Curious Cat
Management Improvement Institute

Deming's Plan for Ford

By W. Edwards Deming

William Scherkenbach provided this memo by Dr. Deming and made available many other files to the Curious Cat Management Improvement Institute web site.

William Scherkenbach is internationally recognized as one of the world's foremost authorities on the subject of quality and its implementation. Theory without action is useless. Action without theory is costly. Bill has the rare combination of both state-of the-art theory and the experience of applying it in the real world.

He was in the very privileged position of learning from and working with Dr. W. Edwards Deming in the last 25 years of his life. He was with him on over 1000 meetings, including at least 50 four-day seminars, with leaders of industry and government all over the world.

> *"He was my student, and there's none better in the world... It takes a little ingredient called profound knowledge, and he's got it."*
>
> *W. Edwards Deming*

Address for this paper: ccmii.org/files/ws/demings-plan-for-ford.pdf

William Scherkenbach and the Curious Cat Management Improvement Institute have made available a large number of additional files.

Find all the files:

ccmii.org/files/ws

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12 September 1987

Memorandum to Mr. Donald E. Petersen

From W. Edwards Deming

Suggestions for discussion at our next meeting.

I

The whole world knows about Ford's success in quality. The big lesson to the world is that you yourself led the system of improvement. My fondest wish is for Ford to be a model to copy in every respect. Suggestions follow.

II

This memorandum is concern with never ending and continual improvement of quality (Jim Bakken).

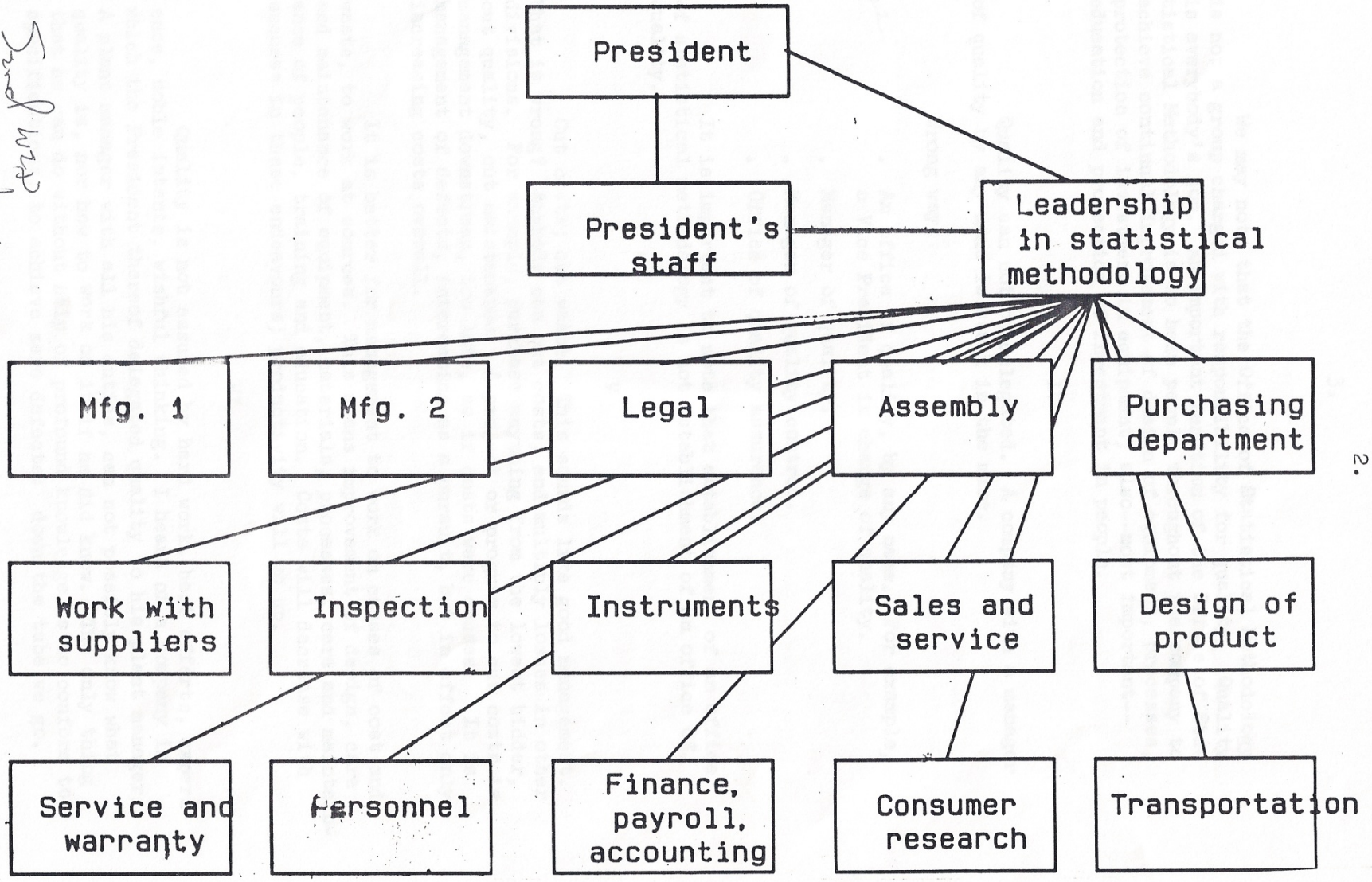
Productivity is also important, but productivity follows inevitably from success in pursuit of quality in all its aspects.

III

Your organization for application of statistical methodology under Bill Scherkenbach is making impact in many ways. My concern is greater impact.

I submit for consideration my belief that Mr. Scherkenbach is not at a high enough level for optimum performance of his organization. The head of the organization for statistical methodology should be an integral part of the President's office, as indicated on the diagram herewith. It would be good for the head of statistical methodology to be directly responsible to the President.

He must be a man of unquestioned ability: you have him. He must have authority from top management to be a participant in any activity that in his judgment is worth his pursuit. He will be a regular participant, without invitation, in any major meeting of the President and staff. He has the right and obligation to ask questions about any activity anywhere in the company, and he is entitled to responsible answers, not a brushoff.


President
President's staff
Leadership in statistical methodology
Mfg. 1
Mfg. 2
Legal
Assembly
Purchasing department
Work with suppliers
Inspection
Instruments
Sales and service
Design of product
Service and warranty
Personnel
Finance, payroll, accounting
Consumer research
Transportation

We may note that the Office of Statistical Methodology is not a group charged with responsibility for quality. Quality is everybody's job. An important function of the Office of Statistical Methodology is to help people throughout the company to achieve continual improvement of design of equipment, processes, protection of investment in equipment; also--most important--education and protection of investment in people.

IV

Quality can not be delegated. A company with a manager of quality by any name is stuck in the mire.

Wrong way:

- An office of quality, by any name. For example, a Vice President in charge of quality.
- Manager of quality.
- Manager of quality control.
- Office of quality assurance.

It is important to note that establishment of an office of statistical methodology is not establishment of an office of quality.

V

Cut costs; cut waste. This sounds like good management. What is wrong? Anybody can cut costs, and multiply losses in other divisions. For example, purchase anything from the lowest bidder, cut quality, cut maintenance. A project or program to cut costs is management downstream, too late, as if costs were causes. It is management of defects, interesting as a pursuit, but in effect only increasing costs overall.

It is better for management to work on causes of cost and waste, to work at sources. This means improvement of design, care and maintenance of equipment, materials, processes, care and maintainance of people, training and education. Costs will decrease with success in these endeavours; productivity will go up.

VI

Quality is not assured by hard work, best efforts, experience, noble intents, wishful thinking. I heard of a company in which the President thereof delegated quality to his plant manager. A plant manager with all his duties, can not possibly know what quality is, nor how to work on it if he did know. The only thing that he can do without help of profound knowledge is to conform to specifications, to achieve zero defects: down the tube we go.

Conformance to specifications is not quality. Certainly no one would deliberately violate specifications, but conformance to specifications will not ensure quality. Zero defects is not quality. Quality is much more complex than zero defects.

How many heads of divisions are rated on conformance to specifications, and not at all on improvement of problems of management? Could anything be worse?

VII

Investment in gadgets, high technology, automation, new machinery, are not by themselves the answer. Expenditures must be guided with profound knowledge.

> It sometimes turns out, in fact, that when reputed needs for new equipment are studied with care and knowledge, no new investment is needed. It is better in any case to first learn to use the machinery and technology on hand.

VIII

Promise of increase in pay to be based on increase in productivity is beating the wrong horse. Incentive pay to the workers ruined the steel business in the U. S. It can ruin any company. As noted earlier, productivity follows inevitably from success in pursuit of quality in all its aspects. This must be led by management.

IX

Performance on the factory floor is not the problem. People on the factory floor can not penetrate the ceiling of performance that is defined and limited by the environment--design of product, equipment, its maintenance, processes, procedures, faults with incoming materials, training, education, etc.

All that the people on the factory floor (and in management, too) ask for is a chance to work with pride. How many people have this privilege? 2%? Production will go up:

. with better quality of design.
. with better incoming materials.
. with less variation in incoming materials.
. with better care and protection of machines and equipment (less down time, fewer emergencies, modification).
. with improvement of processes.
. with expert attention to systems of measurement. (What proportion of gauges and instruments show statistical control? Someone estimated 1 in 30.)
. with better care and protection of people.
. with training, retraining, and education.

X

There remains the matter of education in statistical thinking, a prime function of the Office of Statistical Methodology. It is too big to tackle in one memorandum, but here are a few points.

- For top management, including finance, legal, personnel, education in the new philosophy. Suggestion: my 4-day seminar. Alternate possibility: ten stretches, each of about two hours, under a master: a week or two apart. Better, eight half days, a week or two apart. Continuing education in monthly sessions.

- For middle management, the same, supplemented by examples from your own company. Continuation with monthly sessions provided by people on the line, people that belong to the Office of Statistical Methodology and by others or by anybody. ?

- For research, development, engineers, my 4-day seminar. Continuation.

- Supervisory level, 20 hours, with continuation for refreshment.

Talk to Peter concerning this.