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What People Are Writing About

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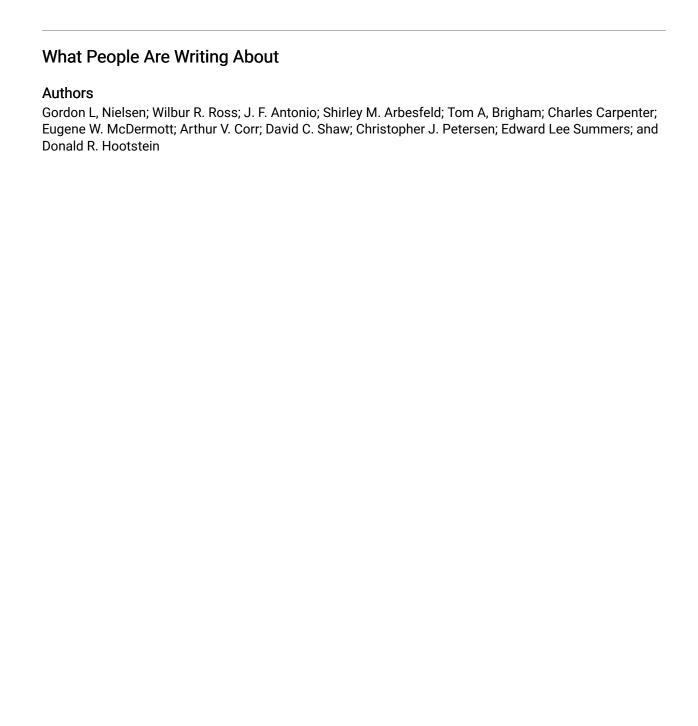


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what people are writing about

BOOKS

Organization for Profit: Management for the Age of Technology by Gerald G. Fisch, McGraw-Hill Book Company, New York, 1964, 311 pages, \$9.50.

There is a great need, the author feels, for a "practical" book about organization that does not "merely end up describing the practices of well-known companies without seriously attempting to discriminate which practice appears sound and which unsound under specific circumstances." This book is an at-

tempt, more successful than most, to meet that need.

Really useful books on organization are rare. Executives are likely to report their own experience, which may or may not be applicable to someone else's problem. Social scientists, seeking universal truths, often end up with generalizations that are so broad as to be meaningless.

Mr. Fisch, senior partner in charge of the Canadian consulting firm of P. S. Ross & Partners and a director of management services of the Canadian accounting firm of Touche, Ross, Bailey & Smart, has tried to strike a balance. He draws

on psychological and sociological research to support his generalizations and on business experience to illustrate them, but his basic approach is didactic. Although the book suffers from the lack of concreteness inherent in the subject, his advice is basically sound.

Mr. Fisch's most novel contributions are his attacks on decentralization, line-staff organization, and rigid assumptions about the ideal span of control. He favors "more centralization of authority than has been fashionable in the past two decades."

Increasing centralization, largely made possible by the computer, will make the traditional line-staff divi-

REVIEW EDITORS

In order to assure prompt and comprehensive coverage of magazine articles dealing with management subjects, Management Services 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 Services, unsigned reviews have been written by members of the magazine's staff.

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sion of authority even more unworkable than it is now, he argues. To replace the line-staff organization, Mr. Fisch offers what he calls the "functional-team" concept, based on a division of the functions of an enterprise into major repetitive time cycles (operations), resources (personnel, finance, materials, assets), and relations.

Appropriate spans of control, he points out, vary widely among levels of the hierarchy. To find the best one for any given job, he suggests, the economies afforded by the largest span of control possible should be balanced against the cost of the necessary support activities as the span of control expands.

For the business executive, the chief value of Mr. Fisch's book probably lies in his continual reminders that every decision on organization must be made in the light of individual circumstances. He criticizes much of what he calls "Holy Writ" in organization theory -such as the division of the management process into planning, execution, and control; the division of business functions into manufacturing, marketing, and control; and the "incorrect" notion that "democracy in a pure sense can function in industry." He concludes with a highly pragmatic set of "maxims" for the chief executive.

For the consultant, the most useful section of the book is the description, illustrated with sample forms and charts, of how to conduct an organization study. One chapter of this section appeared in Management Services ("Organizational Change," July-August '64, p. 55).

In management consulting firms and management services divisions of public accounting firms, a recent study showed, by far the largest area of activity is the solution of organization problems. Executives, as Mr. Fisch points out, are more likely to turn outside for help with organization than with any other aspect of management because they realize that they lack both the knowledge and the objectivity to deal with it. Furthermore, organizational problems are likely to emerge

in the course of a consulting engagement covering almost any area of a company.

For this reason organizational know-how is indispensable for the consultant. Mr. Fisch's 14 years of experience in this field can be helpful.

Management Operations Research by Norbert Lloyd Enrick, Holt, Rinehart and Winston, Inc., New York, 1964, 315 pages, \$5.95.

This little book is a surprisingly successful attempt at a seemingly impossible task—to provide a simple explanation of operations research techniques that still is detailed enough to be useful.

Most books on operations research go to one of two extremes. If they are written for technicians, they are so esoteric that the non-mathematician cannot read them. If they are written for businessmen they concentrate on applications and avoid mathematics altogether, asking the reader to accept the validity of the formulas as an article of faith.

Dr. Enrick has tried to find the middle ground. Without going beyond elementary algebra, he tries (often by graphical analysis) to show enough of the derivation of the formulas used in operations research to give the businessman at least a glimmering of their appropriateness.

Yet he does not neglect applications. The book is rich in case studies. In addition to those incorporated in the text, there are 25 presented as problems in the appendix—with company names attached.

In attempting to make his book a practical guide to the use of scientific methods in business analysis, Dr. Enrick wanders beyond the boundaries of what most OR practitioners would classify as operations research. He reviews most of the basic OR techniques: linear programing (three chapters of this section of the book appeared in Management Services; see Sep-

tember-October '64, p. 21); PERT; line of balance; queueing theory; statistical analysis; and simulation. But he also discusses some older techniques that many operations researchers would consider outside their field: inventory reorder points, economic lot sizes, and economic order quantities; discounted cash flow analysis; and work sampling.

Executives are not likely to quibble about definitions, however. Many will find in this book their first really intelligible introduction to operations research.

Electronic Data Processing Systems: A Self-Instructional Programmed Manual by Leeland R. O'Neal, *Prentice-Hall, Inc.*, Englewood Cliffs, New Jersey, 1964, 408 pages, \$10.

This programed learning textbook is designed to teach the basic concepts of electronic data processing systems. It can be used for either classroom or individual study.

Programed learning, a technique for presenting information in small steps, each requiring an active response from the student, is finding growing application in industrial training. For subjects suited to definite yes or no presentation it seems to speed up learning and improve retention while cutting down on classroom time.

EDP is one subject that has been successfully taught in this way. International Business Machines Corporation, for example, has reported good results in training computer operators and programers.

The author of this text, a planning representative of IBM's Data Processing Division, collaborated in the writing of a programed text on the IBM 7070, which is now in use within the company, and is working on a system for the education of customer engineers. This text was tested at the IBM Customer Engineering Training Center; a control group averaged 92 per cent on the final examination.

The book covers basic data processing and flow charting, data codNielsen et al.: What People Are Writing About

ing, magnetic tape, stored programing, logic operations, use of the console, and system checking. It can be used to teach EDP principles, programing, and computer operation or for management orientation in EDP. It would probably be most useful to computer users who want to train groups too small to justify a formal training program.

Selective Inventory Management by Kenneth R. Lavery, CA, The Society of Industrial and Cost Accountants of Canada, Hamilton, Ontario, 1964, 101 pages, \$3.

This special study commissioned by The Society of Industrial and Cost Accountants of Canada provides a simple, concise summary of the most important techniques for scientific inventory control.

This study was designed to give the reader from a small company tools he can use immediately and at the same time to provide personnel of large companies with an outline of concepts and possibilities. The author, a partner of P. S. Ross & Partners and Touche, Ross, Bailey & Smart, has done a good job.

He touches on nearly every aspect of inventory control, from simple ideas like ABC classification to such new techniques as exponential smoothing. Where mathematics is needed, he explains it in such a way that it can be understood by the nonmathematician.

The major topics covered include inventory classification, calculation of procurement, holding, and stock-out costs; sales forecasting techniques; calculation of economic order quantities and reorder points; statistical methods of determining buffer stocks; and design of operating systems, with emphasis on the establishment of decision rules to permit low-level operation of the system.

For the sophisticated reader, there is nothing new in this book. But the practicing accountant with little knowledge of mathematics would have trouble finding elsewhere as complete and understand-

able a summary of what he needs to know about inventory control.

GORDON L. NIELSEN, CPA
The University of Texas

MAGAZINES

Setting Targets for the Staff by WALTER S. WIKSTROM, The Conference Board Record, October, 1964.

The phrase "management by objectives and appraisal by results" has become familiar in management literature in recent years. More significantly, the concepts covered by the phrase have been widely adopted as a method of planning, a basis for performance appraisal, or a management philosophy.

The author addresses himself to the question of whether the concept of "achievement target setting and performance measurement" is applicable to staff work as well as to its more traditional use in line management. He reports that some notable results have been achieved at Radio Corporation of America from a fouryear campaign to increase the specificity of staff goals.

The objective of the campaign is to encourage staff managers to commit themselves to hitting a target through getting them to state in specific, objective, measurable terms what they will accomplish in the year ahead. Vague statements of objectives such as "to improve efficiency so as to increase profits" are discouraged. The emphasis is not upon the activities necessary to attain an objective but rather upon the objective—the goal or target.

While line managers are likely to accept goal setting, staff personnel usually feel that such a management concept is not applicable to their type of work. It is generally felt that staff merely "assists" line in achieving its goals. The author points out—and experience at RCA indicates—that with a reorientation of staff thinking on this matter, and with appropriate adaptations, the concepts can be made to apply to staff work.

Some examples of staff personnel's use of the concept of "management by objectives and appraisal by results" at RCA are presented. It has been found that desired results of many staff activities, thought to be statable only in more or less intangible terms, can actually be set forth as specific goals to be achieved. The important thing is to get the staff to think in terms of the payoff on its work, not just of the work itself.

WILBUR R. Ross, CPA
The University of Texas

Yardsticks for Evaluating Corporate Acquisitions by WILLIAM R. TINCHER, Management Review, October, 1964.

As in many other areas of decision making, the key to success in a corporate acquisitions program lies in planning and organizing. This author suggests guidelines which, while not necessarily making the task easier, should assure rigorous, comprehensive, and enlightened evaluation of proposed acquisitions and pave the way for successful negotiation and follow-through.

Any company that wants to grow and has not excluded the possibility of acquisitions should have an acquisitions policy whether or not it is currently considering any specific acquisition, Mr. Tincher recommends. This policy would be based on the company's acquisition objectives.

The development of a statement of basic objectives forces the company to crystallize its thinking by applying limits to an otherwise unlimited number and variety of acquisition possibilities. This statement can then be used to evolve evaluation criteria.

These criteria should be comprehensive in their coverage of both the acquirer and the acquired. "Buying a company on its balance sheet and profit-and-loss statement performance, without delving into the component factors of its operation and potentials, without knowing your own company, and with-

out comparing these two groups of knowledge to determine the integration benefits and savings possible, can lead to frustration and disillusionment," Mr. Tincher warns.

The major criteria are summed up by the author as follows:

- 1. What can the acquired company do for us that we could not do for ourselves?
- 2. What can we do for the acquired company that it could not do for itself?
- 3. What direct and tangible savings, improvements, or efficiencies flow from merging with the acquired company?
- 4. What are the dollar and intangible values of these savings, efficiencies, and improvements to us?
- 5. Do these financial and intangible benefits offset, to a satisfactory degree, any deficiency existing when the acquired company's financial ratios are compared to ours and to those we must maintain if the acquisition is consummated?

Not to be overlooked in the acquisitions policy is the major requirement of determining how the cost of the acquisition is to be financed, whether by cash, issuance of stock, or borrowing-all of which definitely entail a long-range outlook.

Other considerations discussed by the author include the tax and antitrust law implications, sources of leads to acquisitions, and the idea of mutual economic benefit. "There should be more than profit involved in an acquisition, however. The acquisition that will be most fruitful will be the one that serves as a vehicle for both acquirer and acquired to fulfill a basic need, to perform for the other a needed service, and to achieve by harmonious teamwork worthwhile objectives that neither could achieve alone."

The results of the acquisitions policy will probably determine the form of the organization created to accomplish and subsequently manage acquisitions. Mr. Tincher goes on to discuss the placing of responsibility for acquisitions and some of the general tasks which are inpolicy.

In a limited space, Mr. Tincher has presented a generally complete set of widely applicable yardsticks for the evaluation of corporate acquisitions.

> J. F. Antonio, CPA University of Illinois

Captive Finance Companies by VICTOR L. ANDREWS, Harvard Business Review, July-August, 1964.

The use of captive finance companies as a device to pyramid debt without affecting the parent companies' debt-equity ratios has increased in recent years. The author questions the soundness of this dcvelopment.

A captive finance company, according to the study directed by Professor Andrews for the Harvard Business School's Division of Research, is a subsidiary holding notes receivable produced in connection with the parent company's sales—as a device for raising needed debt capital. Captives had increased from 14 in 1946 to 125 by 1961. Overwhelmingly, the affiliates operating actively were and are concentrated in four industry groups-electrical machinery, nonelectrical machinery, transportation equipment, and, to a lesser degree, retail trade. A sample of 62 captives for 1961 (latest data available) showed a total financing of \$4.7 billion. Parent equity comprised 15 per cent of the total and parentsupplied debt slightly more than another 8 per cent. The commercial banking system, the commercial paper market, and nonfinancial long-term lenders supplied the balance, i.e., over \$3 billion.

The basic attraction of captives has been their alleged ability to pyramid debt upon equity in multiples of several times, in contrast with their parent companies' more conservative ratios. The foundation of this capacity of the captives is the high collateral value of their notes receivable. The debt contracts have a defined schedule of cash inflow; default and loss rates

Management Services: A Magazine of Planning, Systems, and Controls, Vol. 2 [1965], No. 1, Art. 8 g these two groups of volved in the implementation of the are low; and the purchase of notes receivable from the parent is final. The parent-subsidiary agreement may state that all notes acquired will be offered to the captive or that the captive will buy only the conditional sales contracts arising from sales made by the parent in those retail and mail order outlets mutually agreed upon from time to time. The latter type of contract causes the captives' cash flow to be a managed variable.

The principal financial issue is whether the administration of cash flows, dismemberment of assets and liabilities, and consequent reapportionment of risk in parent-plus-captive is a departure in financing technique that is somehow superior to the financing of a parent as a single unit. How does this design affect the risks of various creditors?

Professor Andrews presents a hypothetical but nevertheless realistic situation, the case of Manufacturing Company, Inc. As the growth of receivables has outpaced the internal generation of cash, management has decided to create a captive. With a two-piece balance sheet, Captive Company is able to boast of debt to its bank of \$11.2 million on an equity base of \$2.8 million, or 4:1. This is quite a contrast with Manufacturing Company's norm of 1:1 Additionally, the latter's debt-equity ratio has improved. It is now .695. The problem of achieving added financing for receivables expansion has been solved; every added \$1 of the parent's equity in the captive will support \$4 of loans from the banks.

Nevertheless, debt service of the parent and interest charges plus debt repayments by the subsidiary must inevitably be drawn from the cash flow of the corporate entity as a whole. Suppose that a period of asset growth requires an expansion of both long- and short-term liabilities. Not only does the parent's earnings coverage of debt service decline, but the consolidated debtequity ratio rises to 1.231. Thus, risk of default in the aggregate has

How does this affect short-term

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creditors? The asset composition of the subsidiary consists of prime liquid assets whereas the parent's current asset structure consists of some cash, some open-book receivables, and mostly inventory. The position of the parent's creditors, both short- and long-term, seems materially weaker than before the formation of the captive.

Consider the position of the longterm creditors. If a creditor is not disturbed by the ambiguities of the operating agreement relative to the captive's earnings and cash flow because of the confidence he has in the parent, this would be equivalent to purchasing captive debt on the faith and credit of the parent, i.e., buying a debenture. If this is in fact the lender's attitude, what point is there to having a credit subsidiary for its supposedly superior fund-raising capacities?

It is apparent that the banking system has absorbed considerably increased risk in lending to parentcaptive combines; that long-term lenders have loaned to many captives with little control over their ability to earn debt service; that creditors of these parents have loaned to organizations with reduced liquidity protection; and that managements of nonfinancial parents have not taken into account the effects on their stock prices of leverage exerted on their profit flows by subsidiary-borne debt.

Professor Andrews concludes that business needs much more concrete information on the behavior of cash flows since the usual analytical practices have been altogether inadequate for revealing the full meaning of the growth of captives.

> SHIRLEY M. ARBESFELD, CPA New York University

Management Controls and the Hidden Costs of Purchasing by RICHARD E. PATTON, Management Review, September, 1964.

The hidden costs of purchasing and related "white collar crime" are estimated at five billion dollars annually. This is one per cent of gross national product. Mr. Patton, of Arthur Young and Company, discusses these abuses and recommends remedial action.

Kickbacks, one of the more common hidden costs, are difficult to recognize. Rebates, or gifts from the supplier to the purchasing agent, take many forms. Some of them are borrowing, part-time employment or directorship, gifts, or debts paid for the agent by the supplier. Although the form may vary, the potential conflict of interest is obvious. The rationalization of the employee is often: "I'd probably give X the business anyway-his price is good, and we know he's reliable-so it's no skin off anybody's back if I let him do me a little favor."

The author suggests four steps to deal with this problem:

- 1. Questionnaires covering investments and other business and personal affairs of executives and key employees
- 2. Statements in annual reports affirming company policies in this
- 3. Requirement of total abstention from financial or other interests in supplier companies
- 4. Review of existing policies and procedures and strengthening of management controls over purchasing, receiving, and other related activities.

The article recommends that the first three approaches be reviewed with the company's lawyer and the fourth with its independent auditor.

A fairly complete list of steps which might be taken by an internal or independent auditor is included. Mr. Patton emphasizes that "although detection and prevention of these activities is basically the responsibility of management, continuous cooperation between management and the independent auditor affords perhaps the best possible safeguard against them."

The purchasing function is vital to over-all operation of the business in terms of both cost savings and profit contribution. It also provides unique opportunities for individuals to be tempted. A firm, clear policy with regard to the ac-

tivities related to purchasing, reinforced by vigilance on the part of the independent auditor, is suggested as the best method to reduce the hidden costs of purchasing.

> Tom A. Brigham University of Illinois

Managerial Acceptance of Scientific Recommendations by C. WEST CHURCHMAN, California Management Review, Fall, 1964.

Even when executives have all the information they need to make a decision, they do not always make the right one. This article explores some of the reasons.

Accountants and management scientists devote a lot of effort to the design of information systems in an effort to improve management decision making. Yet, says Professor Churchman, there is sufficient evidence to show that a manager may have perfect information available to him and yet not make the correct decision. Why?

One obvious answer is that he does not know how to transform the available information into a knowledge of action. Unfortunately, however, even information plus analysis does not necessarily lead to change. A group of graduate students at the University of California wrote to the authors of cases reported in *Operations Research* over the first six years of its publication to determine to what extent the recommendations of the studies had been carried out by management. In no case was there sufficient evidence that the recommendations had been accepted.

Some suggest that the missing ingredient in the equation is communication; if operations researchers could only learn to talk in a language managers could understand, their advice would be accepted. Information theory research at the University of California has provided no evidence that the mode of communication has any significant effect in influencing action.

Professor Churchman concludes

that the real missing ingredient is understanding of the manager and how he works and thinks. His personality, his goals, and the individuals who influence him are all important factors.

Information, analysis, and communication mean nothing, according to the author, unless the manager pays attention, and paying attention is "an obscure process of the managerial mind, little understood by management scientists. . . . If we are to learn more about the implementation of recommendations, we must learn more about how people decide where to direct their attention."

The Payout on Computers: What **Management Has Learned About** Planning and Control by J. T. GARRITY and V. L. BARNES, Management Review, December, 1964.

Two McKinsey and Company consultants offer some suggestions for ensuring the profitability of a computer installation.

Believing that only a few companies achieve the anticipated gains from a computer installation at the expected price, the authors suggest that the fault lies not with poor equipment decisions but rather with management's failure to properly staff the computer program, its failure to supply meaningful top management support, and, especially, its failure to apply sound planning and control techniques to the computer program and related proj-

A study by McKinsey and Company indicated that of the 27 large, sophisticated companies surveyed as to computer experience twothirds did not recover their original EDP investment within four years.

Among successful computer installations, some common elements exist in an installation approach. A seven-step planning and control program is recommended:

1. Specify broad objectives. Of the potential applications utilize the computer where it will make the greatest contribution and/or produce the most savings, taking into consideration company goals in sales, research, and production and also the cost factors which have the greatest impact on profits. Nonaccounting - oriented applications can be quite successful in areas such as sales forecasting, marketing information, material procurement, and quality control.

- 2. Catalog potential applications. Preliminary estimates of savings and of any other benefits, necessary investment in programing and systems, payback period, and degree of risk should accompany each application considered. The systems staff should then rank them on the basis of their over-all contribution. In a situation where the tangible benefits of two programs are similar, intangible factors, such as more timely or detailed reports, could be weighed. Line management ought to be consulted and made responsible for detailed planning, implementation, and follow-through.
- 3. Draw up plans of possible alternative long-range applications. With line management assistance, the systems staff should determine those applications which will make the greatest contribution to corporate EDP objectives considering the limits of time and cost. Due to the multiple variables involved, alternative application plans will result.
- 4. Analyze profit potential. An analysis of a proposed computer installation should be compared with the most efficient manual system obtainable, which may not necessarily be the one in use presently. In evaluating such manual systems, profit analysis should not anticipate clerical cost increase on a percentage-of-sales or cost-per-transaction basis. If savings on a current cost basis do not justify the new system, installation should probably be delayed until increased cost levels will make it worthwhile. It is easy to overestimate immediate clerical savings because parallel runs, new systems tests, and realignment of manual tasks are likely to delay savings. A "total" or "integrated" information system may not necessarily achieve the greatest savings. Great-

er savings may result from automating only part of the system.

- 5. Prepare implementation plans. Comprehensive schedules should be drawn up for every part of the project. Weekly or biweekly progress checks should be possible from these schedules. Delays and "bugs" must be spotted and then eliminated. For particularly complex conversions, the new techniques of network scheduling like PERT and CPM could be used. A month-bymonth spread sheet may also be used to match the costs and savings with the budget.
- 6. Review progress regularly. A biweekly or weekly review of current progress, anticipated delays, and proposed corrective steps is useful to achieve the greatest economic benefits.
- 7. Conduct a post-appraisal. After the installation is complete and all new systems' operating expenses, implementation costs, and measurable operating improvements are available, then the realized benefits can be measured and future opportunities weighed.

CHARLES CARPENTER, CPA University of Illinois

Common Misconceptions in Management by Alan C. Filley, Business Horizons, Fall, 1964.

In a plea for more accurate theories of management, the author refutes seven common misconceptions.

There is great need, the author notes, for a body of management theory that strikes a happy medium between the abstractions of the academician and the "straight-fromthe-shoulder" reminiscences of the businessman. Such theory, he says, should be testable, logically consistent both internally and externally, and complementary to other theo-

He demonstrates the need for accurate theory by presenting empirical evidence to refute "several beliefs" about management "that appear to be ill founded":

1. Job descriptions, organization

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charts, and explicit policy statements will reduce individual freedom in an organization.

- 2. Organization politics are a fact of life, something the textbook cannot cope with.
- 3. Professional employees such as scientists and engineers want a minimum of direct supervision.
- 4. Committees are a waste of time and money and should be avoided.
- 5. There is no limit to a manager's effective span of supervision.
- 6. Flat organizations are decentralized organizations.
- 7. A happy group is a productive group.

Professor Filley does a good job of showing the need for better management theory. Unfortunately, he offers no suggestions as to how to go about developing it.

Sense and Sensitivity in Pricing by Richard T. Sampson, *Harvard Business Review*, November-December, 1964.

Every businessman knows that almost no product demand curves are perfectly elastic, but few know exactly how pricing decisions influence market shares. This author has some suggestions.

Mr. Sampson, an insurance company management analyst, challenges a number of business assumptions about pricing, particularly the so-called "critical price" concept of price sensitivity (that blocks of market share are concentrated at specific price levels and that sensitivity to price changes is therefore irregular). He outlines an approach to identifying and evaluating influences that reduce market price insensitivity.

Among the major desensitizing factors he lists variability in consumer behavior, differing abilities of salesmen, effectiveness of local promotion, the importance of product service, brand loyalties, product differentiation, multiplicity of dimensions of product quality, and product complexity. The degree of price insensitivity, the author sug-

gests, depends on the number and kind of such desensitizing factors that operate in a given market and the amount of "spread" in the distribution of desensitizing differentials, that is, the range between the most favorable and unfavorable pairings of factors favoring the company and factors favoring the competition.

This sort of analysis provides a quantitative basis for study of the effects of changes in prices. Each pricing situation, the author warns, should be explored individually. In most cases, he believes, the resulting demand curve will turn out to be more nearly continuous than most businessmen would expect.

Shirley M. Arbesfeld, CPA New York University

Decision Tables and Their Application by PAUL DIXON, Computers and Automation, April, 1964.

This article describes the fundamental principles of decision tables and discusses the power and applicability of this technique as an analytical and programing tool in production (quality control, operational planning, inventory control, production scheduling, dispatching, shipping, and traffic control), in marketing, and in the design and implementation of complex file-processing systems.

A main advantage of decision tables, according to the author, is that they provide a means for expressing complex problems in a simplified form. A complex decision making process can be broken down into a set of small interconnected tables by which the process is shown in a series of easily digestible, parallel steps that can be executed by nonspecialists

A decision table is a tabular representation of particular sets of (1) conditions: variables that must be considered in reaching a decision; (2) actions: operations that must be carried out when a given set of conditions exist; (3) rules: specific sets of conditions and the actions dictated by these conditions; and (4)

entries: additional information about either a condition or action pertinent to a particular rule.

Both decision tables and flow charts force a clear statement of the problem and show where information is missing. Both also completely define decisions to be implemented. Decision tables, however, have certain advantages over flow charting. They permit development and orderly presentation of systems too complex for effective flow charting. Decision tables are easier to update than flow charts and show more clearly the effects that system changes will have upon the decision logic. They permit system definition and description without imposing a premature sequence of problemsolving operations. Decision tables are suitable for direct translation into a computer machine language. DETAB-X, for example, is an experimental decision table language -an extension to COBOL-61.

EUGENE W. McDermott University of Pennsylvania

Microfilm Focuses on Retrieval by Peter R. Weill, Administrative Management, June, 1964.

Recent developments that have greatly enhanced the usefulness of microfilm in records management are reviewed.

Today, the author claims, business is just beginning to realize the potential of microfilming as a system for automated information storage and retrieval. Although microfilm has been in use commercially since 1929, until a few years ago its major benefit—space saving—was not enough to compensate for the awkward method of retrieval, the time-consuming job of printing, and the blurred images. Finding a document on a roll of film and having it printed was a slow and tedious process. However, recent developments have made microfilm an effective tool for storing and retrieving management and scientific information.

The recent combination of microfilm with automated information retrieval and improved indexing techniques makes it a powerful tool for business records management. In addition, the basic components of the microfilm system-the camera, the processor, the reader, and the printer-have been improved and in some cases combined. New machines, new films, and new processes have added efficiency and flexibility to the system. In two tables the author lists the manufacturers, characteristics, and capabilities of some of the new microfilm cameras, readers, and readerprinters.

A microfilm system for handling the storage and retrieval of business records works in this manner: A camera films each document and in the process sharply reduces the size of the image, often to one-thirtieth of that of the original document. This reduction cuts down drastically the storage space needed. The film is then processed, indexed, and filed in the storage unit. When it is needed the film is removed from the storage unit and placed in a reader which selects the desired image and magnifies it to its original size or even larger. When a reproduction of the document is desired, the printer, which is the last stage of the microfilm system, reverses the process of the camera by creating a full-size document from the micro-image. Printing was a slow and awkward process until the reader and the printer were combined in one machine. Today's equipment can produce high-grade. low-cost paper copies of records and documents in a matter of seconds.

Mr. Weill claims that the high-capacity, integrated, mechanized image system is the system of the future. The following elements are common to most of those already designed: (1) a camera that incorporates an indexing feature, (2) a file cabinet offering quick access to visibly indexed film magazines, and (3) an electronically controlled reader-printer that can scan index numbers on individual film frames almost at computer speeds. Of a total of seventeen such systems that

have been proposed, only a few have been built and demonstrated.

This article comes at a time when many are faced with the problem of handling sharply increased volumes of paper work. It is well worth the attention of those interested in records management and information storage and retrieval.

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Special Report on the Office, Dun's Review, September, 1964.

This year's edition of Dun's Review's annual supplement focuses on computers.

This special report attempts to sum up what management is doing to stem the rising tide of paperwork. Topics covered include the role of computers in decision making, the use of service centers, developments in record storage and retrieval, advances in office equipment, and trends in office design.

The Operations Analysis Meeting by RALPH W. SAUBER, Financial Executive, April, 1964.

The financial officer responsible for releasing the monthly financial statement to the president, Mr. Sauber suggests, may effectively employ an "operations analysis meeting" to augment his own knowledge of current operating performance and to sharpen his monthly report for management's use.

The operations analysis meeting can be a useful device, according to Mr. Sauber. It is held a day or so before the release of the monthly statement. The controller or vice president of finance solicits key reports from the meeting participants on such topics as sales mix, production cost variances, budget analyses, credit, various division operations, inventory costs, and other pertinent problems. From these analyses presented at the meeting together with the other sources of information at his disposal he compiles his operating report.

The author maintains that the degree of success of this technique depends largely on the role played by the financial officer. This meeting demands considerable planning. Care must be exercised in choosing the participants. Aside from acting as chairman the controller must attempt to play the part of an objective spectator, confining himself to asking questions rather than stating policy and giving opinions. Ideally, he will receive individual reports in advance so that he may have questions prepared.

The ultimate goal of the meeting is, of course, a better report for top management. Several important byproducts of this meeting also deserve consideration. The decentralization of financial analysis to middle management develops an improved "sense of belonging" within this group and encourages its members to think beyond the limited scope of their own jobs. Thus it can be important in the development of future executives. The controller benefits, too, from this type of exposure, which helps him to achieve the breadth of view and level of confidence necessary to make him a better member of top management.

DAVID C. SHAW University of Pennsylvania

Temporaries Can Reduce Overhead by Allen K. Trueman, Administrative Management, August, 1964.

The author presents arguments, based on a consulting study, for the use of temporary office help firms.

When management is faced with the necessity of obtaining temporary help to meet the demands of peak loads and special projects, it can take either of two courses of action. It can hire additional employees and put them on the company payroll, or it can call on temporary personnel companies to supply qualified workers on a temporary basis.

The author concludes that, because of the tremendous increase in the cost of fringe benefits in recent years, it is often more economical to rely on help service companies for temporary workers. He cites some examples from a recent study by Stevenson, Jordan & Harrison, a New York management consulting firm, to show that the cost per hour of qualified temporary help obtained from a leasing service is often less than the cost per hour of permanent employees doing the same job in the same geographical area. For this reason it sometimes may pay for management to rely on temporary help companies for ordinary business as well as for emergencies and peak loads.

When management uses temporary personnel companies, the article claims, it gets competent, motivated workers. It is spared all the costs involved in hiring temporary employees, for example, the costs of recruiting, interviewing, selecting, and training. The personnel service company takes care of all that. Management is also spared such costs of adding temporary workers to the payroll as the cost of maintaining the necessary employee records and filing the required employee reports. Furthermore, payment is made in one amount to the help service company, not to the worker, and there are no deductions for taxes, hospital insurance, etc. Also, management pays only for time worked; there is no payment for time lost due to sickness or absence.

Today many business concerns are involved in switching from manual to punched card and electronic data processing systems and they find it necessary to maintain both systems for a short period of time. In such a situation temporary personnel companies can be useful. They can provide qualified temporary workers to operate the new system simultaneously with the old one, and these workers can be retained while the business is training its employees to handle the new system or hiring new employees if that is necessary.

The temporary personnel companies have expanded into many new areas in recent years. In addition to

secretarial and general clerical help, they now provide a wide variety of specialized workers. The business that needs the services of almost any type of worker on a temporary basis can turn to the help service companies for assistance. They can supply specialists in accounting, management, engineering, package design, data processing, and many other fields. They can also provide trained workers to handle conventions, meetings, and demonstrations.

In closing, the author includes some helpful hints on the proper utilization of temporary workers in order to get the job done quickly, efficiently, and profitably. Mr. Trueman also provides a list of temporary personnel organizations with offices in more than one state.

Management should establish a policy with regard to the acquisition of temporary workers. To establish such a policy intelligently it must compare the cost of hiring them as employees with the cost of obtaining them from temporary personnel companies. In addition to presenting many factors to be considered in making such a comparison, this article sets forth some of the changes that have taken place in the temporary help organizations. This article should be of interest to all those concerned with obtaining personnel services not only on a temporary basis but on a permanent basis as well.

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Management Services by CPA Firms—A Client's Viewpoint by ALFRED S. MARTIN, Pennsylvania CPA Spokesman, April, 1964.

This article evaluates the advantages and disadvantages inherent in obtaining management services from the client's certified public accounting firm as compared to the alternative provided by the independent management consultant.

In the author's opinion, it is not only logical but also economical to make use of the management services offered by a company's independent auditors. He cites the following arguments in support of this position:

Time-cost factors are likely to be tavorable to the CPA firm as compared to the independent management consultant. Because of its previous relationship with the client, the auditing firm is likely to be more familiar with the subtle aspects of the organization. Lacking this familiarity, the independent consultant has these alternatives:

He can take the time needed to learn the company, which would add to the cost of his services. Or he can limit the scope of his engagement to meet his budget without encroaching on his margin of profit; thus, he would run the risk of overlooking some pertinent factors. A consultant who is a complete outsider, Mr. Martin suggests, may be tempted to submit classical solutions to the client's problems, solutions that may not apply because of various special circumstances with which he is not familiar.

Client - consultant relationships may be better when the auditing firm is used. A successful relationship is based on mutual confidence and intelligent appraisal of capabilities. Full development of such a relationship ideally requires continuous resolution of divergent thought patterns. This relationship, Mr. Martin argues, is in fact provided by the regular contact between CPA firm personnel and client management.

On the whole, Mr. Martin feels, the studies and analyses prepared by CPA firms have been superior to those prepared by consultants. He concedes that there is risk that such services could compromise the independence of the auditors but feels this can be prevented by the establishment and enforcement of adequate safeguards.

Mr. Martin does not argue for the employment of CPA firms in all cases. He advocates the use of other consultants in areas in which the CPA firm lacks sufficient specialization.

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Management Services: A Magazine of Planning, Systems, and Controls, Vol. 2 [1965], No. 1, Art. 8 **Overseas Subsidiaries** Accountants, he says, report sold, (2) which products should be

Financing Overseas Subsidiaries and Evaluating Their Earnings by Edward J. Mock, Business Topics, Summer, 1964.

When (or whether) to repatriate earnings of overseas subsidiaries and hence how to value them are problems for many international companies. The author outlines a simple mathematical technique for evaluating the alternatives.

Differential taxation rates complicate decisions on how best to finance overseas subsidiaries, how to evaluate their earnings, and what to do with the earnings. The hope of reducing taxes leads many companies to retain profits overseas even when there is little likelihood of reinvesting them profitably. This also creates a problem in evaluating the earnings: Should they be valued as if remitted even if they are not?

The optimal solution to these questions, Professor Mock says, is an exercise in dynamic programing involving consideration of all possible combinations of alternatives. Usually, however, this technique is too cumbersome to apply to practical problems and there are not enough data to justify it. He outlines a simpler method of analysis, one that leads him to conclude that ordinarily it is more profitable for the parent company to repatriate local profits as soon as they are earned.

Something Old, Something New: Accounting - Management Relationships by JOHN G. HALL, Cost and Management, April, 1964.

This article reviews the incompatibility of traditional accounting and management information needs and makes some suggestions as to what can be done about it.

The author begins with the assumption that management is synonymous with control. He defines "control" as that facility which gets done what management wants done.

on performance through reports adapted fom the balance sheet and income statement. These two basic reports are designed to allow the controller to perform his two traditional functions: (1) to insure that expenditures and collections are made in conformance with preestablished plans and policies, and (2) to see that revenues and expenditures, assets and liabilities are recorded so that the financial statements accurately reflect the position of the firm.

The author believes this system hampers management in its function of control of operations by forcing it to rely for data on reports not specifically designed for management purposes. Control of financial policy and control of operations are separate activities. Accounting for financial policy control and accounting for operations control must be completely divorced. The author gives three proposals for reaching this goal:

- 1. Accountants should provide a trail from the financial records all the way back to the firm's physical operations.
- 2. Accountants should limit operations control reports to key factor control data for unit systems managers, even if this requires quantity rather than financial data.
- 3. Accountants should study and learn well the basic operations of their firms to ensure that the proper key factors are reported.

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Profit Measurement by Product Group by Henry W. Hornik, Financial Executive, March, 1964.

Reporting of net profit by product line facilitates a sound appraisal of the present and future profitability of both products and product lines. The author has some suggestions for how to do it.

If financial statements presented product line data, the author says, management would be helped to see: (1) which products should be

discontinued, (3) how to develop a better product mix, (4) how to establish a yardstick for setting prices, (5) which product to advertise more, and (6) which small customers are profitable enough to justify the sales effort. Reporting of net profit would indicate whether or not the products are covering the indirect as well as the direct expenses, make readily available the relationship of manufacturing costs to selling costs for each product, and provide an official productivity scoreboard.

The author admits that allocations of costs will vary from one accountant to the next. Therefore, he suggests, in assigning costs to the product line the principal rule to follow is: "Assign costs wherever possible on a direct basis and allocate the remainder according to a fixed set of rules which can be justified."

There are three major bases for allocating costs: amount of effort expended, results obtained, and ability to pay. The best method, the author feels, is effort expended because it is planned and controlled and ties in with expenditures.

He suggests that the standard cost for each product be used to determine the cost of goods sold. He also makes these recommendations: The cost of getting orders should be allocated by budgets, or if salesmen are on commission the allocation can be made directly to the product. The cost of processing orders should be allocated directly to each product and product group by the line count of orders for each product. The cost of shipping orders may be allocated by cost of goods sold, by relative weights of the various products shipped, or by direct freight expenses for each shipment.

The net profit by product statement can be of immeasurable value in making marketing decisions, the author concludes. With this tool the modern finance executive can provide management with a better picture of profits.

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