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ACCOUNTING SYSTEMS

DESIGN AND INSTALLATION

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*Professor of Accounting
The Ohio State University*

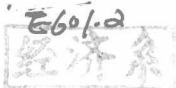
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and

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Preface

This volume presents the fundamentals of the design and installation of accounting systems, procedures, and methods. It does this through a logical discussion of the necessary steps in system building, arranged in their proper chronological sequence. The organization of the book reflects the authors' belief that a knowledge of the procedures and methods applicable to the various business functions is far more valuable to the student and the accountant than brief descriptive data relative to the accounting system used in different lines of business. These functional problems are illustrated by cases, forms, diagrams, flow charts, and photographs selected from many types of business concerns.

Much progress has been made in the field of accounting systems since the publication of the first edition of this book. During this period the subject has received serious attention from many sources. The demands of business for greater efficiency in office operations have sharpened in the face of higher costs of clerical work. Manufacturers of accounting and office equipment have made significant advances in machine methods. The subject has also been intensively studied by teachers, writers, and practitioners and by that growing body of systems and procedures men who occupy staff positions in companies, institutions, associations, and government agencies. In the colleges and universities increasing emphasis is being placed on system problems, and each year numerous schools add systems courses to their curricula. Finally the rapid developments in such closely related fields as internal auditing, standard costs, and production control have contributed substantially to the improvements being made in accounting systems, methods, and procedures.

To reflect all these developments, it has seemed desirable in revising the first edition, to rewrite almost the entire book, drawing upon the wealth of material that the intervening years have brought forth. It is hoped, however, that the present volume has retained and improved the basic features that won for the earlier work such wide acceptance.

Successful systems design rests squarely upon a correct analysis of managerial problems and an understanding of the data needed for their solution. Considerable emphasis is therefore placed on procedures and methods as an administrative technique (a) through which management asserts itself and (b) by which it receives the accounting and statistical data needed to plan, control, and coordinate operations. As soon as an organization adopts this approach, then systems design is not a mere matter of paper-work mechanics but a basic and indispensable tool which makes it possible for management to manage.

While the growth of the field of procedures and methods has been impressive indeed in the past, there is an even brighter future. No business can continue operations without internal procedures and methods. However, these can reflect improvisation and expediency—with attendant high costs, inconsistency, and confusion; or they can be carefully developed, representing the latest thinking and equipment. Despite the progress already attained, there are in existence today more situations of the former category—in varying degrees, to be sure—than of the latter. Here lie both a challenge and an opportunity.

J. BROOKS HECKERT
HARRY D. KERRIGAN

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- Accountancy—Journal of Accountancy*, November, 1949, page 403.
A.I.A.—Copyright, American Institute of Accountants, reprinted with permission from pamphlet, "Internal Control."
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E. J. Bengé—Eugene J. Bengé, "Office Economies." *Systems for Modern Management*, June, 1950, page 13.
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- McCaskey—The McCaskey Register Company.
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Willette Corp.—The Willette Corporation.

Wise Smith—Wise Smith & Company.

J. B. H.

H. D. K.

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PART I

THE METHOD OF SYSTEMS DESIGN

1

Role of Accounting in Modern Management

Task of Management

Managing an enterprise successfully requires men with stout hearts and strong minds. Externally, an enterprise must learn to live in an intricate social, political, and economic environment. Internally, it must be operated efficiently. And this is possible only by painstaking study, careful planning, dependable performance, and effective organization.

EXTERNAL FORCES. It is an exceptional business that does not have to keep a weather eye and constant ear to the demands of external forces that surround it. Only by maintaining a perpetual state of "alert" may an enterprise hope to stay in satisfactory adjustment with these forces.

There are the demands and requirements of creditors, investors, and government agencies. There is the ever-present danger of what competitors will do or threaten to do with established markets. And there is the allied problem of preserving good relations with customers. In the community sphere, the principles of being a "good neighbor" apply to concerns as much as to individuals. A business, like any local resident, must understand and cooperate with all constructive community-wide programs. Labor-management relations that are carried on in a spirit of fairness and mutual respect are bound to enhance the economic health of both labor and management.

INTERNAL FORCES. In meeting and maintaining working relations with external forces, management may be said to fulfill but half of its responsibility. The other half, more directly within the scope of this book, deals with internal operations. Management must first create an effective organization and staff it with able and loyal administrators. It must then meet and solve the many specific and technical problems that arise internally. These problems are made up of a

mass of detailed events, sequences, and transactions. Here, the *way* things are done is as important as *what* things are done. Getting things done on time, and with efficiency and consistency, represents the internal half of management's total responsibility. The price of this comes high. It is continuous vigil over the network of clerical processes and machine methods, systems of communication and transportation, and the problem of human relations.

Divisions of Organization

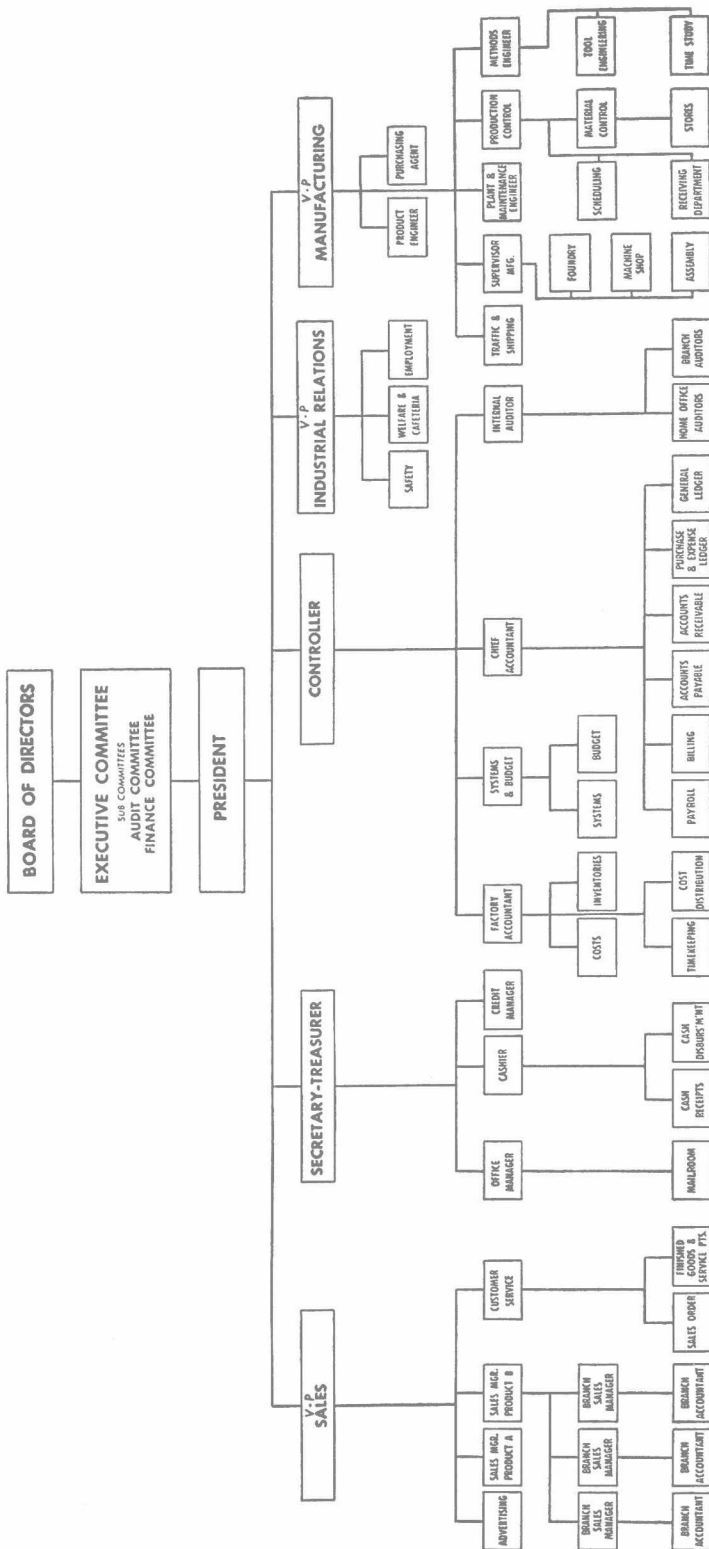
In governing the external and internal forces affecting its affairs, the management of a concern beckons to its aid any and all tools that are available. It first divides and defines the activities or functions that make up the organization. It then assigns them to key personnel to whom is delegated authority commensurate with their responsibility for results. At the top stand the four major divisions: sales, production, finance, and accounting. The same divisions exist at intermediate and lower levels, except that each division progressively embraces a larger list of administrators—with less authority and less responsibility for each administrator, as the descent is made down the management ladder. The first point of interest here is that *accounting* is a major division of organization. The second point is that accounting is found and felt at all levels of management. This authority, influence, and capacity of the accounting division to serve management from top to bottom is graphically presented in Figure 1.

Accounting as a Tool of Management

The value of accounting as a tool of management rises in direct ratio with the size and complexity of an enterprise. The need for systematizing activities or functions, devising procedures and methods, and supplying the manpower to carry them out is the more compelling as a business grows and becomes increasingly complex.

ACCOUNTING NEEDS OF A SMALL BUSINESS. Even a small business that is owner-operated needs and discharges accounting functions. However, these functions are usually not expressed in writing, are carried out informally (when not overlooked), and are often merged with, or submerged in, other functions because of the lack of division of labor. All three characteristics are quite evident in the following sketch of the way a small business is conducted.

Management and ownership are in the hands of either one person or a few persons. There is direct personal control and supervision. Policies are directly determined and directly expressed as the occasion demands. Managerial problems do not require much prelimi-



nary digging up of facts, and the consequences of any decision pending are usually quickly and directly appraised. Elements of organization are under personal direction and can be arranged and rearranged at will. Responsibilities (if they are assigned at all) are made by personal command. Performance is measured and merit awarded by personal observation. And various outside interests, such as creditors, must look after their rights by trusting the personal character and caliber of the owner-manager of the business that owes the money.

Under these conditions, the owner-manager resolves his financial policies by his own complete knowledge of what funds are available to him, where they may be secured, and how they may be most profitably utilized. He directs his credit policies by his own knowledge of customers' requirements, and his sales policies by an intimate contact with his market and customers. He observes the individual workers closely, and judges performance and distributes rewards accordingly. If production is involved, his technology is built up from personal experience. His operating methods are his own handiwork, which is quickly adapted to new situations. If material is wasted, it is done under his personal scrutiny. If time is lost, he promptly comprehends the extent and cause. He personally selects the equipment and judges its suitability. He hires and trains, disciplines, and pays the members of his organization. In sum, all elements of management—determination of policies, planning, direction of work, and coordination and control—are under the personal supervision and judgment of one person or, at best, a few persons.

In such circumstances, formal accounting services are as simple in nature as they are limited in scope. The situation is all the more interesting for the light it throws on an important fact: there is very little to account for where authority, responsibility, and accountability are successfully vested in the same person, or a few persons.

VALUE OF ACCOUNTING IN RELATION TO SIZE AND COMPLEXITY OF SITUATION. By slightly changing the wording of the observation just made, it is possible to state another equally striking truth: the degree to which authority, responsibility, and accountability are dispersed among different people is the key to the value of accounting.

A business passes the point of being small when total activities are no longer within the circle of personal direction and supervision of the owner-operator and a few immediate associates. The characteristics of large organizations are well known. Policies must be determined that look far into the future. Foundations must be laid, the ultimate structures of which may not be completed during the life-

time of any living official. Hundreds or thousands of workers must be kept busy at their assigned duties. Operations may take place at different locations. The buildings, machinery, and other equipment may be devoted to highly technical and complex manufacturing processes, requiring technically trained personnel to operate them. And not too far into the background, watching central management, may well be an army of the concern's investors—the shareholders who have entrusted active management of their business to others.

With size and complexity of operations come new problems of communication, coordination, planning, control, and protection of enterprise property. Top management gives up managing by personal contact and substitutes for it management by “instruments,” both human and mechanical. Top management works through successive levels of administrators, and there is wide and extensive delegation of authority to make decisions, to match equally wide and extensive dispersion of duties and responsibilities. A great stream of reports, memoranda, and written advices flows to those who must make decisions. A reverse flow of orders, instructions, and suggestions goes to those who execute them. It could not be otherwise. Where circumstances are complex and operations are intricate and widely distributed, top management needs and uses any and all human and mechanical instruments that perform indirectly and by artificial devices what it wishes it could do directly and personally.

Nature of Accounting Services

There is little uniformity and no unanimity in practice as to the precise functions that should be assigned to the accounting division of a business. In a recent study of 25 large corporations, it was found that the duties and responsibilities of three top management officials—secretaries, treasurers, and controllers—were reasonably uniform as to the hard core of basic functions. Beyond that, however, the respective functions varied so markedly among the companies that it was impossible to point to any one company as possessing a representative total organization of any of the three top offices mentioned. The reason for this is clear enough. Circumstances of operation vary from company to company. In the usual case, the functions put under a top executive, such as a controller, directly reflect his degree of initiative, originality, personal drive, and the channel through which he arrived at his present position.

Considerable value exists, however, in assembling the functions that may logically be assigned to the accounting organization within a concern. This was the approach used in the construction of the charts in Figures 2 and 3. Although both charts purport to present