thinking—and getting the experience—in the social audit field.

Business Cost-Benefit Analysis by R. F. J. DEWHURST, McGraw-Hill Book Company (UK) Limited, Maidenhead, Berkshire, England, 1972, 288 pages, $18.00.

For the American reader this British effort in management science is probably mistitled, for much of its content does not fall under the heading of what would be classified here as cost-benefit analysis. Rather, it is a book on mathematical decision-making techniques, and a pretty good one, too.

Cost-benefit analysis started in government as a method of quantifying intangible benefits and balancing them against their costs where no profit measure existed. The idea is applicable—although seldom applied—to areas of business where benefits are intangible rather than monetary, for example, research, advertising, publicity and public relations, training, and management development.

In his opening chapter the author of this book, a lecturer at a British university, summarizes the basic approach as follows:

"Apart from his purely recording work, the job of an accountant in a business is to advise and to assist in making financial decisions. Such decisions involve weighing a payment made now against its anticipated cash inflow later. . . .

"Some decisions of business accountants . . . and nearly all decisions of administrative officers in nationalized industries and Government departments, are difficult to evaluate on this basis. One side of the 'equation'—the estimated expenditure on investment—is comparatively easy to determine in money terms; the other side—the expected benefits—can usually only be expressed (if at all) in non-cash quantitative units, such as leisure hours.

"When the benefits from alternative investments can be expressed in the same quantitative units . . . a direct comparison is possible. But whether investment in either is justified is still not proven.

"When the benefits from the alternative investments are not in the same quantitative units, they must be converted to a common unit. Cash has the overwhelming advantage that it enables the benefit from the investment to be compared directly with the cost, and hence makes possible an assessment as to whether the expenditure is justified or not.

"Converting benefits into cash terms is difficult. Techniques do, however, exist, and progress becomes easier as we proceed into this almost uncharted area. When one or two agreed figures (such as a leisure-hour rate) have been established as landmarks, other figures can be related to these.

"Conversion of benefits into money terms is not the final step; the time element must be taken into account. That discount rate which, when applied to the benefits, will make them equal to the investment amount, must be determined. This return on investment rate is an easy measure for comparison purposes. Its incidence is quite general. It applies both to decisions at macroeconomic level and to business decisions."

Quantitative techniques

The author goes on to describe modern quantitative techniques—linear programing, integer programing, regression analysis, Markov chains, input-output analysis, the Simplex method, matrix algebra, discounted cash flow analysis, sensitivity analysis, risk analysis, probability analysis, and decision trees. In the last four chapters he (and a contributing author) apply these techniques to the measurement of management (chiefly through management by objectives), to technological forecasting, to marketing expenditures, and to training.

While the approach is distinctly mathematical, the book can be understood on a superficial level by skipping the mathematical analyses, which are concentrated mostly in a single chapter and the appendixes. The basic writing style is simple, with the grace and exactness that for some reason is found so much oftener in the work of British nonprofessional writers than in that of American ones.

Many terms are differently defined in Britain than in the United States. The fact that the bulk of the contents of this book have more to do with decision-making theory than with the narrower cost-benefit analysis may simply reflect such a difference in terminology. But whatever its subject is called, the book is a good one and should be informative to managers and accountants alike.

The Big Foundations by WALDEMAR NIELSEN, Columbia University Press, New York, 1972, 475 pages, $10.95.

A researcher, in a study financed by a foundation, analyzes the social and financial performance of the 33 largest philanthropic foundations and finds it uninspiring.

Charitable foundations, the principal large-scale conduit for private philanthropy these days, have come under increasing attack in recent years.

After considerable badgering by Rep. Wright Patman of Texas, the U. S. Treasury in 1965 issued a report that identified a number of spreading financial abuses among foundations and criticized such structural flaws as the close ties between many of the foundations and the donor families or associated companies. The result was the Tax Reform Act of 1969, which sharply reduced tax inducements to donors to establish foundations, obliged the foundations to increase their contributions to charity, put pres-

sure on them to make their investment portfolios more productive, forced them to pay the costs of the Federal government's surveillance over them, and forced them to report more fully to the general public on their activities. It also banned grants for political or propagandistic activity, further handicapping any sort of innovative activity by already conservative-minded boards.

As a result, this author feels, the foundations today stand at a kind of crossroads. This makes it appropriate, he suggests, to explore the past, present, and future of a group of organizations about which little objective information has been available.

This study concentrates on the 33 largest foundations, which among them control some $11 billion in assets, half the resources of the 25,000 foundations currently in existence in the United States. The man who conducted it, Waldemar A. Nielsen, is a former officer of the Ford Foundation who now serves as a consultant to foundations and corporations on questions of social responsibility. The foundation which sponsored it, the Twentieth Century Fund, is not one of the top 33.

Mr. Nielsen starts by profiling the foundations individually—their donors, their structures, their objectives, and their performance. Not surprisingly, they vary widely in usefulness – from the major scientific (and noncontroversial) achievements of the Rockefellers to the "second-rate" activities of the DuPonts, seemingly aimed chiefly at the preservation of family memorabilia and the avoidance of taxes.

The profiles, presented in a lively, gossipy, insider style, are all fascinating. Since many foundations over the years have done little or nothing in the way of public reporting, much of the research is original and interview-based. This makes the accuracy of the material impossible for an outsider to evaluate, but the research seems to be conscientious and objective.

Then Mr. Nielsen seeks to evaluate the performance of the foundations as a group. In the absence of generally accepted standards of social utility and of anything faintly resembling uniform reporting requirements, his evaluations are necessarily highly subjective—but they seem reasonable enough.

Basically, he finds the majority of them to be "unprofessional, passive, ameliorative institutions," offering "the multitude of useful nonprofit organizations in American life which depend on contributions 'another door to knock on' in meeting their current operating needs and capital requirements." If their response to the racial issue is typical of their effectiveness in dealing with American social problems, and Mr. Nielsen believes it is, they are orthodox, timid, and anchored in the status quo.

Mr. Nielsen also criticizes the foundations for their "enclave mentality." They are controlled by donor families (in their earlier stages), corporations tied to the donor families, or boards of trustees—almost all white, Republican, Anglo-Saxon, Protestant, college-educated males, who are for the most part businessmen, lawyers, or other professionals. The close ties to families and companies constitute, Mr. Nielsen believes, a built-in conflict of interest.

Imagination lacking

Financially, their management has been mostly honest, the author thinks, but unexciting. The return foundations have received on their investments has averaged slightly below that of the market in general. They pay out their income rather promptly, but largely to established organizations and noninnovative projects.

Thus, he concludes, the foundations have not succeeded in carving out a unique niche for themselves. Their charity goes largely to perform functions that could be done just as well by government or by existing educational and charitable organizations—through which, indeed, they tend to channel their funds. And they may be doomed unless they begin to show more innovativeness. For a start, Mr. Nielsen suggests more opening up of their operations to public scrutiny; more opening up of boards to such excluded groups as "young people, females, nonwhites, Catholics, Jews, Democrats . . . persons whose forebears came from such places as Ireland, Italy, Greece or Poland . . . intellectuals, artists, writers . . . social reformers . . . labor union officials"; and more imagination in seeking out philanthropic activities not already covered by other groups.

Operations Auditing by ROY A. LINDBERG and THEODORE COHN, Amacom, American Management Association, Inc., New York, 1972, 317 pages, $16.

This book, aimed primarily at the beginner in operations (or operational) auditing, gives him a highly specific guide to basic procedures. For the more experienced auditor it has less to offer, although he may be interested in its arguments on behalf of a specific philosophy of operations auditing—firmly held and belligerently defended by these authors.

In many companies auditing, particularly internal auditing, has moved beyond the attestation of assets to include measurement of corporate or departmental performance in utilizing resources efficiently and in moving toward attainment of corporate goals. This process is most commonly known as operational auditing. Sometimes, especially when the audit is performed by company outsiders (usually CPAs), it is called "management auditing."

These authors, respectively the director of management services and the managing director of the Newark, N.J., CPA firm of J. H. Cohn & Company, prefer to call it "operations auditing" because, as they explain, "The process we advance here is sufficiently different from the auditing forms that are called operational and management

auditing to deserve a distinctive name. It is not auditing that is operational in nature, nor does it apply exclusively to management. It is auditing *of operations,* hence the name we give it."

In its most general definition, the authors say, operations auditing is a "formal procedure for systematically analyzing, evaluating, and describing company, unit, or functional performance." Since that is true of all appraisal instruments, the authors suggest a more restrictive definition: "Operations auditing is a technique for regularly and systematically appraising unit or function effectiveness against corporate and industry standards by utilizing personnel who are not specialists in the area of study with the objectives of assuring a given management that its aims are being carried out and/or identifying conditions capable of being improved."

OA formalizes activity

OA is, they emphasize, a formalized activity: ". . . every good manager does instinctively measure the effectiveness of the units he is in contact with but to say that OA is just another version of that informal measuring is to grossly underrate the tool. . . . Operations auditing differs by being consciously and systematically performed against acceptable standards . . . it is a formal activity with a distinctive work content."

The dispute over nomenclature reflects what the authors refer to as the polarization of opinion within the accounting profession on the nature and role of operations auditing:

"The two major opposing views of OA are these: (1) It is only a fact-gathering tool that will help management appraise performance and identify areas in which additional investigations may yield improvements. (2) In addition to the foregoing, OA should be directly involved in recommending specific changes intended to correct the shortcomings it has revealed. We hold the first view—distinctly a minority view."

Why? "To begin with, the operations auditor does not do an intensive study. He engages, substantially, in sampling activities. In the second place, when the survey phase of the audit is over, he must spend the time left to define the problems he discovered in the most precise, meaningful terms possible so that management can decide what priority the problems should be given in using the resources of the enterprise. In the third place, he does not (if he is a typical auditor) have the knowledge needed to provide solutions management can trust. After all, the process of finding the best solution to any problem worth solving is a complex, time-consuming one involving, among other things, developing alternatives, testing them, and selecting the one with the most favorable trade-offs. It is not an activity the operations auditor has either the time or, in most cases, the best qualifications for."

Furthermore, as the authors point out, the Institute of Internal Auditors cautions, "Internal auditors must take an objective attitude and, therefore, should not take a hand in developing or installing procedures that will be subject to later internal audit review and appraisal." Framing a recommendation for change later enacted does not, the authors claim, "leave the auditor in an independent position even though he took no hand in implementation . . . the tendency to get into recommending and even implementing changes" is "deadly to the spirit and purpose of OA. The tendency destroys independence and implies a virtuosity and expertise at odds with the economics of the operations auditing function . . . the main objective of OA is to serve as an instrument of management intelligence, not problem solving. Such a view does not 'flatten' OA into a thin, narrowly useful instrument. Finding, identifying precisely, and describing a real business problem accurately is no mean task. When it is done, finding the solution is comparatively simple."

There are, no doubt, many who disagree with these viewpoints. This book, however, is not directed to "those with formed views of the nature and content of OA." It is "primarily addressed to those who are inexperienced in operations auditing, and it is intended to be helpful to them in performing their first operations auditing assignments." The volume "is intended to be a workbook; it contains some of the knowledge and techniques needed to perform operations audits."

Covered areas described

The main part of the book consists of general descriptions of areas to be covered and questionnaires to be used in the investigatory phase of an audit.

The general descriptions and the more than 80 pages of questionnaires cover the following areas of operations: administration and management, plans and planning, controls and controlling, organization and organizing, information and communication, research and renewal, personnel, clerical operations, manufacturing, marketing and sales, engineering, electronic data processing, costing and pricing, purchasing, materials handling, maintenance, and accounting.

The descriptions attempt to sketch a sort of norm that can be used to evaluate these operations in medium-size commercial enterprises ("between $50 and $250 million in size"). They are not exhaustive, the authors point out; "they primarily serve to bring the auditor abreast of developments and create awareness of auditable aspects." The questionnaires are "examples of working documents. They are useful in directing inquiry, assuring completeness in field work, and providing comparability between successive audits."

In application to a specific audit assignment, the authors concede, the material suffers from the obvious deficiency that "no company is completely like another, and the task of trying to anticipate all operations auditing needs is beyond execution. Accordingly the user of

this book has a sizable task on his hands in bending it to his purpose."

That, of course, would be true of any workbook on the subject, and the authors are hardly to be faulted for it. This book, indeed, has weaknesses of its own. The style is dogmatic and likely to be irritating to readers with differing opinions. The language is sometimes surprisingly imprecise for authors trained in accounting. For example, they recommend an expenditure (presumably annual, although that is not spelled out) of 0.2 per cent for operations auditing. But 0.2 per cent of what? Later it appears that the authors refer to 0.2 per cent of "company size." But what is size—sales or assets? The reader is not told. Furthermore, the descriptions of operations are not nearly so useful as the questionnaires; they are sketchy, superficial, and highly colored with the authors' somewhat doctrinaire views on management.

But the beginner who has to be led by the hand will undoubtedly find this book very helpful. After he has acquired some experience of his own, he can begin to choose up sides.

MAGAZINES

Ideational Items: Rational Computerization, Jerome D. Baker, *Business Horizons,* April, 1972.

According to Mr. Baker, some companies suffer during computerization because management does not understand the uses of the computer. Mr. Baker discusses the following major topics in his article: the management level at which the computerization decision should be made; the costs of computerization; the implementation of the computerization project; and various alternative methods of obtaining computer equipment. In conclusion, Mr. Baker states that, although there is no general formula for success in computerization, management should profit by following his five general guidelines.

Mr. Baker begins his article with four case histories which contain one central theme: as a result of management's inability to understand the uses of the computer, the companies have suffered. Both management and computer experts are to blame.

In order to reduce the number of failures in the area of computerization, Mr. Baker offers some guidelines which, if implemented, will move a company into the area of computerization with a minimum of problems. First, the decision to computerize must be made by top management, not by a data processing manager. The manager must resist the temptation of letting himself be talked into computerization. Rather, his decision must be based on an analysis that shows that the benefits of automation will justify the costs.

Second, the speed and degree of the implementation of automation must be based on such tangible benefits as dollar savings and such intangible benefits as obtaining inventory control data which was not previously available to the firm.

Third, an executive who is considering computerization must ask the following questions:

1. Is the company big enough to be considering a computer operation? With respect to automating operations, size is determined by the volume of paper work or complexity of operations rather than sales dollars.
2. What problems exist within the company that lead it to think that it should computerize? Quite often, problems may be alleviated by modernizing procedures rather than automating the operation.
3. What problems exist within each operation of the company?
4. What benefits can the company really expect to achieve from computerization? A company which goes over to E.D.P. operation rarely saves money as a result of a reduction in personnel. However, it may often save money in other areas, such as inventory control. It is essential that during this period all of the company's major problems be brought out in the open and analyzed carefully. Otherwise, the new computer system is not likely to result in improved operations.

Fourth, there are three types of costs associated with computerization. The first type of costs are those required during the installation of the systems and procedures and include such things as the time it takes experienced, qualified systems analysts to perform the job, the time it takes experienced programers to write, test, and "debug" the programs, and the cost of training the systems operating personnel. The second type of costs are operational in nature and include the routine costs associated with running the system once it is operational. The third type of costs, often overlooked by management, are the costs of training people within the company to use effectively the information coming out of the computer system.

Fifth, the company must implement the computer system. Mr. Baker believes that a number of alternative approaches may be taken to achieve this goal. A company may hire a qualified data processing manager. This individual must be conversant with all the major areas of the business which are to be automated, must know how to design computer applications and supervise and direct programers, must be familiar with the fundamentals of the data processing operation, and must have the ability to train people outside the data processing environment. Such an individual is difficult to find at this time.

Alternatives

A company also has the alternative of implementing the computer system by hiring a computer manufacturer or software house. If the company chooses this alternative, it should select a firm that has done the job before and where qualifications can be checked through other clients.

The third alternative is merely a combination of the first two. Mr.

Baker believes this approach often yields the best results because it allows management to better achieve cost control.

Acquiring hardware

Sixth, a company has a number of alternatives available for acquiring the necessary equipment. The company may: 1) own the equipment solely; 2) own the equipment jointly with another company; 3) lease the equipment; 4) use the services of a qualified computer service bureau; or 5) combine any of the above methods. Each of these alternatives has advantages and disadvantages, and Mr. Baker briefly mentions them in his article. He then states that management must make the final decision concerning which method of operation best suits its particular circumstances. Such a decision should be made only after advice is sought from the most objective source available, either from competent in-house technical personnel or an outside consulting company.

Five-point summary

Mr. Baker concludes his article with a five-point summary of things management should consider if it is to be successful in computerization:

1. Management must be as conversant as possible both with the problems to be solved by automation and the process itself.
2. Management must acquire the best possible technical advice from exploration through implementation.
3. Management must do what is best for the company, not what is best for the computer manufacturer or the data processing manager.
4. Management must frequently monitor the results (at least every six months).
5. Management, above all, must learn how to develop effectively the computer into an effective management resource tool.

James M. Krueger
Indiana University

Some Thoughts on Computer Usage in the '70s by Gordon H. Cowperthwaite, *Management Controls,* April, 1972.

Sales of computers and related data processing equipment have increased at a rapid rate. Accompanying and perhaps causing the increase was a rapid improvement in their technological capacities. In the past, companies have installed the latest data processing systems with little regard to their efficient utilization. Cowperthwaite discusses the problems, developments, and trends in the utilization of computer-based data processing systems from the Canadian perspective, although his comments are also applicable to the United States.

Cowperthwaite notes past improvements in the computational capabilities of computers on utilization efficiency which culminated in the development of third-generation computers in the 1960s. In particular, he indicates that improvements in the reliability and serviceability of computers are playing an important role in reducing costs.

But the major emphasis of his remarks concerns the need for developments in other areas. Increases in the performance capabilities and decreases in the cost of on-line storage devices are needed. Increases in the use of minicomputers dedicated to specific applications are also suggested. The output from minicomputers could often be utilized as input to larger integrated data processing systems. On the other hand, increases are needed in the use of very large computer systems where cost per calculation is very low. Since individual companies or organizational units will often not be able to fully utilize the capacities of the large computer systems, complex time-sharing arrangements will be required. Low-cost data transmission will be necessary to make many time-sharing arrangements economically feasible since multiple users at different locations will need to promptly obtain data from the system for their needs.

Cowperthwaite emphasizes the need for software improvements even more than the need for hardware improvements. He points out that much progress has been made in the development of application program packages sold by independent software companies to businesses with specific data processing needs. Software companies have also developed data-base management systems, which are basically packaged integrated management information systems, but further improvements are needed to increase the sophistication of the systems and facilitate their installation. Decision-making systems will be developed which will constitute a superstructure, selecting and processing information produced by the management information system for the decision requirements of executive management.

Organizational improvements have already increased computer utilization efficiency and should be encouraged in the future. Companies have increasingly integrated their plans for computer-based data processing systems with organizational objectives. In this connection, the responsibility for the planning of data processing systems has been placed at higher levels in the organization structure. Though computer-based data processing systems often have not had to submit to the rigid capital budgeting requirements imposed on other capital projects, more and more data processing projects are being required to contribute to profits or other organization objectives just like other capital projects. The manpower cutback induced by the recent recession has helped reduce costs and thus improve the efficiency of data processing departments.

Corporate managers are emerging who are more demanding of the computer resource, are generally more aware of the techniques involved, and expect the computer to be applied more effectively. On the one hand, managers with nar-

row technical data processing backgrounds have been replaced by those oriented to management needs. On the other hand, formerly non-technically trained managers have been replaced by those with an awareness and appreciation of computer capabilities. Another important environmental factor is the increase in the supply of trained computer technicians, educated at institutions below the university level.

Other environmental changes are also contributing to improvements in computer utilization efficiency. The slowdown in growth of the computer industry has enabled computer manufacturers and independent software companies to concentrate on fitting data processing systems to the needs of users. Also, competition among manufacturers and software companies has increased, motivating them to provide better service. The practice of "unbundling," selling of services separately which were formerly sold as a package, has enabled purchasers to eliminate unneeded services.

Overall, there will be a heavy emphasis from top management for optimum cost/effectiveness and profit contribution of computers and related equipment.

KENNETH ROSENZWEIG
Michigan State University

Physical Distribution: A Cost Analysis by MICHAEL SCHIFF, *Management Accounting,* February, 1972.

Physical distribution costs rank high as a cost of placing a product in a state of marketability and, therefore, should be subjected to as rigorous an application of accounting theory as other costs of production.

Many firms in the last decade have sought to increase their profits by expanding their markets even to the point of encompassing foreign operations. Accompanying these expansions is an inherent increase in distribution costs, and accountants have been lax in the use of accounting theory to develop procedures by which to report these costs.

Dr. Schiff's stated purpose in the article is: "to explore some of the accounting problems faced in cost analysis for physical distribution and to identify desirable practices observed in several companies." The article primarily represents a codification of Dr. Schiff's insights regarding accounting for distribution costs. These insights were formulated by observation and critical evaluation of the methods employed by 14 large companies.

Apparent uncertainty as to proper allocation of physical distribution costs (which may range as high as 35 per cent of total production cost) should be cause for the management accountant to direct attention to the subject. Dr. Schiff points out that the management accountant's job is one of providing information for decision making and control and he therefore should concern himself with the following five general accounting problems in analyzing and reporting with respect to physical distribution costs:

1. *Classification* – The primary point here is that physical distribution costs are controllable and, therefore, the management accountant should endeavor to report them in a manner which facilitates managerial control.

2. *Treatment of Costs: Product vs. Period*—The cost of movement and handling of goods from the point of completion to the physical point at which the sale of the goods is effected is properly treated as a product cost. Shipment from point of sale to customer is suggested to be a period cost.

3. *Budgets and Standard Costs*—Control of cost via budgets requires that physical distribution costs be viewed as homogeneous costs and not arbitrarily budgeted to various departments. Standard costing lends itself to control of physical distribution costs just as it does to factory operations.

4. *Allocation of Cost to User Divisions*—Costs which can be identified as being incurred in the process of placing the product in a state to be sold should be charged to the product as a product cost. Variable costs of distribution which properly reflect the efficiency of an operation should be charged to the responsible profit center.

5. *Information for Decision-Making*—The management accountant's obligation is to provide information which will enable managers to make decisions which will affect future costs. The responsibility reports should provide the necessary feedback to allow evaluation of previous managerial decisions.

Similarities in the nature of distribution and production costs are emphasized to show that the divergence of the accountant's treatment of these costs is founded on an undisciplined approach to distribution costs. The concepts provided by Dr. Schiff are based on management's need for relevant information and therefore will provide needed information for planning and control.

WILLIAM S. HAWTHORNE
Oklahoma State University

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