

## THE OBJECTIVES OF A BUSINESS

The fallacy of the single objective—The eight key areas of business enterprise—"Tangible" and "intangible" objectives—How to set objectives—The low state of the art and science of measurement—Market standing, Innovation, Productivity and "Contributed Value"—The physical and financial resources—How much Profitability?—A rational capital-investment policy—The remaining key areas.

Most of today's lively discussion of management by objectives is concerned with the search for the one right objective. This search is not only likely to be as unproductive as the quest for the philosopher's stone; it is certain to do harm and to misdirect.

To emphasize only profit, for instance, misdirects managers to the point where they may endanger the survival of the business. To obtain profit today they tend to undermine the future. They may push the most easily saleable product lines and slight those that are the market of tomorrow. They tend to short-change research, production and the other postponable investments. Above all, they shy away from any capital expenditure that may increase the invested-capital base against which profits are measured; and the result is dangerous obsolescence of equipment. In other words, they are directed into the worst practices of management.

To manage a business is to balance a variety of needs and goals. This requires judgment. The search for the one objective is essentially a search for a magic formula that will make judgment unnecessary. But the attempt to replace judgment by formula is always

irrational; all that can be done is to make judgment possible by narrowing its range and the available alternatives, giving it clear focus, a sound foundation in facts and reliable measurements of the effects and validity of actions and decisions. And this, by the very nature of business enterprise, requires multiple objectives.

What should these objectives be, then? There is only one answer:

*Objectives are needed in every area where performance and results directly and vitally affect the survival and prosperity of the business.*

These are the areas which are affected by every management decision and which therefore have to be considered in every management decision. They decide what it means concretely to manage the business. They spell out what results the business must aim at and what is needed to work effectively toward these targets.

Objectives in these key areas should enable us to do five things: to organize and explain the whole range of business phenomena in a small number of general statements; to test these statements in actual experience; to predict behavior; to appraise the soundness of decisions when they are still being made; and to enable practicing businessmen to analyze their own experience and, as a result, improve their performance. It is precisely because the traditional theorem of the maximization of profits cannot meet any of these tests—let alone all of them—that it has to be discarded.

At first sight it might seem that different businesses would have entirely different key areas—so different as to make impossible any general theory. It is indeed true that different key areas require different emphasis in different businesses—and different emphasis at different stages of the development of each business. But the areas are the same, whatever the business, whatever the economic conditions, whatever the business's size or stage of growth.

There are eight areas in which objectives of performance and results have to be set:

Market standing; innovation; productivity; physical and financial resources; profitability; manager performance and development; worker performance and attitude; public responsibility.

There should be little dispute over the first five objectives. But there will be real protest against the inclusion of the intangibles: manager performance and development; worker performance and attitude; and public responsibility.

Yet, even if managing were merely the application of economics, we would have to include these three areas and would have to demand that objectives be set for them. They belong in the most purely formal economic theory of the business enterprise. For neglect of manager performance and development, worker performance and public responsibility soon results in the most practical and tangible loss of market standing, technological leadership, productivity and profit—and ultimately in the loss of business life. That they look so different from anything the economist—especially the modern economic analyst—is wont to deal with, that they do not readily submit to quantification and mathematical treatment, is the economist's bad luck; but it is no argument against their consideration.

The very reason for which economist and accountant consider these areas impractical—that they deal with principles and values rather than solely with dollars and cents—makes them central to the management of the enterprise, as tangible, as practical—and indeed as measurable—as dollars and cents.

For the enterprise is a community of human beings. Its performance is the performance of human beings. And a human community must be founded on common beliefs, must symbolize its cohesion in common principles. Otherwise it becomes paralyzed, unable to act, unable to demand and to obtain effort and performance from its members.

If such considerations are intangible, it is management's job to make them tangible by its deeds. To neglect them is to risk not only business incompetence but labor trouble or at least loss of worker productivity, and public restrictions on business provoked by irresponsible business conduct. It also means risking lack-luster, mediocre, time-serving managers—managers who are being conditioned to "look out for themselves" instead of for the common good of the enterprise, managers who become mean, narrow and blind for lack of challenge, leadership and vision.

#### *How To Set Objectives*

The real difficulty lies indeed not in determining what objectives we need, but in deciding how to set them.

There is only one fruitful way to make this decision: by determining what shall be measured in each area and what the yardstick of measurement should be. For the measurement used determines

what one pays attention to. It makes things visible and tangible. The things included in the measurement become relevant; the things omitted are out of sight and out of mind. "Intelligence is what the Intelligence Test measures"—that well-worn quip is used by the psychologist to disclaim omniscience and infallibility for his gadget. Parents or teachers, however, including those well aware of the shakiness of its theory and its mode of calculation, sometimes tend to see that precise-looking measurement of the "I.Q." every time they look at little Susie—to the point where they may no longer see little Susie at all.

Unfortunately the measurements available to us in the key areas of business enterprise are, by and large, even shakier than the I.Q. We have adequate concepts only for measuring market standing. For something as obvious as profitability we have only a rubber yardstick, and we have no real tools at all to determine how much profitability is necessary. In respect to innovation and, even more, to productivity, we hardly know more than what ought to be done. And in the other areas—including physical and financial resources—we are reduced to statements of intentions rather than goals and measurements for their attainment.

For the subject is brand new. It is one of the most active frontiers of thought, research and invention in American business today. Company after company is working on the definition of the key areas, on thinking through what should be measured and on fashioning the tools of measurement.

Within a few years our knowledge of what to measure and our ability to do so should therefore be greatly increased. After all, twenty-five years ago we knew less about the basic problems in market standing than we know today about productivity or even about the efficiency and attitudes of workers. Today's relative clarity concerning market standing is the result not of anything inherent in the field, but of hard, concentrated and imaginative work.

In the meantime, only a "progress report" can be given, outlining the work ahead rather than reporting accomplishment.

#### *Market Standing*

Market standing has to be measured against the market potential, and against the performance of suppliers of competing products or services—whether competition is direct or indirect.

"We don't care what share of the market we have, as long as our sales go up," is a fairly common comment. It sounds plausible enough; but it does not stand up under analysis. By itself, volume of sales tells little about performance, results or the future of the business. A company's sales may go up—and the company may actually be headed for rapid collapse. A company's sales may go down—and the reason may not be that its marketing is poor but that it is in a dying field and had better change fast.

A maker of oil refinery equipment reported rising sales year after year. Actually new refineries and their equipment were being supplied by the company's competitors. But because the equipment it had supplied in the past was getting old and needed repairs, sales spurted; for replacement parts for equipment of this kind have usually to be bought from the original supplier. Sooner or later, however, the original customers were going to put in new and efficient equipment rather than patch up the old and obsolescent stuff. Then almost certainly they were going to go to the competitors designing and building the new equipment. The company was thus threatened with going out of business—which is what actually happened.

Not only are absolute sales figures meaningless alone, since they must be projected against actual and potential market trends, but market standing itself has intrinsic importance. A business that supplies less than a certain share of the market becomes a marginal supplier. Its pricing becomes dependent on the decisions of the larger suppliers. In any business setback—even in a slight one—it stands in danger of being squeezed out altogether. Competition becomes intense. Distributors in cutting back inventories tend to cut out slow-moving merchandise. Customers tend to concentrate their purchases on the most popular products. And in a depression the sales volume of the marginal supplier may become too low to give the needed service. The point below which a supplier becomes marginal varies from industry to industry. It is different in different price classes within the same industry. It has marked regional variations. But to be a marginal producer is always dangerous, a minimum of market standing always desirable.

Conversely, there is a maximum market standing above which it may be unwise to go—even if there were no anti-trust laws. Leadership that gives market dominance tends to lull the leader to

sleep; monopolists have usually foundered on their own complacency rather than on public opposition. For market dominance creates tremendous internal resistance against any innovation and thus makes adaptation to change dangerously difficult. Also it almost always means that the enterprise has too many of its eggs in one basket and is too vulnerable to economic fluctuations. There is, in other words, an upper as well as a lower margin—though for most businesses the perils of the former may appear a good deal more remote.

To be able to set market-standing objectives, a business must first find out what its market is—who the customer is, where he is, what he buys, what he considers value, what his unsatisfied wants are. On the basis of this study the enterprise must analyze its products or services according to "lines," that is, according to the wants of the customers they satisfy.

All electric condensers may look the same, be the same technically and come off the same production line. Market-wise, condensers for new radios may, however, be an entirely different line from condensers for radio repair and replacement, and both again quite different from the physically indistinguishable condensers that go into telephones. Condensers for radio repair may even be different lines if customers in the South judge their value by their resistance to termites, and customers in the Northwest by their resistance to high humidity.

For each line the market has to be determined—its actual size and its potential, its economic and its innovating trends. This must be done on the basis of a definition of the market that is customer-oriented and takes in both direct and indirect competition. Only then can marketing objectives actually be set.

In most businesses not one but seven distinct marketing goals are necessary:

1. The desired standing of existing products in their present market, expressed in dollars as well as in percentage of the market, measured against both direct and indirect competition.
2. The desired standing of existing products in new markets set both in dollars and percentage points, and measured against direct and indirect competition.
3. The existing products that should be abandoned—for technological

reasons, because of market trend, to improve product mix or as a result of management's decision concerning what its business should be.

4. The new products needed in existing markets—the number of products, their properties, the dollar volume and the market share they should gain for themselves.

5. The new markets that new products should develop—in dollars and in percentage points.

6. The distributive organization needed to accomplish the marketing goals and the pricing policy appropriate to them.

7. A service objective measuring how well the customer should be supplied with what he considers value by the company, its products, its sales and service organization.

At the least the service objective should be in keeping with the targets set for competitive market standing. But usually it is not enough to do as well as the competition in respect to service; for service is the best and the easiest way to build customer loyalty and satisfaction. Service performance should never be appraised by management guesses or on the basis of occasional chats the "big boss" has with important customers. It should be measured by regular, systematic and unbiased questioning of the customer.

In a large company this may have to take the form of an annual customer survey. The outstanding job here has probably been done by General Motors; and it explains the company's success in no small degree. In the small company the same results can be achieved by a different method.

In one of the most successful hospital-supply wholesalers, two of the top men of the company—president and chairman of the Board—visit between them two hundred of the company's six hundred customers every year. They spend a whole day with each customer. They do not sell—refuse indeed to take an order. They discuss the customer's problems and his needs, and ask for criticism of the company's products and service. In this company the annual customer survey is considered the first job of top management. And the company's eighteen-fold growth in the last twelve years is directly attributed to it.

### *Innovation*

There are two kinds of innovation in every business: innovation in product or service; and innovation in the various skills and activities needed to supply them. Innovation may arise out of the

needs of market and customer; necessity may be the mother of innovation. Or it may come out of the work on the advancement of skill and knowledge carried out in the schools and the laboratories, by researchers, writers, thinkers and practitioners.

The problem in setting innovation objectives is the difficulty of measuring the relative impact and importance of various innovations. Technological leadership is clearly desirable, especially if the term "technology" is used in its rightful sense as applying to the art, craft or science of any organized human activity. But how are we to determine what weighs more: one hundred minor but immediately applicable improvements in packaging the product, or one fundamental chemical discovery which, after ten more years of hard work, may change the character of the business altogether? A department store and a pharmaceutical company will answer this question differently; but so may two different pharmaceutical companies.

Innovating objectives can therefore never be as clear and as sharply focused as marketing objectives. To set them, management must first obtain a forecast of the innovations needed to reach marketing goals—according to product lines, existing markets, new markets and, usually, also according to service requirements. Secondly, it must appraise developments arising or likely to arise out of technological advancement in all areas of the business and in all of its activities. These forecasts are best organized in two parts: one looking a short time ahead and projecting fairly concrete developments which, in effect, only carry out innovations already made; another looking a long time ahead and aiming at what might be.

Here are the innovation goals for a typical business:

1. New products or services that are needed to attain marketing objectives.
2. New products or services that will be needed because of technological changes that may make present products obsolete.
3. Product improvements needed both to attain market objectives and to anticipate expected technological changes.
4. New processes and improvements in old processes needed to satisfy market goals—for instance, manufacturing improvements to make possible the attainment of pricing objectives.
5. Innovations and improvements in all major areas of activity—in accounting or design, office management or labor relations—so as to keep up with the advances in knowledge and skill.

Management must not forget that innovation is a slow process. Many companies owe their position of leadership today to the activity of a generation that went to its reward twenty-five years or so ago. Many companies that are unknown to the public will be leaders in their industry tomorrow because of their innovations today. The successful company is always in danger of living smugly off the accumulated innovating fat of an earlier generation. An index of activity and success in this field is therefore indicated.

An appraisal of performance during the last ten years serves well for this purpose. Has innovation in all the major areas been commensurate with the market standing of the company? If it has not, the company is living off past achievements and is eating up its innovating capital. Has the company developed adequate sources of innovation for the future? Or has it come to depend on work done on the outside—in the universities, by other businesses, maybe abroad—which may not be adequate to the demands of the future?

Deliberate emphasis on innovation may be needed most where technological changes are least spectacular. Everybody in a pharmaceutical company or in a company making synthetic organic chemicals knows that the company's survival depends on its ability to replace three quarters of its products by entirely new ones every ten years. But how many people in an insurance company realize that the company's growth—perhaps even its survival—depends on the development of new forms of insurance, the modification of existing forms and the constant search for new, better and cheaper ways of selling policies and of settling claims? The less spectacular or prominent technological change is in a business, the greater is the danger that the whole organization will ossify; the more important therefore is the emphasis on innovation.

It may be argued that such goals are "big-company stuff" suitable for General Electric or for General Motors, but unnecessary in the small business. But although the small company may be less in need of a complete and detailed analysis of its needs and goals, this means only that it is easier to set innovation objectives in the smaller business—not that the need for objectives is less. In fact, the management of several small companies I know assert that the comparative simplicity of planning for innovation is one of the main advantages of small size. As the president of one of them—a container

manufacturer with sales of fewer than ten million dollars—puts it: "When you are small, you are sufficiently close to the market to know fairly fast what new products are needed. And your engineering staff is too small to become ingrown. They know they can't do everything themselves and therefore keep their eyes and ears wide open for any new development that they could possibly use."

#### *Productivity and "Contributed Value"*

A productivity measurement is the only yardstick that can actually gauge the competence of management and allow comparison between managements of different units within the enterprise, and of different enterprises. For productivity includes all the efforts the enterprise contributes; it excludes everything it does not control.

Businesses have pretty much the same resources to work with. Except for the rare monopoly situation, the only thing that differentiates one business from another in any given field is the quality of its management on all levels. And the only way to measure this crucial factor is through a measurement of productivity that shows how well resources are utilized and how much they yield.

The Wall Street exercise of comparing the profit margin of Chrysler and General Motors is actually meaningless. General Motors manufactures most of the parts of the car: it buys only the frame, the wheels and the brake. Chrysler until recently was an assembler; it made nothing but the engine which is but a fraction of the value of the car. The two companies are entirely different in their process mix. Yet both sell a complete car. In the case of G.M. the bulk of the sales price is compensation for work done by G.M.; in the case of Chrysler the bulk of the sales price is paid out again to independent suppliers. The profit G.M. shows is for 70 per cent of the work and risk. Obviously General Motors must show a much bigger profit margin—but how much bigger? Only an analysis of productivity which would show how the two companies utilize their respective resources and how much profit they get out of them, would show which company did the better managing job.

But such a yardstick is needed also because the constant improvement of productivity is one of management's most important jobs. It is also one of the most difficult; for productivity is a balance between a great variety of factors, few of which are easily definable or clearly measurable.

We do not as yet have the yardstick we need to measure productivity. Only within the last few years have we found a basic concept that even enables us to define what we have to measure—the economist calls it "Contributed Value."

Contributed Value is the difference between the gross revenue received by a company from the sale of its products or services, and the amount paid out by it for the purchase of raw materials and for services rendered by outside suppliers. Contributed Value, in other words, includes all the costs of all the efforts of the business and the entire reward received for these efforts. It accounts for all the resources the business itself contributes to the final product and the appraisal of their efforts by the market.

Contributed Value is not a panacea. It can be used to analyze productivity only if the allocation of costs which together make up the figures is economically meaningful. This may require major reforms in the accountant's traditional concepts, figures and methods. We have to give up such time-honored practices as the allocation of "overhead" on a percentage basis "across the board" which makes realistic cost analysis impossible. We have to think through what depreciation charges are supposed to do—charge for the use of capital, measure the shrinkage in value of the equipment, or provide for its eventual replacement; we cannot be satisfied with a "rule of thumb" percentage depreciation allowance. In short, we have to focus accounting data on management's needs in running a business, rather than on the requirements of tax collector and banker, or on the old wives' tales so many investors imbibe at their security analyst's knee and forever after mistake for financial wisdom.

Contributed Value will not measure productivity resulting from balance of functions or from organization structure, for these are qualitative factors rather than quantitative ones, and Contributed Value is strictly a quantitative tool. Yet, the qualitative factors are among the biggest factors in productivity.

Within these limitations, however, Contributed Value should make possible, for the first time, a rational analysis of productivity and the setting of goals for its improvement. In particular it should make possible the application to the systematic study of productivity of new tools such as the mathematical methods known as "Opera-

tions Research" and "Information Theory." For these tools all aim at working out alternative courses of action and their predictable consequences. And the productivity problem is always one of seeing the range of alternative combinations of the various resources, and of finding the combination that gives the maximum output at minimum cost or effort.

We should therefore now be able to tackle the basic productivity problems.

When and where is the substitution of capital equipment for labor likely to improve productivity, within what limits and under what conditions? How do we distinguish creative overhead, which cuts down total effort required, from parasitical overhead, which only adds to costs? What is the best time utilization? What the best product mix? What the best process mix? In all these problems we should no longer have to guess; we can find the right answer systematically.

The Contributed Value concept should show us clearly what the objectives for productivity are:

1. To increase the ratio of Contributed Value to total revenue within the existing process. This is simply another way of saying that the first goal must be to find the best utilization of raw materials or of services bought.
2. To increase the proportion of contributed value retained as profit. For this means that the business has improved the productivity of its own resources.

#### *Physical and Financial Resources*

What resources objectives are needed and how progress toward them is to be measured differs for each individual business. Also objectives in this area do not concern managers throughout the enterprise as do the objectives in all other areas: the planning for an adequate supply of physical and financial resources is primarily top management's job; the carrying out of these plans is mainly the job of functional specialists.

Yet, physical and financial resources are too important to be left out of consideration. Any business handling physical goods must be able to obtain physical resources, must be sure of its supply. Physical facilities—plants, machines, offices—are needed. And every busi-

ness needs financial resources. In a life-insurance company this may be called "investment management," and it may be more important even than marketing or innovation. For a toy wholesaler the problem may simply be one of obtaining a seasonal line of credit. Neither, however, can operate unless assured of the financial resources it needs. To set objectives without planning for the money needed to make operations possible is like putting the roast in the oven without turning on the flame. At present objectives for physical resources, physical facilities and supply of capital are only too often taken as "crash decisions" rather than as carefully prepared policies.

One large railroad company spends a lot of time and large amounts of money on traffic forecasts. But a decision to spend ten million dollars on new equipment was taken in a board meeting without a single figure to show what return the investment would bring or why it was necessary. What convinced the Board was the treasurer's assurance that he could easily raise the money at low interest rates.

A notable exception in respect to physical resources is the long-range forest-building policy of Crown-Zellerbach, the West Coast pulp and paper manufacturer. Its aim is to make sure that the company can stay in business by providing the timber supply it will need in the future. Since it takes fifty years or more to grow a mature tree, replacement of cut trees involves investing today capital that will not pay off until the year 2000. And since the company expects the trend of pulp and paper consumption to continue to rise sharply, mere replacement is not enough. For every tree cut today, two are being planted to become available in fifty years.

Few companies face a supply problem of Crown-Zellerbach's proportions. Those that do usually realize its importance. All major oil companies work on the finding and exploration of new oil wells. The large steel companies, too, have begun to make the search for new iron-ore reserves a systematic, planned activity. But the typical business does not worry enough about tomorrow's supply of physical resources. Few even of the big retailers have, for instance, anything comparable to the planned and systematic development of "sources" that is so important an activity in Sears, Roebuck. And when the Ford Motor Company announced a few years ago that it would systematically build up suppliers for its new West Coast assembly plants, the purchasing agent of a big manufacturing company considered this a "radical innovation." Any manufacturer, wholesaler,

retailer, public utility or transportation business needs to think through the problem of its physical resources, and spell out basic decisions.

Should the company depend on one supplier for an important material, part or product? There may be a price advantage because of bulk purchases; in times of shortage a big and constant buyer may get priority; and the close relationship may result in a better design or in closer quality control. Or should the company find several suppliers for the same resource? This may make it independent; it minimizes the danger of being forced to close down because of a strike at a single supplier; it may even lead to lower purchase prices as a result of competition between several suppliers. A cotton-textile manufacturer has to decide whether he should attempt to outguess the cotton market or try, in his buying policy, to average out fluctuations in cotton price, and so forth.

Whatever the decision, objectives should aim at providing the physical supplies needed to attain the goals set for market standing and innovation.

Equally important is good facilities planning. And it is even rarer. Few industrial companies know when to stop patching up an old plant and start building a new one, when to replace machines and tools, when to build a new office building. The costs of using obsolete facilities are usually hidden. Indeed, on the books the obsolete plant or machine may look very profitable; for it has been written down to zero so that it looks as if running it involved no cost at all. Most managers know, of course, that this is pure fallacy; but it is not easy to free ourselves completely from the spell of arithmetical sleight of hand.

Yet, clearly, both undersupply of facilities and their oversupply are extremely dangerous. Physical facilities cannot be improvised; they must be planned.

The tools for the job are available today. They have been developed above all by Joel Dean, the Columbia business economist.<sup>1</sup> They are simple enough to enable every business, large or small, to decide what physical facilities and equipment it needs to attain its basic goals, and to plan for them.

<sup>1</sup> See especially his *Capital Budgeting* (New York: Columbia University Press, 1951) and his brilliant article: "Measuring the Productivity of Capital," in the January 1954 issue of the *Harvard Business Review*.

This, of course, requires a capital budget. And this raises the questions: How much capital will we need, and in what form; and where will it come from?

The life-insurance companies have had capital objectives for a long time. They know that they have to obtain a certain amount of money each year to pay off their claims. They know that this money has to come from the income earned on their invested reserves. Accordingly they plan for a certain minimum rate of return on these investments. Indeed, "profit" in a life-insurance company is essentially nothing but the excess of investment earnings over the planned minimum return.

Other examples of capital-supply planning are those of General Motors, DuPont and the Chesapeake and Ohio Railroad. And the American Telephone and Telegraph Company, as already mentioned, considers this so important a job as to justify the full-time attention of a senior member of top management.

But, on the whole, managements do not worry over capital supply until the financial shoe pinches. Then it is often too late to do a good job. Such vitally important questions as: should new capital be raised internally by self-financing, borrowed long-term or short-term, or through stock issue, not only need careful thought and study; they largely determine what kinds of capital expenditure should be undertaken. Decisions on these questions lead to conclusions regarding such vital matters as pricing, dividend, depreciation and tax policy. Also, unless answered in advance, the company may well fritter away its available capital on the less important investments only to find itself unable to raise the capital for vital investments. In far too many companies—including some big and reputedly well-managed ones—failure to think through capital supply and to set capital objectives has stunted growth and nullified much of the management's brilliant work on marketing, innovation and productivity.

#### *How Much Profitability?*

Profit serves three purposes. It measures the net effectiveness and soundness of a business's efforts. It is indeed the ultimate test of business performance.

It is the "risk premium" that covers the costs of staying in busi-

ness—replacement, obsolescence, market risk and uncertainty.<sup>2</sup> Seen from this point of view, there is no such thing as "profit"; there are only "costs of being in business" and "costs of staying in business." And the task of a business is to provide adequately for these "costs of staying in business" by earning an adequate profit—which not enough businesses do.

Finally, profit insures the supply of future capital for innovation and expansion, either directly, by providing the means of self-financing out of retained earnings, or indirectly, through providing sufficient inducement for new outside capital in the form in which it is best suited to the enterprise's objectives.

None of these three functions of profit has anything to do with the economist's maximization of profit. All the three are indeed "minimum" concepts—the minimum of profit needed for the survival and prosperity of the enterprise. A profitability objective therefore measures not the maximum profit the business can produce, but the minimum it must produce.

The simplest way to find this minimum is by focusing on the last of the three functions of profit: a means to obtain new capital. The rate of profit required is easily ascertainable; it is the capital-market rate for the desired type of financing. In the case of self-financing, there must be enough profit both to yield the capital-market rate of return on money already in the business, and to produce the additional capital needed.

It is from this basis that most profitability objectives in use in American business today are derived. "We shoot for a return on capital of 25 per cent before taxes," is accountant's shorthand way of saying: "A return of 25 per cent before taxes is the minimum we need to get the kind of capital we want, in the amounts we need and at the cost we are willing to pay."

This is a rational objective. Its adoption by more and more businesses is a tremendous step forward. It can be made even more serviceable by a few simple but important refinements. First, as Joel Dean has pointed out,<sup>3</sup> profitability must always include the time factor. Profitability as such is meaningless and misleading un-

<sup>2</sup> For a discussion of these terms see my *New Society*, (New York: Harper & Bros., 1950), especially Chapter 4.

<sup>3</sup> Most effectively in the *Harvard Business Review* article mentioned above.



less we know for how many years the profit can be expected. We should therefore always state anticipated total profits over the life of the investment discounted for present cash value, rather than as an annual rate of return. This is the method the capital market uses when calculating the rate of return of a bond or similar security; and, after all, this entire approach to profit is based on capital-market considerations. This method also surmounts the greatest weakness of conventional accounting: its superstitious belief that the calendar year has any economic meaning or reality. We can never have rational business management until we have freed ourselves from what one company president (himself an ex-accountant) calls "the unnecessary tyranny of the accounting year."

Second, we should always consider the rate of return as an average resulting from good and bad years together. The business may indeed need a profit of 25 per cent before taxes. But if the 25 per cent are being earned in a good year they are unlikely to be earned over the life time of the investment. We may need a 40 per cent return in good years to average 25 per cent over a dozen years. And we have to know how much we actually need to get the desired average.

The tool for this is also available today. It is the "break-even point analysis" (best described by Rautenstrauch and Villiers in their book *The Economics of Industrial Management*, (New York: Funk and Wagnall's, 1949). This enables us to predict with fair accuracy the range of returns under various business conditions—especially if the analysis is adjusted to express both changes in volume and in price.

For small and simple businesses this capital-market concept of the minimum profitability required is probably adequate. For the large business it is not sufficient, however, for the rate of return expected is only one factor. The other is the amount of risk involved. An investment may return 40 per cent before taxes but there may be a 50 per cent risk of failure. Is it a better investment than one returning 20 per cent with practically no risk?

Shooting for a 25 per cent return before taxes may be good enough for existing investments, investments that have already been made irrevocably. But for new decisions management needs to be able to say: "We aim at a ratio of 1.5 to 1, 1.33 to 1, or 1.25 to 1 between anticipated return after all costs (including those of

capital) and estimated risk." Otherwise a rational capital investment policy cannot be worked out.

And without a rational capital-investment policy, especially in the big business, no real budget is possible. It is a necessity for effective decentralization of management; for without it central management will always manage its components by arbitrarily granting or withholding capital and arbitrarily centralizing the management of cash. It is a prerequisite of the spirit of management; without it lower management will always feel that its best ideas get lost in the procedural maze of the Appropriations Committee "upstairs."

A rational capital-investment policy sets the range for management decisions. It indicates which of the alternative ways of reaching marketing, innovation and productivity goals should be preferred. Above all, it forces management to realize what obligations it assumes when making decisions. That our business managers have for so long been able to manage without such a policy is as amazing a feat of navigation as Leif Erickson's feat in finding his way back to Vineland across the Atlantic without map, compass or sextant.

A capital-investment policy must be based on a reasonably reliable assessment of the ratio between return and risks. These risks are not statistical risks like the odds at the roulette table or the life expectancies of the actuary, which can always be calculated. Only one of the four "costs of staying in business" is a statistical risk: replacement. It is no accident that it is the only one that is being handled as a cost, called variously depreciation, amortization or replacement reserve. The other three—each of which is a more serious risk than replacement—are essentially not predictable by what happened in the past; that is, they are not predictable statistically. They are the risks of some new, different, unprecedented occurrence in the future.

Still we can today reduce even these risks to probability forecasts—though only with a fairly large margin of error. Several of the large companies are apparently doing work in the field; but the systematic job has yet to be done.

The real problem concerning profitability is not however what we should measure. It is what to use for a yardstick.

Profit as percentage of sales—lately very popular in American

business—will not do, for it does not indicate how vulnerable a product or a business is to economic fluctuations. Only a "break-even point" analysis will do that.

"Return on invested capital" makes sense, but it is the worst of all yardsticks—pure rubber of almost infinite elasticity. What is "invested capital"? Is a dollar invested in 1920 the same thing as a dollar invested in 1950? Is capital to be defined with the accountant as original cash value less subsequent depreciation? Or is it to be defined with the economist as wealth-producing capacity in the future, discounted at capital-market interest rates to current cash value?

Neither definition gets us far. The accountant's definition makes no allowance for changes in the purchasing power of the currency nor for technological changes. It does not permit any appraisal of business performance for the simple reason that it does not take the varying risks of different businesses into account, does not allow comparison between different businesses, between different components of the same company, between the old plants and the new plants, etc. Above all, it tends to encourage technological obsolescence. Once equipment is old enough to have been written down to zero, it tends to look much more profitable on the books than new equipment that actually produces at much lower cost. This holds true even during a deflationary period.

The economist's concept of invested capital avoids all this. It is theoretically perfect. But it cannot be used in practice. It is literally impossible to figure out how much future wealth-producing capacity any investment made in the past represents today. There are too many variables for even the best "electronic brain." There are far too many unknowns and unknowables. To find out even what would be knowable would cost more than could possibly be gained.

For these reasons a good many management people and accountants now incline toward a compromise. They would define "invested capital" as the amount it would cost today to build a new organization, a new plant, new equipment with the same productive capacity as the old organization, plant and equipment. Theoretically this, too, has weaknesses—it would, for instance, greatly distort profitability in a depression period when new equipment prices and building costs are low. But the main difficulties are practical. For replacement

assumptions, besides being not too reliable, are difficult to make; and even minor changes in the assumed basis will lead to wide divergences in the end results.

There is, in other words, no really adequate method as yet. Perhaps the most sensible thing is not to search for one but to accept the simplest way, to realize its shortcomings and to build safeguards against its most serious dangers.

I have therefore come to advocate a method which has little in theory to commend it: to measure profitability by projecting net profit—after depreciation charges but before taxes—against original investment at original cost, that is, before depreciation. In inflationary periods the original investment figures are adjusted roughly for the rise in costs. In deflationary periods (this method has still to be tested in one) original investment figures would similarly be adjusted downward. In this way a uniform investment figure can be arrived at in roughly comparable dollars every three or five years, regardless of the date of the original investment or the purchasing power of the original money. This is admittedly crude; and I cannot defend it against the argument advanced by a friend that it is no better than painting over a badly rusted spot. But at least the method is simple; and it is so crude that it will not fool any manager into mistaking for precision what, like all "return on invested capital" figures, no matter how obtained, is at best a rough guess.

#### *The Remaining Key Areas*

Little needs to be said here about the three remaining key areas: manager performance and development, worker performance and attitude, and public responsibility. For each is dealt with in later parts of this book.

However, it should be clear that performance and results in these areas cannot be fully measured quantitatively. All three deal with human beings. And as each human being is unique, we cannot simply add them together, or subtract them from one another. What we need are qualitative standards, judgment rather than data, appraisal rather than measurements.

It is fairly easy to determine what objectives are needed for *manager performance and development*. A business—to stay in business and remain profitable—needs goals in respect to the

direction of its managers by objectives and self-control, the setting up of their jobs, the spirit of the management organization, the structure of management and the development of tomorrow's managers. And once the goals are clear, it can always be determined whether they are being attained or not. Certainly the examination of the spirit of management, proposed in Chapter 13 below, should bring out any significant shortfall.

No one but the management of each particular business can decide what the objectives in the area of *public responsibility* should be. As discussed in the Conclusion of this book, objectives in this area, while extremely tangible, have to be set according to the social and political conditions which affect each individual enterprise and are affected by it, and on the basis of the beliefs of each management. It is this that makes the area so important; for in it managers go beyond the confines of their own little world and participate responsibly in society. But the overriding goal is common for every business: to strive to make whatever is productive for our society, whatever strengthens it and advances its prosperity, a source of strength, prosperity and profit for the enterprise.

We are in a bad way, however, when we come to setting objectives for *worker performance and attitude*. It is not that the area is "intangible." It is only too tangible; but we know too little about it so far, operate largely by superstitions, omens and slogans rather than by knowledge.

To think through the problems in this area and to arrive at meaningful measurements is one of the great challenges to management.

The objectives in this area should include objectives for union relations.

If this were a book on industrial society, the union would figure prominently (as it does indeed in my *New Society*). In a book on the *Practice of Management* the union is only one of many outside groups and forces management deals with—suppliers, for instance. But it is a powerful outside force. It can through wage demands wreck the business, and through a strike deprive management of control. The management of any unionized company therefore needs definite long-range objectives for its union relations. If it

leaves the initiative in labor relations entirely to the union, it can be said not to manage at all.

Unfortunately that has been precisely the way too many of our managements have conducted their labor relations in the last fifteen or twenty years. They have left the initiative to the union. They have usually not even known what to expect in the way of union demands. They have, by and large, not known what the union is, how it behaves and why it behaves as it does. When first told that certain union demands are about to be made, the typical management refuses to listen. It is sure that the demand will not be made—for the simple reason that it does not consider it justified. Then, when the demand is made, management tends to turn it down as "impossible" and as "certain to ruin the business," if not our free enterprise system. Three days to three years later management caves in, accepts the demand, and in a joint statement with the union leader hails the agreement as a "milestone in democratic labor relations." This is not management; it is abdication.

What union-relations objectives should be concretely goes beyond the scope of this book. But they should first focus on returning the initiative to management. This requires that management must know how a union operates and why. It must know what demands the union will make and why; indeed it must be able to anticipate these demands so as to make their eventual acceptance beneficial to the enterprise or, at the least, harmless to it. Above all, it must learn to make demands itself; as long as the union alone makes demands, management will remain the passive, the frustrated, the ineffectual partner in the relationship.

Union relations, no matter how important, are however only a small and peripheral part of the management of work and worker. Yet, in the main areas we simply do not even know whether the things we can measure—turnover, absenteeism, safety, calls on the medical department, suggestion system participation, grievances, employee attitudes, etc.—have anything at all to do with employee performance. At best they are surface indications. Still they can be used—in some companies are being used—to build an Employee Relations Index. And though we can only guess what such an index measures, at least the systematic attempt to find out what goes on in the work force focuses management's attention on what it could and should do. While no more than the merest palliative it serves at

least to remind managers of their responsibility for the organization of the worker and his work. Admittedly this is hardly even a stopgap, perhaps only an acknowledgment of ignorance. The goal must be to replace it by real objectives which are based on knowledge.

#### *The Time-Span of Objectives*

For what time-span should objectives be set? How far ahead should we set our targets?

The nature of the business clearly has a bearing here. In certain parts of the garment business next week's clearance sale is "long-range future." It may take four years to build a big steam turbine and two more to install it; in the turbine business six years may be "immediate present" therefore. And Crown Zellerbach is forced to plant today the trees it will harvest fifty years hence.

Different areas require different time-spans. To build a marketing organization takes at least five years. Innovations in engineering and chemistry made today are unlikely to show up in marketing results and profits for five years or longer. On the other hand a sales campaign, veteran sales managers believe, must show results within six weeks or less; "Sure, there are sleepers," one of these veterans once said, "but most of them never wake up."

This means that in getting objectives management has to balance the immediate future—the next few years—against the long range: five years or longer. This balance can best be found through a "managed-expenditures budget." For practically all the decisions that affect the balance are made as decisions on what the accountant calls "managed expenditures"—those expenditures that are determined by current management decision rather than by past and irrevocable decisions (like capital charges), or by the requirements of current business (like labor and raw material costs). Today's managed expenditures are tomorrow's profit; but they may also be today's loss.

Every second-year accountancy student knows that almost any "profit" figure can be turned into a "loss" by changing the basis of depreciation charges; and the new basis can usually be made to appear as rational as the old. But few managements—including their accountants—realize how many such expenditures there are that are based, knowingly or not, on an assessment of short-range

versus long-range needs, and that vitally affect both. Here is a partial list:

Depreciation charges; maintenance budgets; capital replacement, modernization and expansion costs; research budgets; expenditures on product development and design; expenditures on the management group, its compensation and rewards, its size, and on developing tomorrow's managers; cost of building and maintaining a marketing organization; promotion and advertising budgets; cost of service to the customer; personnel management, especially training expenditures.

Almost any one of these expenditures can be cut back sharply, if not eliminated; and for some time, perhaps for a long time, there will be no adverse effect. Any one of these expenditures can be increased sharply and for good reasons, with no resulting benefits visible for a long time. By cutting these expenditures immediate results can always be made to look better. By raising them immediate results can always be made to look worse.

There are no formulas for making the decisions on managed expenditures. They must always be based on judgment and are almost always a compromise. But even a wrong decision is better than a haphazard approach "by bellows and meat ax": inflating appropriations in fair weather and cutting them off as soon as the first cloud appears. All managed expenditures require long application; short spurts of high activity do not increase their effectiveness. Sudden cuts may destroy in one day what it took years to build. It is better to have a modest but steady program of employee activities than to splurge on benefits, lush company papers and plant baseball teams when times are good, only to cut down to the point of taking out the soap in the washrooms when orders drop 10 per cent.<sup>4</sup> It is better to give the customer minimum service than to get him used to good service only to lay off half the service force when profits go down. It is more productive to spend 50,000 dollars each year for ten years on research than to spend, say, two millions one year and nothing the next nine. Where managed expenditures are concerned,

<sup>4</sup>Let this be considered hyperbole; it actually happened, in this country, and in 1951.

one slice of bread every day is better than half a loaf today and none tomorrow.

Almost every one of these expenditures requires highly skilled people to be effective. Yet, first-rate people will not remain with a business if their activity is subject to sudden, unpredictable and arbitrary ups and downs. Or if they stay, they will cease to exert themselves—for "what's the use of my working hard if management will kill it anyhow." And if the meat ax cuts off trained people during an "economy wave," replacements are hard to find or take a long time to train when management, applying the bellows, suddenly decides to revive the activity.

Decisions concerning managed expenditures themselves are of such importance for the business as a whole—over and above their impact on individual activities—that they must not be made without careful consideration of every item in turn and of all of them jointly. It is essential that management know and consciously decide what it is doing in each area and why. It is essential that management know and consciously decide which area to give priority, which to cut first and how far, which to expand first and how far. It is essential finally that management know and consciously decide what risks to take with the long-run future for the sake of short-term results, and what short-term sacrifices to make for long-run results.

A managed-expenditures budget for a five-year period should show the expenditure considered necessary in each area to attain business objectives within the near future—up to five years or so. It should show the additional expenditure considered necessary in each area to maintain the position of the business beyond the five-year period for which concrete objectives are being set. This brings out the areas where expenditures are to be raised first if business gets better, and those where they are to be cut first if business turns down; it enables management to plan what to maintain even in bad times, what to adjust to the times, and what to avoid even in a boom. It shows the total impact of these expenditures on short-range results. And finally it shows what to expect from them in the long range.

### *Balancing the Objectives*

In addition to balancing the immediate and the long-range future, management also has to balance objectives. What is more

important: an expansion in markets and sales volume, or a higher rate of return? How much time, effort and energy should be expended on improving manufacturing productivity? Would the same amount of effort or money bring greater returns if invested in new-product design?

There are few things that distinguish competent from incompetent management quite as sharply as the performance in balancing objectives. Yet, there is no formula for doing the job. Each business requires its own balance—and it may require a different balance at different times. The only thing that can be said is that balancing objectives is not a mechanical job, is not achieved by "budgeting." The budget is the document in which balance decisions find final expression; but the decisions themselves require judgment; and the judgment will be sound only if it is based on a sound analysis of the business. The ability of a management to stay within its budget is often considered a test of management skill. But the effort to arrive at the budget that best harmonizes the divergent needs of the business is a much more important test of management's ability. The late Nicholas Dreystadt, head of Cadillac and one of the wisest managers I have ever met, said to me once: "Any fool can learn to stay within his budget. But I have seen only a handful of managers in my life who can draw up a budget that is worth staying within."

Objectives in the key areas are the "instrument panel" necessary to pilot the business enterprise. Without them management flies by the "seat of its pants"—without landmarks to steer by, without maps and without having flown the route before.

However, an instrument panel is no better than the pilot's ability to read and interpret it. In the case of management this means ability to anticipate the future. Objectives that are based on completely wrong anticipations may actually be worse than no objectives at all. The pilot who flies by the "seat of his pants" at least knows that he may not be where he thinks he is. Our next topic must therefore be the tools that management needs to make decisions today for the results of tomorrow.