

The Budget as a Medium of Executive Leadership¹

The Budget Properly Handled Furnishes a Means of Combining Instruction and Inspiration for Creative Activity Which Is Unique

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A TIME study and budget represent different aspects of the same thing, an estimate. When Frederick W. Taylor first advocated the use of time study in setting bonuses and in planning and routing work in the factory, most of the people who heard him and *understood* him said his plans involved too much detail and added too much to overhead costs; that they were beautiful in theory but impracticable. The people who heard him and *did not understand* said, "Fine!" and immediately proceeded to apply the term time study to the same old averages of performance and guess work estimates they had previously used.

The difference between a time study and an ordinary estimate of time is that time study uses the job analysis, that is, breaks the job into its component parts and studies each of them separately. It also studies the conditions and methods of work in their inter-relation. Standards are set with reference to prescribed conditions. The same difference exists between a popular and a scientific budget with the added confusion, in the case of the budget, of calling both by the same name. As a preliminary to what I shall say with reference to the budget as a medium of executive leadership, I shall first review briefly the present general practice in the use of budgets and, second, suggest certain refinements which add very much to flexibility.

Present General Practice in the Use of Budgets

Budgets differ from estimates and forecasts principally in form. They are used in industry, primarily in making appropriations, in determining policies and in controlling expenditures.

In the case of budgets used in making appropriations, where there is a prescribed sum of money

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for certain general purposes which must be expended under different responsibilities, the person in charge of each responsibility is required to make a separate budget. These budgets are then considered in the light of the relative importance of the different responsibilities. After being revised so as to bring the proposed expenditures in relation to the relative importance of the different responsibilities, the budgets are used for control of expenditures.

In determining policies the budget may be used, for example, to compare the cost of distribution, say of milk or bread, by horse drawn wagons and by automobiles, and possibly by post or through an outside delivery agency; to determine the relative desirability of putting more salesmen on the road or of increasing sales by direct mail and periodical advertising; to determine the desirability of producing something now being bought from outside manufacturers. In the case of all such budgets, certain factors, such as the amount of sales to be expected under different conditions, must be assumed, but budgets are usually made to show what can be expected under minimum as well as reasonable expectations.

Budgets for the purpose of controlling expenditures are usually more detailed than those for other purposes. The items preferably are grouped according to the accounting classification to which they will be charged. The persons in a position to effect economies in the different items usually participate in making the figures for the budget. The principal difficulty with budgets for this purpose is that general economic conditions, styles, good or bad weather, etc., may so change the conditions upon which the budget is predicated that by the time actual expenditures are available for comparison the budget is more or less useless.

The questions most often asked with reference to budgets are: What sales quota should be used in making a budget and how can one compare

budget and actual figures where circumstances have materially changed since the budget was made? The conventional answer to these questions is that you must of course base your budget upon whatever sales you feel reasonably assured of making, and that you must refigure your budget whenever conditions change from those upon which the budget was based.

A Flexible Budget

Working out more satisfactory answers to the foregoing questions has led to some interesting developments in the use and effectiveness of budgets. These questions both resolve themselves into the necessity for a budget which is applicable to different and changing conditions. This necessity has been met by making the original budget in *items, or we might say factors, rather than in totals* and by not *computing* a budget which is to be compared with actual figures until volume of sales and all other conditions are known.

Roughly speaking, we make our budget in terms of tons, yards, or some other unit of measurement, but always in terms of two elements: (1) fixed cost, that part of cost which remains constant irrespective of fluctuations from the smallest practicable volume of business to the largest practicable capacity of the business, and (2) variable cost, that part of cost which should vary in proportion to the volume of business done.

As a practical illustration, suppose you want to include in your budget the cost of paper and printing for a one-page circular but do not know how many circulars you may use. You might get an estimate from your printer of so much for the first thousand, say fifteen dollars, and so much for each additional thousand, say five dollars. Deducting five dollars representing the cost of an additional thousand circulars from the fifteen dollars representing the cost of the first thousand, we get ten dollars as the "fixed" cost and five dollars per thousand as the "variable" cost. Following this general procedure it is possible to determine a fixed and a variable cost and a practical unit for computing each item of the budget. When this has been done, it will readily be seen how both the advantage of making the budget in advance of the expenditures, yet computing it on the same basis as the expenditures, may be achieved at one and the same time.

In practice we have found it necessary to create one formula for determining the "fixed" and "variable" cost for *all* items used in the same budget, otherwise it is impossible to prove the work. Following is a copy of a formula I worked out for this purpose in 1921 in connection with a very interesting situation.

METHOD FOR DETERMINING BUDGET FIGURES FOR ITEMS WHICH DIFFER IN VARYING PROPORTIONS ACCORDING TO THE BUSINESS DONE

FORMULA

Determine largest and smallest probable volume of business (expressed in dollars) and the cost of the item in question, for each such volume.

Per cent Variable Cost—Difference between largest and smallest cost, divided by difference between largest and smallest volume of business.

Fixed Cost—Either largest or smallest volume, less variable cost for whichever volume is used.

EXAMPLE

	Volume of Business	Cost	Per Cent Variable Cost
Largest	\$400,000	\$900	
Smallest	200,000	700	
	\$200,000	\$200	
		\$200,000	.001

The .001 represents the relation of the variation in cost to the variation in volume or the *per cent variable cost*.

Total Cost on Sales of \$400,000 \$900.
Variable Cost (.001) on Sales of \$400,000 400.

Fixed Cost \$500.
or
Total Cost on Sales of \$200,000 \$700.
Variable Cost (.001) on Sales of \$200,000 200.

Fixed Cost \$500.

APPLICATION

Question—If the volume of business is \$300,000 what would the budget figures for the item in question be?

Answer—One tenth of one per cent of the volume ($300,000 \times .001 = \$300$) as representing the *variable cost* plus \$500, as representing the *fixed cost*, or \$800 in all.

There were a great many concerns in difficulties about that time. Some of them were actually losing money. The question was constantly put to me as to what would or could these concerns make when business returned to normal. Through the application of the above formula, using the best year they had ever had as representing a maximum and the poorest year they had ever had, which in most cases was the current one, as representing a minimum, we were able to make a list of budget items in terms of fixed and variable cost from which we were able to compute prospective profits and losses on different volumes of business and even at different commodity and labor costs.