EXAMPLE -- VALUE APPLICATION

The importance of a "balanced" organization to effectively accomplish our Value Analysis job is again pointed up by this example.

About a year ago in Louisville, I had a "down to earth" conference with Jim Knight, Manager of Engineering. He took the viewpoint, "How can Value Analysis possibly help us because we have about two dozen 'component engineers' each of whom is a highly skilled specialist in his line, such as hardware--plastics--insulation--etc.". He said, "We also have a half dozen or so engineers, each of whom is in charge of a particular model and who in turn goes to the component engineers for their guidance on the components in the model". He said, "How then, can someone else who can't possibly know as much about these components as our men help us to get better value".

I told him I would develop a means of determining facts. To determine facts "Value Analysis application" to a refrigerator was essential. Having no "Value Analysis application" organization we broke Earl Kittle loose from his assignment for a few days and borrowed some professional value specialists for a few days each to set in on a "Value Analysis Application Team" studying the refrigerator.

The suggested savings developed by these men were:

<table>
<thead>
<tr>
<th>Item</th>
<th>Suggested Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Magnet Application</td>
<td>$315,000</td>
</tr>
<tr>
<td>Latch Assembly Mat.</td>
<td>33,000</td>
</tr>
<tr>
<td>Pole Piece Assembly</td>
<td>75,000</td>
</tr>
<tr>
<td>Magnetic Latch Housing</td>
<td>151,000</td>
</tr>
<tr>
<td>Latch Keeper</td>
<td>52,500</td>
</tr>
<tr>
<td>Door Gasket</td>
<td>150,000</td>
</tr>
<tr>
<td>Drip Tray Hinge</td>
<td>24,000</td>
</tr>
<tr>
<td>Door Stop</td>
<td>25,500</td>
</tr>
<tr>
<td>Evaporator Rear Support</td>
<td>13,800</td>
</tr>
<tr>
<td>Basket Retaining Strips</td>
<td>385,000</td>
</tr>
<tr>
<td>Top Hinge</td>
<td>300,000</td>
</tr>
<tr>
<td>Wiring Harness</td>
<td>280,000</td>
</tr>
<tr>
<td>Monogram Signature</td>
<td>292,500</td>
</tr>
</tbody>
</table>

I think it is not a coincidence that now our Louisville seminar is sponsored by the Refrigerator Dept. which insists on including people; that an excellent Value Analysis organization under the guidance of engineer Les Pruehs has been organized, that a one hundred thousand dollar savings from a Value Analysis Seminar table was put into effect and that their value program seems to be rolling.

We must be in a position to supply proof.
"The mind does not grow by instruction -- it is not a sack to be stuffed"

"To get more fruit from trees -- stir up soil around roots, improve root soil, etc."

"Have got to have convictions in order to really accomplish but cannot contribute to progress unless can change those convictions."

"Learning depends on wanting to learn" (Morale factor is a component)

"Learning is an emotional experience"

"A painting is more than paint & canvas"

"Use more role playing" 3 questions - 60 seconds

Phillippi told Board - every one order computer to eliminate paper work $500,000
Set up Task Force to use it -- go to work
Five months later cancel order
Will get 60% of savings

Christian religion every land every people 2000 years
However, rings church bell every Sunday a.m.

McCullough's... (1) training programs in productive maintenance may assist us,
(2) feed back of product weaknesses to engineers may help us.

When we say "That is simple understandable language", we mean, "We are able to make pictures as we read or listen."

All have two jobs
One is functional
Other is relationship to all and each other functions - departments - etc.
Learn what we practice most frequently - most recently - and with the greatest degree of satisfaction.

Integrating is \[ I = POM / \text{listening} \] (Results of L fed back with POM)

Devil's Advocate -- 'priests in early days suggested'
"Lift where you are"

\[ S = \frac{R}{E} \]

Satisfaction = \[ \text{Realization} \]

\[ \text{Expectation} \]

Borch
"Automatic factories cost so low can't afford to stop them"
"Products cost so low can't afford to repair them"
"Money in hands of those who won't spend it"

"Supposing that your competitor had the monogram and you had his - how would you make out?"

"If we try effectively (in mkt research to find out why people buy) and can't find out - it's like an insurance policy"

Ticker Klock
Come up with models - alternate ways of doing it
(should do in VA for operations org.)
"New York Times doesn't print list of people alive every day - only ones who die in last 24 hours"

(relationship of VA to Misc.)

"Higher price concept" causes customers to want to buy
"Feeling is that higher price is higher value."
Buys lower priced model but has pride of ownership

Theme - "In and Out"

Legal
"Steeped - if not stifled or staggered by..."
In making speech 'I can't tell you about this - this or this or this or this...
but only this'
"Not doing job unless are effective"

. . . . . . . . . . .

With each delegation - "worry" must be sustained.
The more delegation, the more total "worry,"
"Professional knows too much to be patient and doubts too much to conform" - Cordiner
"Staffing by desperation"
"Persuasion by fatigue"

Paul Mills -
Objectives are "philosophies of intention"
"Two people meeting together - leave different people - either better or worse"
"There can be no promise without threat because - implicit is the possibility that
the promised will be withdrawn?"
"Fortuitous circumstance where a brilliant mind is placed before a perceptive
audience,
"Easier to produce evidence of work than evidence of originality."
"Takes 2 1/2 to 3 centuries for a phase of human knowledge to work its problems
into a solidarity of knowledge."
"Substantial enough to place reliance on" (he was discussing psychology)
"Science is a body of organized knowledge"
"Lots that is said isn't communicated."
"Lots that isn't said is communicated"
"There are lots of facts around - you can always find facts to bolster up your feelings"
"Let people tell all of the bad points - then they will tell some good"
"Power of possessing information"

Drucker "we only know what we can measure"

. . . . . . . . . . .

There are no "future decisions" - only "today's" decisions.
Planning is not an exercise in "mathematics" or "logic" - it is an exercise in
"judgment" - "a risk taking judgment activity"
"Organize our ignorance"

.Fixed expenses represent the decisions of the past.
Drucker "what does the customer buy?" he doesn't buy a product.
"What can we not afford not to do?" he is buying what the product does.
"Expenses are in two classes
  1. necessary to operate business in its present framework
  2. necessary to enlarge the framework.
"No choice but to get our manpower by 'developing those we have', "
"Use ranges - not a definite number"
"All of life is coercive"
"Integrated individual decisions"
"Goya" "Beta"

Stories

Communication is the ability to increase our multipliers
Mr. Cordiner "too late when budget is approved"
Mr. Smidder "authority is complete unless reserved" with respect to any job
( rather than - only the authority written is conveyed)
When coming out with a new product like electric blanket, we want competition
to help "sell in the product".
The leader should lead in increasing prices - and allow others to lead in decreasing them.
Drucker - in the final analysis, all decisions will succeed or fail "depending upon the people."
By asking a man for recommendations - you encourage a man to choose a decision - then search for data to support it.
Instead, ask him for "analysis of the data" "analyze and report"
Decisions perhaps should be the product of the group but the responsibility of one.
In addition to 'responsibilities' in position guides, have a section entitled
"participate in." In one area he decides - in another he guides and advises.
There is a difference between "knowledge" and "skill."

Principles
  1. Concentration of skills - apply close to point of action.
  2. Immediacy - worker to work and worker to worker
  3. Control built into design of work - work controls itself
  4. Integrity of task - integer instead of unit
     (functional component instead of pieces)

(Basic to value spec work
"Call" of work very effective)
Relationship of man to his boss not like steel band - but umbilical cord - moves around - changes
Each works between worry and monotony
If capabilities exceed job, it is monotony
If job exceeds capabilities - worry
The line is fine
What is the competition
Packard thought competitor was automobile
Cadillac thought competitor was diamonds and mink coats
Look at specifics - manageable units
cat's paw - wave - ground swell - tide - Gulf Stream
In preparing a speech - look at subjects from specific points of view.
"Conservative vs. progressive" has given way to "obsolete vs. modern"
Why measure by moon (month) - flow method instead -
To avoid losing out because of obsolescence -
1. Perceptiveness
2. Adaptability
3. Versatility
4. Persuasiveness
5. Ability to deal with complexity
6. Facility to effect successful transitions
Management has two types of problems
Important! ) How do we spend our time
Urgent! )
Wright
"Creeping conformity" can destroy us (M-wright)
We pay for a man's work - we have every right to study his work - measure his work - not so much right to study his personality traits.
"The way a man grows is due primarily to the way his work was managed by his manager.
"Danger of returning from AMC into a vacuum" (Have D.v. Mgrs. in AMC as soon as possible)

RW Johnson - "Engineering going on a vacuum" - Sales Manager had no say in it.
"No business can survive unless it is constantly and vigorously trying to obsolete itself"
"The customer is king - but he doesn't know what he wants - we have to educate him."
"Sears Roebuck has 95% mobility - still does not do substantial manufacturing"
"Conflict" is inevitable - use it to good purpose - friction
Conflict is resolved by "domination, compromise or integration"
"The greatest enemy of thought is pre-conception."
the "practice of management" page 43 - accounting terms.

LA Appley - "Mgt. responsible to make things happen"
"Not solely guided by future - but determines future."

Short and long range objectives - dynamic organization, should change constantly -
measure results of each.
measure each in terms of potential
provide to individuals assistance to improve and develop
have a personal philosophy
believe that each job is an opportunity for a person to develop.

Progressive attitudes toward other human beings.
Savagery - slavery - servitude - welfare - paternalistic - participation -
trusteeship - statesmanship

Climate of organization such that mistakes can be made
Reduce the penalty for error.
Need a "philosophy, a program and a passion"
"Profit" for capital increase should be an expense - non taxable.

Paxton
Learning - being exposed - and selecting for our use the useful,
Each has his personal images from which he speaks - and also listens
A man of almost "frightening purposefulness"
"Test your decisions by their welfare"
"Polarize an organization"
"People basically do not work without objectives"
"People basically do not work without motivation"

Muller - Thyme (paper work)
"How could I get everyone to do his job well if every one was intelligent
and cultured but illiterate?"
Organizational distance - boy and girl always separated need much instruction.
"Man and wife more productive and relations better if unnecessary to
always have coordinator (marriage counselor) present.

.............

Decentralize the authority to fail.
In different businesses, different functions are most important
Lamps - adv. & publicity
Dept. Store - purchasing
Automation in education
In 5 - 10 years, because of demand to import raw materials, the $ supply will change - there will be an excess internationally. We must export vast quantities 30-40% to use these dollars. Most of today's competitors were not existent yesterday.

Tomorrow's competitors will be other than today's - only answer - "innovation" Marketing - distribution VC has been 60% - innovation upon us - with IME based upon some parts of labor

Odds against knowing anything about costs are overwhelming. Profit is a cost not a bonus - should have no yearly statement
Profitability should be changed from accounting to an economic area

"Organize our ignorance"
Use "knowledge and method"
"Can only learn as an adult" - experience and maturity - 10 years
"much more motivating"

Jim Goss - from Harvard

me       you

/       -
-
/
/

"No business can drag the dead weight of a weak functional manager without paying a tremendous price for it."

"Stand up and be counted" - courage. Stand up to the boss clear to the point of decision if you believe you are right - then be a team player."

"Policies are 'pre-packaged decisions'."

"The fellow who is 'smart and clever' never gets very far in the GE Co."

"Each man should go ahead and get his job done, then tell the boss about it 'after the fact'."

"We are groping for satisfying and attainable prestige symbols."

Group protect a boss against his emotions"

"Encourage constructive disagreement"

"Get conformance - with agreement"

"In starting any difficult conference - for example with employee - pause a minute to set up main objectives."

"We must get fun from our jobs."

"Be sure - especially the young men - are not afraid to fail"

. . . . . . .

All have a family of "notions about" -- or -- "beliefs about"
These are our hypotheses.

"Ignoring a problem or situation will not make it go away."

"Must be intellectually capable of being a wise fool - not being afraid of looking stupid."
First open the closed mind, opposing closes - agreeing opens.

Where do we find the young medium ability ablest - meeting problems - hostile environment, etc. leaders

"Drive for show and put for dough"
German general said, "Greatest hazard to general is over influence of sensual aspects of battlefield."

Dean's comments on Dr. 's thesis Lots that's new, Lots that's true.
But what's true isn't new; and what's new isn't true.

"Had lots of data - but no concepts"
"Is a study initiated simply to validate a course of action."

Recuperation and recreation - no longer a privilege of managers - but a necessary ingredient of their job.

Ed Parker says, "our opportunity to get product leadership lies from now on largely in the area of material."

If we're not careful, we're going to get "Paralysis by Analysis."

Subconscious (or super conscious) which underlies (or overlies) our mental activities.

One of the greatest pains to humans is the pain of a new idea. So upsetting, etc.

Common man disposed to ill treat the man who brings the new ideas. I book Walter Bohegot and politics

Education is acquisition of the art of utilization of knowledge. Science is the organization of thought. Science is a river with two sources - practical and theoretical.
1954

2004, 2005

1954, 1955, 1956, 1957

3.5%

%.  0% to 50% of

PLANT WIDE TOTAL COST reductions

Low Volatile Structure
Phil - Low Volume Teams

Drilling - Eng. - 21.75

1954 - 667,000 3.4
1955 - 2,040,000 8.8%
1956 - 2,421,000 7.2% up from
1957 - 3,800,000 Budget

Solid on U. Team activity

Projects =

Ball Bearings = Nice Ball B in

IRPNTF- 2002

Varnish Combo- 992

Painfully considered over 375 was visionary

Sam 9-4
Nov. 94
Andy Westhead from the Plastics Dept. attending the last May 1955 seminar and working at his table on a Philadelphia project developed with the group an idea which will save $7924 (tools $4200). The development authorization for the tools is going through the approval procedure. (2 months after the seminar).

They feel however that the important factor about this suggestion is it pointed out that all similar draw out cases were too expensive, for example, the Value Analyst working on another case developed a suggestion to save $9504 with a tool cost of $1200 and the second one saving of $4068 and a tool cost of $6800. They are working on others.

From the Rectifier Dept. it is reported that of all the projects they had at the Lynn Seminar, one suggestion was adopted in July for $13,000 and one has been rejected having a value of $20,000. 99% of the suggestions involve major engineering changes and none have been thrown out accept the one mentioned but no one is working on them to any extent.

In the last Lynn Seminar there were approximately $1,250,000 worth of suggestions (duplication removed). We have had reports that good has come from each department but the following comments might be pertinent. It is estimated that AAT has done the most. We believe that Small Aircraft Engine is second only because of manufacturing support. The Outdoor Lighting Dept. has received fairly good results but largely through the efforts of the men attending the seminar. Where the man has not been connected with the product, next to nothing has been done. In the Rectifier Department action has only been taken on two suggestions because they just haven't gotten to them. The Instrument Dept. reports next to nothing.

From the Syracuse Seminar the potential savings developed were somewhere between one and a half million dollars and two million dollars. The general feeling among most of the engineering people in Syracuse is that about 80% of the suggestions will produce results. On the other hand Bboes projects from Utica are only running about 20% acceptance. On the basis of the dollar value of the projects involved it appears that $800,000 might be recovered as a result of the seminar but admittedly some of these things are fairly long range. In one department we have had no results because Mr. VanAiken wanted to look over the results personally. This took approximately three months.

From our May seminar on one project alone from Aircraft Accessory Turbine six suggestions worth $131,772 are looked upon with great favor and approximately are being adopted. Favorable action was being taken on these suggestions in less then one month. One other major suggestion offered worth $148,000 is being studied by the research and development engineers and they have made the necessary calculations and feel that it will work. They are going to get the equipment, set it up and test it.

* Now looks like $30,000-- for long range on balance also. From Kearny Project and Lynn -- Savings Resulted -- Finish -- Peter Deno -- Carl Long Story -- Savings. Appr. 2000
IN SUPPORT OF SAVINGS BY VALUE ANALYSTS

After returning from a Seminar, Harold Sample started from scratch as a Value Analyst. He developed a number of suggestions. Within nine months he was advised by Management that over three hundred thousand dollars worth of his suggestions had been adopted.

One man (Phil Spinelli) in substantially less than a year's time brought about the following savings:

...by changing the wording on a purchase order to buy copper bar in longer lengths saved over $100,000/year.

...a screw machine machined spacer cost 84¢ -- changing the material, spec and shape resulted in a cost of 30¢ -- saving $5,000 per year.

...changing the material in a large clamp originally costing $30 and permitted it to be mounted for $10 -- saving on one order $8000 a year.

Set up as a task force, Jim Shute working with a cost supervisor and an engineer on one line of plating rectifier costing $1647 developed suggestions to lower the cost to $711. The prototype is now in test and appears it will have a shop cost of $800. With this reduction in price it is expected it will change the percent of available business from 9% to 20%. Their work can be applied to other lines. Time required from start of project to prototype on test -- five months.

Here are some examples of what Jim Shute has accomplished. On a fan motor through the use of the technique "Evaluate Basic Function" and nothing else he was able to develop some new thoughts which permitted them to buy a $30 fan motor which accomplishes the same function as one for which they previously paid $45. The savings -- $18,000/year.

On a terminal board costing $7.50 each he developed suggestions so that they could be made for $2.50 each. Saving -- $2,500/year

On aluminum they were grit blasting -- They now sand blast saving $18,000/year.

Here are some approximate savings per year in several of our units --

...Hal Jones ---- $300,000/year
...Distribution Transformer ---- $700,000/year (for three men)
...Pete Demos, Power Transformer ---- $200,000/year
...Jim Foley, Instrument Dept. ---- $750,000/year (for four men)
...Phil Spinelli, Large Motor & Generator ---- Over $200,000/year
...Fred Schnoor, Radio & TV ---- over a million dollars per year
...Jim Shute (working half time under not very favorable conditions) ---- $60,000-$70,000/year
Eric Peterson called and gave me the following information. He says, if you have any questions, you can call him.

He said they never made the 14" cabinet before, so he can't give you any comparison.

<table>
<thead>
<tr>
<th>Description</th>
<th>1954 Version</th>
<th>1955 Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet</td>
<td>$7.40</td>
<td>$5.01</td>
</tr>
<tr>
<td>Tube Mounting</td>
<td>$0.88</td>
<td>$0.28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8.28</strong></td>
<td><strong>$5.29</strong></td>
</tr>
<tr>
<td><strong>SAVING</strong></td>
<td><strong>-$2.99</strong></td>
<td></td>
</tr>
</tbody>
</table>

He says you can use those figures -- they are accurate and the best comparison he can make.

On the 14", they started using safety glass -- tempered glass for a cost of $0.69

They substituted molded plastic for a cost of $0.42

SAVING -- $0.27
Godson current cash balance returns on self for
moded cell set, less run, $100.
that time lowest costudev in 159 (competition)

Boy's set up -
met of color was 2.50 more
Boy

Glasses come 1.49 - huge - comm
wholeprice cost hit 59 & general market but
bought several axes marked at
one almost fit for or mom
out come was -
0 mode like rectangular must be held
with tube fixed against a corner
2 past to set - picture tube in poit

Pet on a corner on Wade like on a
coffee can -

Corner become so small. tube locked
do big - people tell that they are
buying a large screen

Hoped & sold 50,000
200's now in corner when originally 500
now sells 150,000
QUOTATIONS IN SUPPORT OF SEMINARS

"I cannot express in words the value I have received of your instruction of last October."

D. L. Fredenberg (Purchasing Section)

"You sold me on Value Analysis at the October Seminar when frankly I felt it just wouldn't work in our type of business."

R. Lakowicz (Value Analyst)
IN SUPPORT OF EXTERNAL INTEREST --

It has been reported that Shakeproof, Hampden Brass & Aluminum and Ilsco have all had dealings with the Navy and at least the first two mentioned have been putting on presentations for their value engineering group.
Roger White and Jim Savage report that Line Materials has approached Glastic Corporation to have them make a porcelain cap for their pellet-type lightning arrester. They advise that they had just lost one of their big customers because he refused to buy arrestors with a porcelain cap.

It is reported from the same source that the production of Glastic caps for Distribution Transformer is up 40%. Whether this is through natural growth or because they are selling to Line Materials for a customer has not been verified because of vacations.

Myron DeHollander of the Foundry reports that they are now receiving consistently 10% more of the available casting business from the General Electric Company than in previous years. He attributes this to the Value Analysis approach (they now receive 85% of the available total business).
IN SUPPORT OF RETURN WHEN A MAN GOES BACK TO HIS JOB FROM A SEMINAR —

One man (D. L. Fredenburg - Purchasing Section) after attending a seminar noticed that we were not obtaining the resale discount from our suppliers when we purchased equipment which was being shipped directly to the ultimate customer. He sent some letters to vendors requesting this discount. The very first month resulted in an $18,000 saving with the end of further savings not yet in sight.

Due to the departmental set up one buyer was purchasing capacitors and another purchasing the brackets. After attending the seminar he discussed this situation with an allied plant and found that the capacitor and bracket purchased as a single item saved 25% of the cost.

One man (Eric Peterson) in a defense area recognized the need for simplification. Working with the Equipment Development Works one day resulted in reducing the manufacturing operations from 32 to 13 — savings and other details not available because of security restrictions.

One design engineer (Paul Shaeffer) developed the Form R motor which will save approximately four million dollars. Near the completion of the design he attended the Value Analysis Seminar and it is his opinion that the direct result of his attending permitted him to take out $375,000 in less than a year's time which he would not have been able to do otherwise. Also in his opinion this additional $375,000 was peanuts compared to the indirect benefits to the Company because he is now better able to influence and handle people working for and with him.

(supporting data for above —

| Old Motor   | Material     | $3.50 |
|            | Labor        | 1.09  |
|            | (Approx.)    | 1.09  |
|            | Shop Cost    | 7.80  |
|            | (Approx.)    | 7.80  |

| New Motor   | Material     | 3.12  |
|            | Dir. Labor   | 0.58  |
|            | Shop Cost    | 6.16  |
|            | (Approx.)    | 6.16  |

or a difference of $1,64 shop cost on $50,000/week

One man (Kirk Newell) after attending our seminar redesigned an underwater flood light from an original cost of $72 to $29. Saving $30,000/year. His approach was "that it just cost too much" and although he feels that the seminar helped him he was somewhat at a loss to say how much.

Walt Giest (Philadelphia - reported by H. Aurelius) has always done a good job in cost reduction but the seminar "really gave him a shot in the arm." He now attends committees and he stands alone to prevent negative thinking on any idea. If he is out numbered by negative thoughts, single handedly he proves that it will work returning complete with models, etc. One job he did since the seminar was to show them how to make a one piece relay cover which was formerly bought -- part from W. Lynn and part from Somersworth -- the savings was $8500.
The suggestion developed in the first Philadelphia seminar (June 1954) to change cut gears to powdered steel gears means a $30,000 saving with $11,000 tools. The DA is written and approval is being obtained now. (14 months later).

One man (J. Fitzsimmons) heard the talk on Standards and immediately considered a bolt costing $11.33 each. Working with the Standards Dept. he found a better material in a standard bolt which would cost $2.28 each — savings $20,000 within two months.

A draftsman "Rectifier Dept." took the Value Analysis Course in Lynn. He was assigned to a Task Force with three (3) engineers and a Value Analysis Specialist assisting. The object of the Task Force was the Industrial Germanium Rectifier having a cost of $12,000 a unit. This draftsman spark-plugged the whole Task Force with the result that the cost is now $8,000 a unit. Three units a week or a savings of $600,000 a year — for three months work. The product is not yet in production but they are building the prototype.

Within two months one of the fellows, John Gatta, worked with another man that had Value Analysis training, C. B. Miller. They submitted a suggestion reducing the cost of a part from $766 to $315 and reducing the number of pieces from 28 to 3. This is a cash savings within 2 months of $18,040. John reports that 90% of this savings is directly traceable to what he learned how to do and who to call upon at the Seminar. He said as a matter of fact he is sure that had it not been for the seminar he would have never thought of it in the first place.
IN SUPPORT OF SERVICES --

Three of us working with Kirk Newell one morning on his flood light redesign suggested Nielson Hardware for latches. Outdoor Lighting was making the part for 21¢ -- Nielson provided the latch for 9¢. So, on Kirk's project we saved $3,000. However, the department uses 410,000 of these latches per year -- saving $42,000.

Larry Monroe called Charlie Zimmers concerning a special bell mouth adapter being machined from a 5½ pound bar of steel. He described the part over the phone and Charlie suggested he talk to Myron DeHollander in the Foundry. The end result was that the Foundry got the job as a precision casting, cutting the cost from $39.50 to $10.60 -- a reduction of $28.90 -- saving $35,000/year.

Doug Eagan called in specialists on gun squirted rubber resulting in the application to the speaker and television tube support for a savings of $76,000 and $46,000/year respectively.

Bick Moorlee called us one Friday afternoon at 5:20 p.m. in desperation. He said, "Maybe you could help. I have searched everywhere in the Company with no success. Value Analysis has always come through in the pinch, here is my problem -------". Those remaining in the office at that time were called together and within 10 minutes developed some ideas. Among them was the solution to this problem which prevented shutting down the entire plant.
Industry Control

Hai Jones

--- Level 6

Profit Before Taxes

$1,000,000 in 5 years
Medium Induction Motors

John DiMarco--LEVEL 6

Profit Before Taxes $190,000 per year
Pete Demos
---
Level 5

Power Transformer

$400,000 Per Year

Profit Before Taxes
Large Motor Generator

(10 cale)

$1,533,000
$1,710,000
$1,406,000
$1,902,000

level

Phillip Spinnelli

$1,000,000
$1,311,000
$602,000
$322,000

Profit Before Taxes

1956
1955
1954
1953

1952
1951
1950
Range & Water Heater

Hari Pranzenen -- Level 8

Profit Before Taxes $120 per hr.
A few months ago Bill Berringer, Materials Handling man -- now Manager of Advanced Planning in the Refrigerator Department -- asked Svein to take a look at their conveyor system which was causing them much trouble. Svein referred them to the materials handling people instead, but Mr. Berringer had been through a Value Analysis Seminar -- had confidence in Value Analysis creative methods and in Svein. He asked Svein to invest an afternoon on his next trip to Louisville which was done. It was found that the refrigerator units were picked up by four hooks

...which sometimes injured the anodizing
...which sometimes became loose and caught on other objects
...which required two men to load and unload
...and which had a variety of other costly characteristics

Also the sheet metal design of the conveyor carrier made it difficult and costly to apply asphalt to the unit.

That afternoon they designed a telescopic design for suspension -

...utilizing wire formed construction
...eliminating the four hangers
...completely eliminating the damage done by the hangers
...making a simple one man mounting practical
...making the unit entirely acceptable for asphaltating and other operations
...and providing other advantages.

Time has gone by.

We are now gratified to hear that the entire conveyor systems of Building 4 & 5 are being changed to this structure.

Again the return in operating department profits for proper investment for a few hours of "effective Value Analysis application" is staggering.
DOES IT MAKE SENSE?

A short time ago during a seminar one of the purchasing men presented this experience in his area.

"Our engineers needed some pamphlets costing 65¢.

A purchase order was issued.

Because of the extra cost of invoicing and collecting, the vendor would not accept an order of under $2 except when a check was enclosed. The order was returned.

We then had a payment voucher issued and sent with it.

So the pamphlets cost...

- Cost of issuing and clearing purchasing order: $5.00
- Approximate cost of voucher for 65¢: 5.00

**TOTAL COST**

$10.65

We asked an auditor how else it could be done and he advised that the only method that would save most of this cost would be if the pamphlets were not shipped in the name of General Electric.

LDM:AEM

May 17, 1955