

SUCCESSFUL MANAGEMENT OF LARGE CLERICAL OPERATIONS



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**A Guide to Improving
Service Transaction Systems**

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Successful Management of Large Clerical Operations

In memory of Ann

PREFACE

This book seeks to help managers and other professionals responsible for operating, improving, or studying large labor-intensive service organizations. The book is concerned with the mix of workers, procedures, machines (including computers), and especially management which renders service in retail, financial, governmental, and similar sectors. New concepts and techniques are offered as a reference and a guide for managers and systems analysts to double-check their thinking, to stimulate new and better approaches to system design, and to aid diagnosis and analysis of existing systems and problems. The use of computers in service organizations is not dealt with here although the potential for this use is vast. Computers and other information-handling tools are vital links in many service processing chains. At present, however, they rarely make up the whole chain.

No matter how a clerical service operation looks, the interaction between customers and the operation requires the use of human judgment. While mechanical work—such as typing, sorting, filing, retrieving—may take up a large percentage of the labor and cost of an operation, the essentially human clerical work uses judgment and intelligence in taking action. Clerical judgment may be based upon knowing the customer, the environment, or the service process itself. The use of judgment in choosing the appropriate action to take on any service transaction is often overlooked because people exercise judgment without being conscious of it. For the near future, management should feel safe in assuming that a clerical worker's capacity for knowledge relevant to a service transaction will exceed that of a machine. The "artificial intelligence" branch of computer science is exploring the nature of intelligence and ways to automate intellectual effort.

The chapters of this book unfold labor-intensive service organizations from the point of view of management responsibilities—putting policies and

decisions onto a basis of measurement, fact, and analysis. The content of the book is eclectic, concentrating on concepts, ideas, approaches, and techniques which work. There is plenty of room for creative borrowing from fields of operations research, statistics, marketing research, organizational development, computer science, project management, industrial engineering, human resources management, and more. The area of clerical service organizations is underdeveloped perhaps because it is eclipsed by more glamorous high technology.

Most of the book is organized around management responsibilities which arise in a service transaction system and analytical tools which can be helpful in the job of management. The term "service transaction system" (STS), which I coined and have used for some time, refers to a general class of labor-intensive clerical service systems which produce service transactions rather than products. The service transactions may be face to face with customers or they may be paper transactions servicing customer orders, applications, claims, and other records. They may be concerned solely with transferring information, say, by telephone. The service transactions should satisfy customer wants or needs—the more fully these are satisfied, the more valuable the service. Depending on what customers want or need of the service, faster, more consistent, more professional service is of higher value in the customer's mind than is slow, inconsistent, unskilled service.

Section 1 opens by describing the elements of an STS and the existing approaches to STS management and analysis. The balance of the section identifies symptoms of common management problems and the characteristic elements which distinguish STS types and STS levels of complexity. Section 2 discusses management responsibilities and organizational levels at which they are carried out. Major responsibilities of management are described explicitly as the focal point for quantitative or qualitative analyses. Section 3 is concerned with analytical and management tools and how they are used in understanding, designing, operating, and controlling STSs. Section 4 concentrates on systems studies and implementation, devoting three chapters to the design of an improvement study and to implementation issues. Section 5, two final chapters, takes initial steps toward a more scientific framework for STS design and management. The purpose of the section is to further an understanding of how STSs should be designed on scientific grounds.

This book is based upon some 10 years of experience gained in working with a diverse group of clients and professional associates at Arthur D. Little, Inc. I acknowledge a debt to teachers at the University of Pennsylvania, especially Russell L. Ackoff and Roger L. Sisson, as well as to other authors who have enriched my understanding of the subject.

At Arthur D. Little, Inc., Jan S. Meades, my colleague on several of the larger studies covered in the book, deserves special acknowledgment and thanks. Her professionalism and thoroughness first brought out many points

which are now part of a more general insight into service transaction systems. Credit is also due to my colleagues in the Operations Research Section, especially William C. Copacino and Lawrence Lapide, for reading the first version of the manuscript and commenting in great detail, and to Ernest S. Arvai, for much constructive comment on the management sections of the first manuscript. Special thanks are due to my friend and colleague George H. Harris, for his considerable help and support on a number of assignments over the last 3 years, and to my associate, Joel E. Jensen, for patient listening and for clear advice on all questions.

I wish to thank Arthur D. Little, Inc., and its management for providing opportunities and encouragement without which this book might not have been written. Individuals worthy of special mention are David M. Boodman, who first saw the emergence of service or transaction-intensive operations as an important extension of our marketing and control systems work; and Martin L. Ernst, who provided numerous effective course corrections and observed the need to develop a more scientific approach in this area. Also, I acknowledge the support given me by Arthur D. Little, Inc., through an internal project which led to the first four chapters of the book.

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It is also appropriate and highly desirable to express my appreciation to a number of individuals in client organizations with whom I have worked closely. I wish to thank Marvin Tableman and James Wresinski, who as clients have been major positive influences in the development and successful use of management and planning systems in their organization. Equal thanks are due to Russell E. Hogg for his support of greater professionalism in management of labor- and transaction-intensive organizations.

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Cambridge, Massachusetts

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