Elbert Hubbard said "an executive is a man who makes quick decisions—and sometimes he is right." Management by hunches is rapidly becoming a thing of the past. The best managers today need judgment as much as they ever did, but this judgment should be reserved for the problems regarding which it is either too difficult or too expensive to get the facts. There will always remain an ample supply of such problems, no matter how eager the search for facts. But wherever facts can profitably be found, they remove many of the complications of management and make success more certain. Getting the facts is either a statistical or a scientific process, or both, which the busy executive cannot do "in his spare time." Frederick W. Taylor said: "the science which underlies each act of each workman is so great and amounts to so much that the workman who is best suited to actually doing the work is incapable of fully understanding this science." Management by facts deliberately and systematically sought is responsible for the greatest successes in modern business.

Questions:

1\*.... Is there a Research Department for products, materials or methods?

2\*.... Have you a cost system tied in with your financial books?

3\*... Do you regularly compare production performance with production standards?

Note—One of the greatest hidden wastes in industry today is the vast number of small periods of idleness of machines and workers.

4\*... Have you a record of Idle Machine time, with causes tabulated?

5\*.... Have you a record of Idle Workers with causes tabulated?

Another great source of waste is the lack of proper maintenance of equipment and plant. In many companies the upkeep is left almost entirely to the workmen.

Questions:

1\*.... Have you an equipment inventory?

2\*.... Have you a separate maintenance department?

3\*.... Is equipment subjected to periodical inspection?

4..... Are records made of breakdowns, with causes tabulated?

Things all alike are not necessarily standardized. A standard is a unit of comparison, something accepted for the time being as a goal to be reached. Standardization, therefore, presupposes careful scientific investigation. Hoover says that lack of standardization is costing industry of this country an annual loss of "not millions, but billions of dollars."

Questions:

1\*.... Has any systematic attempt been made to standardize product?

2\*.... Are tools standardized?

3\*... Have more than 25 per cent of your operations been standardized by scientific time and motion study?

4\*... Is raw material purchased by standard specifications?

Years ago the heads of departments and foremen did much of the buying. Even today the buying function in many companies is not centralized. In some companies there are few reliable standards to follow, yet purchasing is rapidly becoming a science. One company using a large quantity of a special lubricating oil decided to adopt the scientific method. They first determined what qualities they needed. Then they made a laboratory test and of the 13 brands on the market found only one satisfactory.

Questions:

1\*... Do all purchases clear through a Purchasing Department?

2\*.... Is raw material subjected to test upon receipt?

3\*... Have you a perpetual inventory showing all stock receipts, issues and returns and a balance on each item?

4..... Do you have maximum and minimum limits on each item?

## G. PLANNING

Pre-planning production is a major function which is greatly neglected in many companies and its neglect is a source of great waste.

Ouestions:

- 1\*.... Is the function of Planning Production centralized?
- 2\*.... Have you an up-to-date layout plan of your plant?
- 3\*.... Have you a budget of anticipated sales and production?
- 4\*.... Are there drawings covering all products?
- 5\*... Are there material lists covering all products?
- 6\*.... Are standards of performance available from which work is planned?
- 7\*.... Are there written standard instructions for each operation?
- 8\*... Are there records showing stock on hand and available?

Often material must be handled between each operation in the plant. This is the source of much waste. Mechanical means are available for almost every material-handling problem.

Ouestions:

1\*.... Are more than 25 per cent of the material handlings mechanically transported?

The financial affairs of a company are dependent upon many factors and scientific planning and forecasting is rapidly replacing the old habit of meeting the emergency by the best available method. The following questions indicate minimum requirements for well-managed companies.

Questions:

1.... Is there a budget of expenses, separated by departments?

2.... Are seasonal requirements well understood and provided for by adequate reserves?

3.... Are adequate reserves set up to meet unforeseen contingencies?

4.... Is there an organized credit system working with standard credit policies in writing?

5.... Is there an organized collection system with standard written policies?

6.... Are cash discounts taken?

7.... Do you issue periodical financial statements to your banker?

8.... Have you an established line of credit at your bank?

9.... Do you periodically pay up all outstanding notes?

10.... Are your financial books audited by a recognized public accountant at least four times a year?

Total possible points . . . . 50
Your standing . . . . .

## J. SALES

In no other activity of business in general is there so much waste as in selling. It has been thought until recently that selling was not subject to scientific analysis but the experience of many of the most successful companies shows that even greater possibilities of the elimination of waste exist in selling than exists in production. For example, the automobile industry. It costs much more to sell than to produce an automobile.

## Questions:

1.... Have you a sales manager?

2.... Have you a standard price list of your product?

3.... Have you in writing, all of the uses of your product?

4.... Have you made a survey of your market possibilities?

5.... Have you a standardized plan of remuneration to your talesmen, etc.?

6.... Have you standardized sales methods?

7.... Have you a sales manual?

8.... Are salesmen given a period of intensive training?

9.... Do you predict sales by establishing quotas for salesmen and districts?

10.... Do you have a monthly comparison of sales anticipated and actual sales made?

11.... Have you a record of sales lost and the probable reasons therefor?

12.... Do you make a systematic record of complaints classified as to causes?