

things which, if one is honest with one's self, can easily be seen to be the direct result of hopes or fears on the part of one's self or of those with whom one is dealing.

While the science of psychology as a basis for management has not yet been evolved, and even if it were, it is already too late for us to include it in our education. It fortunately has already been developed to a point of offering many practical suggestions, and it is not too late for us to profit by them through the reading of the best literature on the subject.

Passing then from the different types of organizations and the personalities and characteristics of executives, we come to the alternative methods and devices through which these may be expressed. There are so many of them, and there are so many variations of each, that it is impracticable to give even a list of them in an evening's talk. I have selected from this mass of material two which I believe to be of great importance in the solution of the problems of the chief executive and at the same time to be sufficiently novel to be of special interest.

Mr. Babson, as I understand him, predicts that the margin of profit in industry, regardless of its short swings and in the large, will be constantly downward over the next thirty to forty years. If this be true, and barring seasonal fluctuations and those of the business cycle—and I believe that it is,—not only for forty years but for all time—there is much reason why we should concern ourselves with the methods and devices of business, for they in their sphere are the equivalent to tools and machines in the sphere of production.

The two devices I have selected for discussion are: "The Classification of Costs in Terms of Responsibilities," and "The Making of Standards which are Adjustable to Changing Conditions."

Before beginning this discussion I want, however, to say that the character and extent of organization and methods used by every executive should be in direct proportion to the need for supplementing memory and for coordinating information, and no more. In other words, if we have a one-man organization, that is, a concern which is dominated by one individual, all we need in the way of organization is records of the things that this one individual cannot remember. When the concern grows to the point of two executives, then we need only such organization and methods as may be necessary to augment the memory of these two individuals, plus that necessary to coordinate their activities; and so we go up the line to the point where we have an organization of a considerable number of major executives and an indefinite number of minor execu-

tives. In connection with such an organization it is desirable and even necessary for effective work that we should have not only written organization charts but written assignment of duties and a written office manual, to say nothing of the more specific mechanisms necessary to the conduct of the business.

This is not saying that an organization of this size cannot function without these things, for I know organizations without much, if any, of them which are functioning excellently and in which I should hesitate to recommend their introduction, but my hesitancy is entirely because of my knowledge of the temperament and individuality of the chief executive.

If the chief executive is primarily a handler of men, achieves his ends through their joint enterprise, and contents himself with leadership, it would be worse than useless for him to set up rigid rules and procedures which could only serve to defeat the good will and co-operation he had developed on more flexible lines.

On the other hand, if a chief executive is of a highly executive type and depends more on himself than upon others, he will naturally want rigid rules and methods with which to make his will effective.

We come, then, to the first of the two devices I have selected for discussion—"The Classification of Costs in Terms of Responsibilities." Most accounting classifications are in terms of results, and the executive who is dissatisfied with results submitted sometimes has difficulty in analyzing them into causes which he may affect. My suggestion is that we use our organization chart as our accounting classification and that the expense in connection with all activities be charged to the unit of the organization responsible for the cost of the activity.

If the organization chart represents the units of responsibilities upon which the success or failure of the enterprise depends, then obviously it represents the units in which all costs and records should be kept, if the chief executive is to exercise an effective control over the situation. Assigning responsibilities and duties on one basis and keeping records on another, is like trying to check with a bushel basket something bought by the pound. That is what is unconsciously being done, at least to some extent, in every organization wherein the accounting classification was made prior to the organization chart. A great many concerns, without making the organization chart and the accounting classification synonymous with each other, have made such a close coordination as to get very much the same result. I prefer to see them made synonymous.

Most concerns distribute certain overhead expense

items direct to the various major departments. In this case these items never appear as such in the operating statement. My idea is that every expenditure should be charged to the organization unit which is responsible for it, and should stop there. The name of the organization unit and the name of the ledger account should be the same, and they should be synonymous for John Smith or Bill Brown or whoever is in responsible charge of the organization unit in question. This would mean that no part of any expenditure for rent, insurance, interest or any other item which the head of the organization unit does not arrange for and in effect pass the bill for, should be prorated to him; and no part of any expenditure for which he is responsible should be prorated to the unit of someone else, that is, so far as the book records or the operating statement which goes to the chief executive are concerned.

After the operating statement, expressed in terms of expenditures for which each organization unit is responsible, has been made, the overhead expense items can readily be distributed over the various departments or commodities, but I would prefer that this be done statistically in the form of a recapitulation of the operating statement and that the book records remain in terms of responsibilities.

I turn now to "The Making of Standards which are Adjustable to Changing Conditions." Much interest has been focused on the making of budgets, especially since the recent period of deflation during which expenses got so out of control that deficits have become almost fashionable.

Most criticism of the use of the budget in industry applies to its inflexibility. In institutions where expenditures are more or less uniform and in businesses where production and distribution are uniform, there is little trouble, but dissatisfaction arises wherever the business is seasonal and averages do not apply.

Costs are usually divided into *direct costs*, meaning those items which are directly related to the cost of a commodity or service, and *indirect costs*, meaning those which are general in character and must be prorated to the various commodities or products. This is the generally accepted subdivision of cost, and it has been very helpful to executives in analyzing their operating problems; but for purposes of budget making, if the budget is to be flexible, it is necessary to make a further analysis into what I have termed *fixed* and *variable* costs.

By *fixed cost* I mean that part of cost which exists irrespective of the volume of business done.

By *variable cost* I mean that part of cost which varies in proportion to the volume of business done.

This subdivision of costs into *fixed* and *variable* is not so much a distinction between such items as rent representing a fixed cost and material representing a variable cost, as it is a division of the various items. For example, a certain part of office salaries is fixed and unavoidable, whereas a certain other portion is variable and should vary with the volume of business done.

If the variable cost varies in amount with the volume of business but is always the same percent of the business done, while the fixed cost stays fixed regardless of the volume of business, then the difference between the per cent of variable cost and 100 per cent (as representing the business done) may be called the "Contribution to Fixed Cost or Profit."

In other words, if the variable cost is 75 per cent or 75c out of each \$1.00 of business, there must be 25c out of each \$1.00 of business applicable to fixed cost until it is offset, and thereafter to profit; if the fixed cost should be \$10,000 a month, it will take a business of four times this amount, or \$40,000 a month, to break even, and we shall make or lose 25c out of each \$1.00 of business more or less than \$40,000 in each month.

When we have all of the items of expense which enter into the conduct of a business divided into that portion of each which is fixed and that portion of each which is variable, and the variable expressed in per cent of volume of business, it will readily be seen that we can then make a budget to meet the changing conditions of each month's business.

This division cannot be made by analysis of the items. It can be made only by the use of a mathematical formula which I gave in a talk on this subject before the annual meeting of the Taylor Society in 1921, and which is published in the *Bulletin of the Taylor Society*, Vol. VII, No. 2, April, 1922. The diagrams and charts accompanying that article help to make it clear.

Let us assume we are making a budget for the clerical force in some one department of an industry. If we set the budget at \$1,000 for a month as representing the average expectation over the period of a year, and we find in one month that the actual cost is \$700 and in another is \$1,000, even though we know we were very dull in the first and very busy in the latter, the budget had almost as well not be made. On the other hand, suppose that instead of making an average budget we should make a budget in terms of that part of