SPECIAL REPORT TO MR. DAVENPORT

"HOW CAN THE TECHNIQUES OF VALUE ANALYSIS REDUCE OPERATING COSTS OF THE SOUTHERN CALIFORNIA EDISON COMPANY?"

Mr. J. F. Davenport
Executive Vice President
Southern California Edison Company
Post Office Box 351
Los Angeles 53, California

Dear Mr. Davenport:

The techniques of Value Analysis were developed to keep the useful and desirable functions of practices, procedures or products but to do so with much lower costs.

For purpose of definition, we consider that

Good Value is received if each expenditure secures
   1. Appropriate performance of function
   2. At appropriate cost.

Good Value is not received if:
   1. Performance of functions is not appropriate
   2. Or, cost is too high.

All of today's practices, procedures and products are the result of the heritage of the past, with the ideas, tools, knowledge and problem solutions of the past. Each was arrived at under a set of conditions and limitations of the past utilising the thinking and knowledge of the people responsible at that time then modified from time to time since, to meet changing conditions, to utilize different approaches and to incorporate different ideas.

Each costs a great deal more than it would if the decisions affecting it were all up-dated based upon today's creativity, knowledge, ideas, tools and approaches.

Some of the Value Analysis techniques produce an approach which brings into clear view -- exactly the functions or needs under today's conditions. Other techniques produce in dollars the Value or "Appropriate Cost" of the functions. Still others cause usable alternatives which will accomplish the functions at lower cost to be brought into view.
In applying Value Analysis the starting point is the list of significant expenditures.

What use or uses, need or needs, function or functions are provided by the expenditure?
What real benefit is provided to the Company by each function?

In studying the functions provided by the different expenditures, avoid generalities. Break them down into specifics so that specific single functions are associated with their costs and can be studied and evaluated.

By function, we mean
1. The "Use" accomplished by the practice or procedure or product.
2. The "Satisfaction" to the customer provided by the practice, procedure or product.
"Use" functions perform needed tasks, do some needed physical thing, provide needed information, give needed instructions.
"Esteem" functions provide satisfaction. They motivate people; make them proud of their work, their company and themselves; build confidence, conform to custom.

Very definitely separate the "Use" functions from the "Esteem" functions. Evaluate the functions secured by each significant expenditure in dollars.
"Evaluate the function" is one of the new techniques in the Value Analysis technology. It is explained and illustrated in the McGraw-Hill text, pages 15 and 111.

Divide the dollar value so that the annual amount paid for the "use" function factors and the annual amount paid for the "esteem" function factors are separately known.

By now -- the first two of the three Basic Steps of Value Analysis have been accomplished.

Step I  - Identify and classify functions
Step II - Evaluate them in annual dollars
Step III - Cause alternatives to be developed.

Page 17 and bottom of page 116 explain and illustrate Step III.
Although the example is a physical product, the approach is seen to be the same.

Proceed creatively and vigorously with Step III.
Peruse the 6 page, Chapter VI for some guidance on vital human factors which will have large bearing not only on the effectiveness with which Basic Steps I, II and III are accomplished but also the extent of implementation of improvements which results.

Some suggested typical expenditure areas for study by the Value Analysis Approach are:
I - Any practice or procedure that has been in use 10 years.
   What -- precisely -- are the functions? Do they advise or instruct?
   If so - whom? where? how often? how useful?
   Do they fill some physical need? What functions? etc. ?
II - Certain groups of resources.
III - Various services.
IV - Certain groups of people.
V - Certain organizations.
VI - Certain wings of a building or buildings in other locations.
VII - Certain groups of products.

Attached is a typical work sheet listing the first four items, so that, if desired,
detailed identification of some important projects can be made.

By all means first choose only one -- do it thoroughly -- finish it. Then a second,
third, etc. Penetrate each intensely, thoroughly, doggedly. The techniques of
Chapter III will help.

The results accomplished will be governed by six factors.
1. The place of reporting of the men.
2. The training of the men in use of the techniques.
3. The competence of the men.
4. The number of men.
5. The absence of handicapping personal factors caused by
   previous experience of the men with the areas being studied.
6. The preparation of others in the "environment".

A few important precautions are attached.

If high 6 figure of low 7 figure annual results are expected, two to three men of
proven competence and respect, who have not been closely associated with the areas
being analyzed, who will secure from one to three weeks of Value Analysis technique
training and who would report to you would be required.
CONCLUSION

Skillful application of the techniques of Value Analysis to the various classes of expenditures of the Southern California Edison Company would bring benefits by:

1. Clearly identifying functions secured for significant integers of expenditure.
2. Promoting study of each function in light of today's needs and opportunities.
3. Causing classification of functions and evaluation of them in annual dollars.
4. Developing an environment most conducive to the up-dating of decisions.
5. Promoting important decisions which would result in securing the desirable Use and Esteem functions in practices, procedures, products and operation at lower costs.

Yours very truly,

L. D. MILES
Manager - Value Service
General Electric Company

February 21, 1962
TYPICAL WORK SHEET
PLAN OF PROJECTS

I. Practice or Procedure
   1.
   2.
   3.

II. Group of Resources
    1.
    2.
    3.

III. Services
     1.
     2.
     3.

IV. Groups of People
    1.
    2.
    3.
SOME PRECAUTIONS

1. Do not allow an underestimation of the importance of esteem factors.

2. Do not diminish quality, or degree or grade, or usefulness of something needed.

3. Recognize that to those closely associated -- the way things are being done seems very nearly correct. Do not put them in the position of having to try hard to do something that inwardly will seem very hopeless and wrong.

4. Recognize that those closely associated will be embarrassed by the simplicity, effectiveness and lower cost of some of the solutions. Protect them from as much embarrassment as possible.

5. Recognize in making assignment that those who might be inconvenienced or embarrassed by change are in the most difficult position to search out, create and develop effective alternative solutions.

6. Be prepared to take a little time to make the changes so that the personal well-being of the people can be supported and their confidence in their company and their enthusiasm for their jobs can be kept.

L. D. MILES

2/21/62