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SMS: Social Measurement Systems for the Future—A Practitioner's Preview

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Aroused public awareness provides the motive force behind much of the turbulence of our time. For change to be directed along constructive channels, measurement methods and standards are necessary. Since social *measurement* is the aspect of social *responsibility* that demands accounting skills, a timely overview of the subject is important to professional accountants. While reporting on progress and problems, the author peers down the road that lies ahead.

Motivated by self-preservation, public interest in social responsibility is rapidly growing. Members of society feel they have a right to know what effect actions taken by others will have on their lives. Such matters as the depletion of global resources in meeting societal demands and the degradation of our environment are primarily responsible for the stimulation of this acute social concern. Actions by business and government affecting society's quality-of-life will have a significant impact on life-styles, health, and economics around the world.

Both public and private organizations are sensitive to this aroused public awareness. Increasingly public officials and the general public demand information about government programs. In the private sector, a *Business Week* survey of 100 company annual reports showed that in 1972, 64% of these companies made disclosures on their concern for corporate responsibility as compared with 30% in 1970.

Managers of public programs are accountable to society for the efficient discharge of their responsibilities. This characteristic stems from the fact that public programs are established by the people to accomplish certain tasks which they, individually, are unable to perform. Serious difficulty is usually encountered in attempting to measure the degree with which public programs are achieving their objectives, since service outputs are difficult to identify. However difficult, these measurements are essential to evaluating the effectiveness of a public-sector organization in fulfilling its purpose. Public officials, legislators, and individuals have a right to know how effectively and efficiently public institutions are utilizing the resources entrusted to them.

Business, government, and social agencies are vitally concerned with their socially relevant actions. Investment houses are interested in the degree of social awareness exhibited by companies, and social activists and organized public interest groups are determined to improve socially responsible activities in the public and private sectors. The pressing problem for all of these groups is how to effectively measure socially relevant actions.

One has only to review the plethora of current writing on social measurement to become aware of the widespread interest in this problem. John D. Rockefeller III, in *The Second American Revolution,* calls for the development of measurement standards that "go beyond the strictly economic." It is to this added dimension of measurement that accountants must now address themselves. With training and experience in the development and maintenance of measurement systems, accountants are in a unique position to make significant contributions to the development of new social measurement systems and to expand their sphere of influence in society.

Effects of Business Social Costs

Social costs occur when business does not consider its external costs in making decisions regarding production, distribution, and sale of its products that have a negative impact on our quality-of-life (i.e., depletion of resources, pollution, etc.). To the extent that a company is not responsible (legally or economically) for its actions, these social costs are then borne by the individuals in society and by society in general. For example, a company which pollutes a river has an impact on living conditions surrounding that body of water, health standards of people using the water, and costs to society of purifying it.

The economic impact of social costs will also be felt by business. Recent cost estimates of air pollution by the Environmental Protection Agency are placed at $16 billion annually with about $6 billion attributed to the economic cost of human mortality and morbidity.[1] Cost estimates for operating pollution control facilities run, for some companies, as high as 4% of sales. Some of these costs may be passed on to customers through higher prices. However, certain industries, and particularly older or poorly situated plants, may be unable to maintain their competitive position while coping with raised environmental standards.

Attention must be focused on the matter of gauging social responsibility costs, since these costs can have an impact on the going-concern concept of an organization. Due to the severe problems that are encountered by some organizations attempting to meet these new social responsibility costs, their future existence may be threatened. Many organizations faced with these costs for the first time may be unaware of the full impact that compliance enforcement could have on their existence, in the absence of adequate internal control. Since this goes to the very heart of reporting responsibility, we must be directly involved in certain questions relating to the measurement of an organization's social responsibility costs.

International marketing and economics can also be affected by environmental costs. Competitive products produced in countries having higher environmental and quality standards may be costlier and cause changes in world markets which can affect trade patterns.

Financial Systems Objectives

A basic accounting concept is that information collected will be useful to an interested party for the purpose of forming judgments about the activities of an organization. Unfortunately, present-day accounting systems do not satisfy this fundamental requirement when applied to gauging social responsibility in the private or public sectors.

There are two accounting objectives for private and public entities. The first objective fosters accountability by providing information for management to discharge its responsibilities and report on its stewardship; the second objective bolsters management control by providing information relating to the effective utilization of resources.

These classifications imply that a basic standard for judging the quality of accounting information is its relevance. In *A Statement Of Basic Accounting Theory*, published by the American Accounting Association in 1966, this conclusion was stated as follows:

> "Relevance is the primary standard and requires that information must bear upon or be usefully associated with the action it is designed to facilitate or the results it is desired to produce. Known or assumed information needs of potential users are of paramount importance in applying this standard."

The primary goal of business is to generate profits which represent to shareholders an adequate return on their investment. Present financial accounting systems are designed to reflect these relevant data. The Government Accounting Office, as a result of its recent publication *Standards for Audit of Governmental Organizations, Programs, Activities and Functions*, has defined its information needs, which the accounting profession must respond to in order to provide relevant data.

Current *financial* accounting and reporting is designed to respond to user information needs since it is relevant to:

- Management
- Stockholders or owners
- Interested third parties, such as banks, investment houses, and government
- Society

However, additional information is needed as a result of the new dimension of user concern. Management, owners, third parties, and society want to know more about actions of others which have an effect on their quality-of-life, and that of society in general. These new information requirements are vastly different from the traditional profit-and-loss, return-on-investment, and use-of-funds concepts now employed. Present accounting and reporting systems are not responsive to total information needs of all parties except in a limited financial sense.

Social Systems Objectives

In broad terms, the objectives of social responsibility accounting can be stated as follows:

National	1. Evaluate our quality-of-life.
	2. Develop national social need indicators.
Organizational	3. Develop internal measurement and control mechanisms.
	4. Develop responsive public reporting systems.

The first two objectives must be national in scope to be useful. Publication of a book on social indicators, which will attempt to identify social concerns on a national basis and relate them to national policy, is being prepared by the U.S. Office of Management and Budget. In order for organizations to be responsive to changing needs, national predictive indicators will be helpful for planning purposes. Additional information that might be developed by the government are the costs to society resulting from business actions by industry.

The two organizational objectives can be dealt with directly by accountants. Information generated at this level should help to reflect the quality and quantity of an organization's socially relevant actions.

Measurement systems at the organizational level must assist management in balancing its social output with its resource capability. An organization should strive to achieve an acceptable level of resource employment consistent with its organizational objectives and with societal needs. It is the development of these measurement systems by accountants, in conjunction with members of other disciplines (such as economists, behavioral and social scientists, and statisticians), which presents an unprecedented challenge to accountants.

Internal Measurement Systems

Internal decision-making systems must be revised to consider the effects of management decisions on organizations and society. Such systems should include both financial and nonfinancial measures which consider the:

1. *Internal impact* of a decision on an organization's financial resources and operational capabilities consistent with its planning goals, and its
2. *External impact* on society in general and the environment with which it interacts directly.

Such an internal measurement and control system should be integrated into an organization's planning process and information system. Goals for an organization's socially relevant commitments should be considered in the long-range planning process and in the formulation of organizational strategy. This requires a careful analysis of the environment in which an organization functions and its available resources. With such a system, adjustments will be possible in organizational objectives, long-range plans, and short-term actions as suggested by changing circumstances and social needs. Commitments could then be evaluated before the fact, providing for better organizational planning, control, flexibility, and resource employment.

A budget system, expanded to provide a performance evaluation of socially relevant actions, should be an integral part of a management social measurement system. Lacking such a control monitor, management cannot:

1. Evaluate an organization's success in achieving program objectives.
2. Evaluate performance on a benefit-versus-cost basis.
3. Adjust commitment levels to effect the benefits produced.
4. Choose between available alternatives for social commitments.
5. Readily spot problems as they occur.
6. Intelligently set organizational priorities.

Without a reliable evaluation of an organization's social costs and benefits, management may be unwilling to make social commitments. Furthermore, without satisfactory knowledge and control of its socially relevant expenditures, management may be reluctant to make fair public disclosure.

Current management control systems place emphasis on the short-run measure of performance of an organization and its management. This system does not satisfy the control needs of managements, which must now consider the social cost effects of decisions having longer-term impact. Measurement of short-term performance against plan gives incentive to management to ignore the long-term implications of their organizational decisions. Since survival is more important to individuals in organizations than social concern, current measurement and control systems must be restructured before we can expect changes in management and organizational performance relating to society's needs.

Practical first steps in designing and implementing an internal measurement and control program for socioeconomic expenditures will require management to define and inventory its existing social programs, identify and assign costs to these programs, and select the appropriate measurement criteria necessary to evaluate performance (these subjects are discussed later). These steps will promote a better understanding of social responsibility, a factor essential for its acceptance throughout an organization. Due to the magnitude of implementation difficulties, we cannot expect that such systems will be developed quickly. Although progress may be slow, it should steadily approach the goal of an integrated management system.

Public Reporting Systems

Before any meaningful evaluation of public information can be made, uniform standards must be established to preserve the comparability of reported data. Without comparability, performance cannot be evaluated between firms, and an individual firm's performance cannot be compared year to year. With the growing trend of public disclosure, comparability is becoming increasingly important. Mr. David Linowes, well known in the field of socioeconomic accounting, proposes the start of public social responsibility reporting by use of a socioeconomic operating statement (SEOS).[2]

Mr. Linowes presents a reporting format, with suggested guidelines, that tabulates dollars voluntarily spent to improve societal conditions. Costs of actions knowingly not taken by management (called detriments) would have a negative effect on the SEOS. Both positive and negative actions would be further classified as relations with people, environment, or product.

This is the first positive approach to measuring social action in quantitative terms, and it will provide some degree of comparability if interpreted uniformly by users and consistently followed by reporting entities. Although the SEOS represents a step forward in the establishment of social reporting, it is not without limitations.

The SEOS measures the quantity (costs of social actions or inactions) but not the quality (social improvement or its absence) associated with an organization's social responsibility. Neither management, stockholders, nor the public is provided with an adequate tool to evaluate or gauge the effectiveness of an organization's social responsiveness. Without performance measures, it is questionable whether the SEOS would fulfill the information needs of potential users.

One further observation should be made regarding reporting and the employment of resources. In present financial statement reporting, the accounting profession has been primarily concerned with attestation of the fact that funds have been expended in the amounts, and for the purposes, stated in the report. Social responsibility accounting requires further expansion of this concept. An organization may spend substantial sums for socially relevant purposes and achieve minimal or no results while appearing responsive to society's needs. To meet society's new information needs therefore, it may not be adequate to state only that a certain sum was spent for a specific purpose. These new information needs require a report which is different from the conventional financial report consisting solely of dollar tabulations. Even the SEOS will require further development.

Nevertheless, the present SEOS may be used as the framework for the development of a performance-oriented reporting system. Such a system could include performance data in accordance with acceptable measurement guidelines. This report might also become statistically oriented with narrative content rather than retain the suggested traditional income statement format. A new reporting format appears necessary to satisfy the new information needs of users.

Management may resist adoption of the SEOS in its present form since it lacks a control mechanism to evaluate or regulate resource commitments. Without controls, it will be difficult for management to produce results consistent with long- and short-range goals and available resources. Adopting such a reporting system without an effective internal control mechanism would cause management to be judged by, and held responsible for, final results—without having adequate control and authority over the outcomes. Also, public reports of this nature will lack credence until uniform standards are developed and accepted by users. Performance measures must become an integral part of any public social reporting system. Until this is accomplished, the needs of expected users will not be satisfied.

Other Considerations

The entire social responsibility area contains a complex labyrinth of interlocking issues. The above discussion does not include all relevant issues relating to the evaluation of social responsibility, nor is it my intention to do so below. However, many difficult questions related to reliability and comparability must be addressed and answered before social reporting can be accomplished and made acceptable. The following is a review of certain of these problem areas.

Program Identification

What constitutes a socially relevant program? To answer this question, the program investigator must carefully travel through a dense thicket of specific factors and related issues. Pollution control and minority personnel policies appear to receive regular attention. Other social issues concern the wasting of natural resources, consumer issues, working conditions, product considerations, and so on.

Further, social issues of the past may not be relevant today, just as today's issues may not be of future interest. As certain social problems are controlled, they will diminish in importance while other issues gain emphasis. The fluidity of socially relevant issues creates a difficult target. This reality may persuade management to deal with popular social issues in an effort to enhance its public image while ignoring the organization's ability to effectively plan and utilize its own resources to solve other relevant social problems.

An organization desiring to develop a responsive, socially relevant program will have to identify and inventory areas of social responsibility within its sphere of influence, consistent with its primary organizational purposes. For example, a foundry should be interested in its ability to control its pollutive emissions and take positive action toward solving this problem; but it will possibly be less concerned about, or less able to make an effective contribution toward, the control of oil spills and their environmental effects.

Program Measurement

Once socially relevant programs are identified, the next question concerns measurement. Measurement problems can be classified into those relating to cost and those relating to effectiveness.

What costs should be accounted for in social programs? Should only direct costs (costs directly associated with the program), or full costs (costs both directly and indirectly associated with the program) be used? Obtaining direct costs should not pose serious difficulties, but greater difficulty may be encountered in attempting to collect full social program costs.

Allocation of indirect costs, if not integrated with an organization's cost system, could produce inflated (or at least inaccurate) costs attributable to social programs. Without a proper costing mechanism, verification of these costs will be difficult. Despite the problems, management has an obligation to know the full cost implications of its actions, even though this information may not ultimately be used for public reporting.

The second area of measurement is an attempt to determine program effectiveness and evaluate performance in quantitative terms. The basis of this measurement would be statistical data. Weaknesses of various existing statistical series have been widely discussed, and many questions have been raised regarding the use of these measures to show the effectiveness of social programs. Nevertheless, since the entire program is in an embryonic state, available information should be used while better measures are being developed.

Important steps in this area of measurement are the identification and evaluation of the most appropriate statistical series to use, classification of outputs in accordance with these measures, and comparisons of costs incurred with their related benefits.

Finally, an overall problem related to the measurement of social programs is the difficulty which can be expected in obtaining and assembling necessary cost and performance data.

Government Regulation

Additional problems are related to the reporting of costs associated with social or environmental actions. In addition to the government standards previously mentioned, on July 19, 1971, the SEC issued its Securities Act Release No. 5170, which requires disclosure of material, "... when compliance with statutory requirements with respect to environmental quality, e.g., various air, water and other anti-pollution laws, may necessitate significant capital outlays, may materially affect the earning power of the business, or cause material changes in registrant's business done or intended to be done." Further, the SEC requires disclosure of any legal proceedings under statutory requirements relating to these matters. Because of the growing interest in the reporting of costs associated with environmental or social actions, we might anticipate future expansion of reporting requirements to cover the attestation of these facts on a broader scale.

Materiality

Materiality in social reporting should also be considered. For example, what norms should be applied in evaluating the materiality of cost and benefit data when part of a public report? Guidelines should be developed to provide norms concerning the materiality of costs and benefits included in public reports.

Current Professional Activities

The AICPA is active in and concerned with the field of social responsbility and its impact on our profession. It has assumed a leading role in coordinating the meaurement of socially relevant actions by organizations. The AICPA has sponsored an interdisciplinary roundtable on social measurement. This session included scholars from various disciplines, people from industry and government, and CPAs. As a result, a Committee on Social Measurement was started. This committee plans to publish a monograph on the subject which will discuss the theoretical framework of social measurement standards and provide information on the practical application of these standards. In addition, the Institute has other committees which have been active in identifying professional involvement related to environmental matters.

To further stimulate the progress of social measurement, the Government Accounting Office recently published standards for auditing federally funded government programs mentioned earlier.

Conclusion

It is critical that current attempts to gauge social responsibility include the evaluation of organizational structure and planning processes and be combined with an effective internal measurement and control system. Effective participation in the solution of social problems requires long-range planning and the establishment of organizational goals for management. An evaluation mechanism which rewards management solely for its short-term ability cannot be expected to motivate management toward optimizing organizational resources associated with long-range goals. Further, an effective internal measurement and control system which includes social costs will help to:

1. Promote identification of social programs.
2. Identify direct and full costs of programs.
3. Identify appropriate performance measures.
4. Permit planning by organizations and integration with:
   a. Short- and long-range management plans
   b. Rational commitment of resources
5. Provide management with a means to control and evaluate its programs, providing for:
   a. Flexibility in resource commitment
   b. Possibility of corrective action
   c. Optimization of resource use
6. Assign responsibility to various organizational levels.

Provision should be made to obtain direct and indirect costs as part of the overall cost system. In order to ensure an effective system, a post-review of program accomplishments should also be made.

Accountants will then have something reliable to audit (assuming the adoption of standards) instead of a group of disjointed facts. Further, such a program will establish a framework for responsive reporting to users and add credibility to reporting comparability on social costs.

The development of an integrated, internal, social-measurement control system is most important to the success of social responsibility reporting and, if it is not developed prior to a public reporting system, it should at least be developed simultaneously.

Much of the technology necessary to effectively contribute to the development of such measurement systems is readily available in CPA firms; the accounting function can provide reliable financial data for measurement purposes and, through interdisciplinary cooperation, the profession can make valuable contributions and participate in one of the most significant undertakings of our times.

Accountants should continue their research and, in cooperation with other disciplines, they should jointly examine the measurement problems surrounding questions regarding our quality-of-life. Dialogue with representatives of government, special interest groups, and members of other disciplines can provide the communications link necessary to keep the development of social measurement systems on track. A closer working relationship among all concerned is worth striving for in order to improve the measurement processes for determining the value to society of organizational actions.

Traditionally, our profession has responded to the needs of society; we should now assist in initiating programs to improve the measurement of factors affecting society. In so doing, we can pursue a more expansive role by investigating the uncertainties surrounding the measurement of social programs and their effects on society. If we as a profession do not satisfy the obvious need for further involvement, if we fail to adopt an expanded horizon, we shall be defaulting on an obligation and an opportunity to provide a valuable service to society. □

REFERENCES

[1] *Environmental Quality,* the second annual report of the Council on Environmental Quality, August 10, 1971 (Washington, D.C.: Government Printing Office), p. 206.

[2] Linowes, David *"Let's Get On With The Social Audit: A Specific Proposal"*, *Business and Society Review Innovation,* Winter, 1972-73, No. 4, pp. 39-42.

The very genesis of the auditing profession and the source of two of the major audit "tools" (review of internal control and sampling) can be traced to the industrial revolution.–R. Gene Brown and Roger H. Salquist in *Auditing Looks Ahead,* Proceedings of the 1972 Touche Ross/University of Kansas Symposium on Auditing Problems