

structed the persons involved how to put the decision into practise.

I have in mind another case where there was a question of the regular delivery of a very large number of small parcels, whether this could best be done by the firm's own wagons or by contract. The same procedure, as above described, was followed. In this case it was decided to deliver by contract, because they found a contractor who was already covering the ground to be covered and could make the deliveries at very little additional cost to himself, and, after including a substantial profit, at a lower price than the firm could make the deliveries with their own wagons.

In another case the question arose whether to manufacture certain articles or have them manufactured elsewhere in a plant especially equipped to produce the article in question. The decision finally turned on the fact that the only actual cost to the firm that could be saved by having these articles produced elsewhere was the direct wages involved. The concern happened to have plenty of floor space and power and the necessary equipment, which it was not otherwise using, whereas the outside concern did not. Even though the outside concern had better facilities, by the time it would have added overhead expenses and a profit, its price would have been considerably over the direct payroll of the concern in question plus a substantial profit.

You may say that these questions come up in every business and there is nothing different in what I have suggested from what is done in every other case. I think, however, you will find that in the majority of cases decisions of this kind are made on insufficient facts; at least, that has been my experience. The point I want to make is that the ordinary executive who is required to make decisions usually has not the disposition or time for getting the facts, and therefore makes his decisions on insufficient information. If he has a methods man who has no right to make decisions, the methods man must necessarily, to justify his position and in the interest of his own ego, dig up a body of facts which will almost automatically protect the executive and therefore the firm against an unwise decision.

#### Essentials of Control Methods

While it is not practical in a brief talk to give as much detail as I should like, it may be worth while to view some of the fundamentals which should underlie all control methods.

The subdivision of the organization and the accounting classification should be coordinated with responsibilities. If you buy a peck of apples, peaches, pears and oranges, and they are delivered mixed in one basket which is obviously short measure, you have no way to know in which fruit you have been short-measured. Likewise, if the costs incurred under various responsibilities are mixed under one accounting classification, though the total cost may obviously be too great, you will have no way to know with which executive the question of excess cost should be taken up. Costs should be subdivided and classified according to the different persons in a position to affect them. Then, if a cost is too high, you know with whom to take the matter up.

I have in mind a case where a certain branch of an industry was not paying and the owners were almost on the point of discharging the manager. However, when we came to classify costs according to the persons in a position to affect them, it soon became apparent that some of the largest items of cost with which his branch had been charged were absolutely outside his control.

I had an amusing case in connection with a large dairy company. The costs of the cowbarn seemed high. When we came to analyzing these costs into terms of responsibilities, we found an item for removing manure which the superintendent of the cowbarn said he had nothing to do with. When the item was put under his control, it was soon transformed into a credit representing what he received through the sale of the manure in excess of the cost of its removal.

Costs may and should be recapitulated through statistical methods according to commodities, functions, services, etc., but the official records of the company should be and should remain in terms of responsibilities. Every account, so far as responsibility for it is concerned, should be synonymous with some individual, and no individual should be charged with the cost of anything outside his control.

Like things should be recorded alike at all times in all branches and departments of an enterprise. No executive, not even the president of the company, should be allowed to make exceptions to this rule; otherwise you might as well save the trouble and expense of cost records. I had an experience not far from here which illustrates the advantage of keeping accounts in comparable items. There were some thirty distributing branches of the concern in question, and

when the expenses of all of these branches had been reduced to comparable items and the items expressed in terms of percentage of branch sales, and when each branch had been informed of its own figure, the best figure, and the average figure of all the others, there was some lively voluntary scrambling to reduce expenses on the part of those who had items substantially above the average. The work involved in standardizing the classification was very little and the annual saving ran into tens of thousands of dollars.

One sometimes thinks that there can be no advantage through keeping comparable accounts in different plants and branches where conditions are different. Experience proves quite the reverse. It is not at all uncommon that the plant which you think should be cheapest on a given item is the highest. Handicaps in any given particular very often stimulate effort, and on the other hand, favorable circumstances very often lull to sleep. The very obviousness of differences in conditions often serves as an incentive to the persons with a handicap to bring their costs in harmony with those of the other branches.

I must not fail to emphasize the fact that nothing can be gained by keeping records, no matter how well they are kept, if one or two of the top executives are going to keep them under their hats. I have already said that you cannot control anyone. On the other hand, you can educate, stimulate and help everyone. Stimulation is the all important factor, and I know of nothing so effective as accurate competitive records. The higher you go in the organization, the more effective competitive records are. The comparison of even such items as rent, storage, delivery, etc., per dollar of value, even though weights and bulks are different, will often be more stimulating because of the very differences which must necessarily exist. A search to find the occasion of large differences will often uncover elements of costs which can be eliminated. Comparison stimulates an ego interest—an opportunity for recognition among one's peers.

Another basic principle, applicable to all methods so far as I know, is the adoption of a unit system—like bookshelves and filing cases, as it were. Departmental operating reports should be like unit bookshelves. Each should be separately complete, yet uniform with the others in its major characteristics. They should be summarized in terms common to all so that a list of these summaries added together will constitute a complete report for the concern in question. By this method it is possible, if the result is

unsatisfactory, to go back through the unit reports and definitely locate the units in which the trouble exists. Assuming that the accounting classification is in terms of responsibility, you will have no trouble in knowing the exact individual with whom a matter should be taken up.

#### The Importance of Budgets

The budget is fundamental to an effective control. In brief, the budget is nothing more or less than an estimate; an estimate is nothing more or less than a standard; and a standard is nothing more or less than a measure by which we are able to judge results achieved. Our forefathers were content to bathe in a pan with a bucket of water and a sponge, and the only reason we are not content to do the same today is the standard which has been set by porcelain bathtubs and modern plumbing. We all know to how much trouble one goes to get a nice bathroom in these days, or a nice motor car. We must not delude ourselves into thinking that this is chiefly because of their convenience. The real reason is that they have become established as standards by which to measure success. If we take the same trouble in making our budget that is taken in making plumbing fixtures and motor cars, and give the budget the same recognition and prestige as constituting a standard, we shall find the same effort on the part of all the members of the organization to meet its standards as they now display to get good plumbing and good motor cars.

Let me warn you as an executive against making the budget yourself, or against having the accountant or any one else make it; you had as well not make it at all, because the person who is expected to meet its standards has only to say that you have left something out or made an insufficient estimate. On the other hand, if the budget is made in terms of the accounting classification and each item is determined by the person in a position to affect it and no charge can be made against the budget item that this same person has not approved, you will find that you have an automatic control. Of course the methods man should make the budget in the sense of controlling the items in which it is made, its form, and finally the rewriting of it, but the figures should be made by the various persons in a position to affect them.

Budgets should be flexible—that is, in terms of fixed and variable costs—so as to enable the making of a forecast under the same conditions as actual results are achieved. What is the use of making a