

TITLE, AIM, AND SCOPE OF BOOK

- A. The purpose of this textbook is to provide the learner with specific information concerning the system of Value Analysis and Value Engineering techniques and their use. This book covers the specific system of techniques put together for the purpose of efficiently identifying large amounts of unnecessary cost in all stages of the product cycle--before design, during design, during manufacturing, during purchasing work, etc.
- B. Chapter I orients the learner into this basic system of techniques for the efficient identification of unnecessary cost and provides the basis of understanding which will make the application of the Value Analysis techniques understandable.

Chapter II provides and teaches a systematic plan throughout which the Value Analysis techniques are applied.

Chapter III describes, explains, and illustrates the thirteen specific techniques which, in conjunction with the Value Analysis system accomplish the efficient identification of unnecessary costs.

Chapter IV provides further instruction and examples in the use of the various techniques and groups of techniques in the Value Analysis system.

Chapter V introduces to the readers the vitally essential special knowledge which is used in conjunction with the techniques. The total fund of special knowledge will be built by the user; however, this chapter describes it, shows how it is used, and provides typical knowledge in appropriate form and of appropriate type.

Chapter VI comes to grips with the practical problem of securing effective implementation of good value alternatives which are developed through use of the Value Analysis system with its special techniques and knowledge.

Chapter VII provides very valuable guidance on the relationship of the use of Value Analysis and Value Engineering techniques to the various work areas in a business--the relationship to accounting, appearance design, engineering, manufacturing, purchasing, quality control, sales, cost reduction activities, etc.

Chapter VIII provides guidance and recommendations for effective organization in a business including structuring, number of personnel, use of personnel for the various types of businesses from the smallest businesses to the largest businesses.

Chapter IX shows the essential qualifications, experience, and skills required as a basis for men who can learn the Value Analysis and Engineering system and utilize it effectively.

Chapter X deals with the actual work content which must be accomplished for effective Value Engineering. It describes the various types of work that are required and also provides guidance as to which types of work need special emphasis in sales, in engineering, in manufacturing, and in purchasing.

Chapter XI deals with the vital subjects of measurements and tests which establish the grade or degree of excellence of the value practices and value work. It also includes considerations important in the vital field of motivation of value work.

Chapter XII includes an extremely useful series of practical questions bearing upon the Value Analysis system, its concept, its specific techniques, its operations, its organization; in fact, all of the subject matter in the text. These questions carry the headings of the chapters to which they refer making it practical to assign daily work on the areas throughout the book or depth studies in specific areas. It also includes specific problems by which an instructor can test the practical effectiveness of the learners use of the subject matter. It further consists of a bibliography of Value Analysis and Value Engineering together with recommended allied reading.

WHAT ARE ITS SPECIAL FEATURES?

- A. The Value Analysis and Engineering system has taken techniques from all technologies and arranged them in a special system with appropriate emphasis to efficiently accomplish its task. These techniques are function based rather than parts based or process based or materials based and constitute a new and extremely efficient approach.**
- B. Probably no departures in presentation of material have been made. The text describes the important techniques, includes penetrating questions which, when answered fully, will develop a substantial understanding, includes numerous case histories to illustrate their use and dozens of actual problems which will strengthen the learner's ability to create effective solutions.**
- D. The system of Value Analysis techniques like other new effective systems incorporates knowledge and technique from existing technologies where it is available, arranges it in appropriate order, emphasizes and de-emphasizes it in a manner that makes it efficient, then intersperses techniques which are entirely new which are required for this work. An entirely new technique is that of evaluating functions. This has not hitherto been done and experience has shown it is, by all odds, a technique of decisive strength.**
- E. The Value Analysis system is a practical system.**
- F. In the matter of the use of this book in the classroom, it will be effective in the following areas: post graduate and post experience training in industrial engineering, design engineering, and procurement work.**

Graduate instruction in the same.

Final year of college or equivalent courses in the same areas.

- G. This question was already answered--this book contains problems and questions as assignment aids.
- H. None
- I. At this moment, I am not qualified to say.
- J. Value Analysis techniques have been taught to several thousand people in our Company. However, the teaching has hitherto relied upon the skill of the instructors rather than the adequacy of the text material. The results have been extremely gratifying.

WHAT WILL THE READER GET FROM IT?

- A. Here is a new function based system of techniques oriented toward "anything that costs money, whether it be a service, a product, a process or whatever" which will aid me to efficiently identify and eliminate important amounts of non-working cost.
- B. The reader who uses the book for self-study must recognize that the dealing with the techniques is extremely concentrated and he will not learn to use them by the reading. He should peruse it, then start with the Value Analysis approach and the various techniques studying them while working on specific projects of his own on which he applies them. Once he has mastered the use of the techniques, then he will be ready to receive more benefit from the guidance later on in the text on how to organize, staff, how to secure implementation of the alternatives, etc.

HOW DOES IT COMPARE WITH OTHERS IN THE FIELD?

- A. I suppose that a person not familiar with the content of this book would consider that any book on cost reduction, on industrial engineering, on work simplification, and related subjects was a competitor in this field. Actually, the truth is exactly opposite. This text provides a system which results in the technologies of all of those listed, and others, being appropriately used in the business. This is a new function based system for evaluating functions and for securing the effective development of value alternatives.
- B. The approach in Value Analysis is from a basis of dollars cost and function secured from those dollars. The method of treatment is to sharply study these functions to identify exactly what is desired, then to place value--i. e., appropriate cost--upon them accordingly. This system is easy to understand because every dollar of expense of every nature is intended by its purchaser to buy some type of a "function." The whole basis of the study of value in this text is appropriately evaluating that function and providing alternatives which will secure it for its value.

Many books exist which deal with manufacturing processes, with special materials, with special concepts of design, with special systems of purchasing. Each makes large contribution in its field. Value--i.e., appropriate cost--is secured by the proper use at the proper time of the technologies in all of these fields. The techniques in this text bring into clear focus areas for improvement from all of these technologies.

WHICH ILLUSTRATIONS ARE BEST FOR PROMOTION?

I require a little more time for study of this than I can give it at the present writing. I will send this item in to you soon.

WHAT IS THE MARKET FOR INDIVIDUAL SALES?

- A. Any executive who has profit accountability for a business or activity. Any man in a business whose decisions affect the appropriateness of costs and therefore the profits of the Company. Some are listed:

- Engineering managers
- Engineers
- Manufacturing managers
- Manufacturing people in many of the categories
- Purchasing agents
- Buyers
- Sales planning personnel
- Sales people, especially of a product or process which has some technical content.

- B. Engineering organizations, such as...

- IRE
- ASME
- AIEE
- Drafting organizations

- Management improvement organizations
- NAPA and similar organizations in the purchasing field
- Societies of tool engineers--of industrial engineers--and similar

- C. We have been forwarding these to Mr. Hicks. We will forward others to you as they come in.

WHAT IS THE MARKET FOR QUANTITY INDUSTRIAL SALES?

- A. For in-plant training courses in engineering, drafting, manufacturing methods, purchasing. The book might be quite appropriate as a give-away for good will to purchasing agents, buyers, etc. In general, the philosophies and approaches find ready belief by purchasing people, perhaps importantly because it helps bring closely into focus the changes which engineering and manufacturing people must make in order to allow purchasing to accomplish a very much more profitable job of buying.

- B. Probably purchasing associations/
Perhaps industrial groups such as Electronic Industries Association/
Perhaps associations in the military or having much to do with military materiel
since the techniques taught are so extremely applicable to the design,
procurement, and cost of all military equipment/
- C. Howard L. C. Leslie
Value Analysis, Inc.
141 N. Broadway
Schenectady, New York
- Walter J. Cahners
Industrial Education Institute
25 Huntington Avenue
Boston 16, Massachusetts

WHAT IS THE EDUCATIONAL MARKET?

I am, of course, disqualified from answering this question as drawn because I have not been teaching. However, there is pertinent information in this area. This is put in shape as a textbook so that the professors who plan the curriculum for electrical, mechanical, industrial, and similar engineering courses should be very much interested in using it as a text. Furthermore, as an advanced course for men who are taking purchasing electives, it will be outstanding. This text is a result of our industrial work in developing better problem-solving methods for the identification of unnecessary cost. The curriculum planner who learns in enough depth precisely what is covered by this text will find that it covers an area which has never before been taught using a proven approach developed from experience. One deterrent for early understanding of this may be the fact that they will recognize a number of the "bits and pieces", the specific techniques, and not recognize that the extremely large accomplishment is the result of using known techniques, some with greater emphasis, adding a few very essential and hitherto unknown and unused techniques, and incorporating all into an appropriate system for the identification of unnecessary cost.

WHAT IS YOUR BACKGROUND?

- A. We include some biographical accounts from which you can extract that which is useful. We will also provide this brief running account for you.

Graduate - Nebraska Wesleyan University with major in education - 1925

Experience as principal - urban high school.

Graduate Electrical Engineer - University of Nebraska - BSEE - 1931

Joined General Electric - Engineering Training Program

In 1932 - became design engineer in vacuum tube engineering department

Always seemed to have a driving interest in the cost of all the factors that enter into engineering decisions. This interest led to an assignment in 1938 with Harry L. Erlicher, vice president of purchasing.

During the period from 1938 to 1944 carried responsibilities in procurement of military materials, such as, at different times for the Manhattan Project - which developed the atomic pump - the B-29 gun turrets, turbo superchargers and other similar vital material. During this period of time, of necessity, worked in areas involving real depth of both purchasing and engineering considerations. Furthermore, manufacturing processes and procedures and problems were constantly a large factor.

1944 to 1947 - purchasing agent of one of the General Electric plants.

Late 1947 - returned to headquarters staff - started development and formalization of the system of techniques reported in the text.

Since this time, my principal work has been developing and guiding a group which would further extend knowledge, prove feasibility of the knowledge in actual product areas, teach and consult the various product departments in the effective utilization of the techniques.

At the same time, since it is the policy of the General Electric Company to be a good citizen and to make extra contributions, I have followed this line of work to the extent of making, I presume, approximately 100 to 200 presentations. These include presentations at some of the annual meetings of national societies, at the University of California, and others. (Incidentally, we have been invited to give presentations to some of the various universities many many times through this period which we have been forced through shortage of time and resources to decline. More details can be provided from our records to you in this area if they are useful.)

The biographies attached will indicate a few more important items.

- B. Lawrence D. Miles
Manager - Value Service
General Electric Company

- C. American Ordnance Association
National Association of Purchasing Agents
Chairman - Value Engineering Committee - Electronic Industries Association
Edison Club
Mohawk Club
Nebraska Wesleyan
University of Nebraska

WHERE SHOULD NEWS OF YOUR BOOK BE CIRCULATED?

- A. Purchasing Magazine
American Machinist Magazine
Design News
Management Methods Magazine

- B. This information will be supplied at a later date.

CONFIDENTIAL

MARKET SURVEY

AUTHOR UNIT

How the author can aid distribution of his book:

SUGGESTIONS TO

McGRAW-HILL AUTHORS

MARKETING A BOOK

We take pride in the thoroughness with which we seek the market for all books bearing our imprint. The spirit of the agreement that we make with the author is that each book is a separate business venture into which we have entered as a partner of the author.

In marketing his book, the author can be of material assistance to us. He knows the subject better than we can ever know it, and he knows the type of man to whom he intends his book to appeal. For these reasons, we always welcome the assistance and suggestions of the author.

Specifically the author can assist the publisher, first in defining the scope and purpose of the book and suggesting special features to be emphasized in the publicity, and, second, in recommending special periodicals to which copies would be sent for review, and lists of prospective purchasers which may well be circularized.

The aim of the McGraw-Hill Book Company is to secure, for every book on which its imprint is placed, the widest possible circulation both in the United States and abroad. Yet the author, more than the publisher, is in touch with the activities of his own field, and as a supplement to our regular procedure and the contacts of our organization, we welcome the suggestions and comments of the author in carrying out the spirit of the publishing agreement.

Please answer questions on pages 2 and 3 in detail

1. State the title, aim, and scope of your book.

- A. Describe your book in about 100 words, stating in general terms its purpose and the ground it covers. When giving title, tell whether final or tentative, and include any subtitle.
- B. Please give a one-sentence summary of each chapter. If some are particularly more important than others, please indicate these and briefly tell why.

2. What are its special features?

Point out in detail the distinguishing features which make the book outstanding, elaborating on such questions as:

- A. What new approach to the subject has been taken?
- B. What departures in presentation or treatment of materials have been made?
- C. What recent advances in the field have you covered?
- D. What special topics or material have you covered which heretofore have not been treated in a work of this kind?
- E. What key words best stress the type of treatment (practical, theoretical, simple, technical, etc.)?

Keeping in mind the use of your book in classroom instruction, please answer the following:

- F. At what grade levels would the book be usable (high school, trade or vocational school, industrial or business training, technical institute, college)?
- G. What distinctive classroom helps, such as problems, questions, discussion topics, review exercises, etc., does the book offer?
- H. What complementary instructional materials for use with the book are available? How used?
- I. What other books, and in particular what McGraw-Hill books, are especially suited as companion or supplemental volumes?
- J. If the materials in your book have been tried in classes, how long and in what form were they used?

3. What will the reader get from it?

- A. If you were a prospective purchaser of this book, what single, outstanding feature would persuade you to buy it?
- B. Briefly outline how the reader who uses your book for self-study will benefit from it, indicating any materials, methods, illustrations, or data of a practical or "how-to-do-it" nature.

4. How does it compare with others in the field?

- A. List books that are competitive, in whole or in part, with your book and tell how yours differs from them.
- B. Point out how your book improves on each with reference to: (1) approach; (2) arrangement and method of treatment; (3) ease of understanding; (4) size; etc. List also any characteristic weaknesses and omissions in competitive books which you have avoided.

5. Which illustrations are best for promotion?

Please select two or three of your book's illustrations which may be of special interest for promotion purposes. Please identify them by figure number, or chapter location, or caption.

6. What is the market for individual sales?

- A. What type of reader can use your book for self-study?
- B. Give the names of societies and other special groups of individuals to be circularized.
- C. Furnish the names and addresses of individuals and organizations with whom you have had contacts, who should be circularized.

7. What is the market for quantity industrial sales?

- A. For what type of industrial organization would your book be most appropriate for training purposes or as a give-away for good will, etc.?
- B. Give the names of societies or other special groups that might purchase your book in quantity for resale or as a gift or premium to their members.
- C. Furnish the names and addresses of individuals in industry with whom you have had contacts and who might be interested in quantity purchase of the book.

8. What is the educational market?

If you are teaching or have taught, and the book is usable in classroom instruction, please answer the following:

- A. Is the book the result of your teaching activities?
- B. What is the title of your course in which this book will be used?
- C. If similar courses are often given under other titles, what are the most common ones?
- D. What is the length of this course in credit hours and classroom hours?
- E. How is time divided among lectures, quiz, or recitation periods, and laboratory periods?
- F. If laboratory work is given in the course, how is it conducted and what manual do you use?
- G. What is the average size of the sections in which classes are conducted?
- H. What courses are prerequisite to yours, and in turn for what other courses is yours a prerequisite?
- I. Give the names of former associates or students now teaching courses in which the book might be used as a text.

9. What is your background?

- A. Write a brief biographical account of your professional career, stressing your special qualifications for writing this book.
- B. Include your name exactly as you desire it to be used in conjunction with the advertising of your book, and give your present position.
- C. List your associations, both personal and professional, which should influence its sale, as well as your college, fraternities, and home address.
- D. Please attach a *glossy* photograph of yourself, 5x7 or 8x10, suitable for promotional use.

10. Where should news of your book be circulated?

- A. List the periodicals and journals which should be most effective media for reviews of your book.
- B. Give names and addresses of appropriate company house organs, alumni and fraternal publications, local newspapers, and other special media to which we can direct publicity about you and your book.