The Productivity Prescription

THE MANAGER'S GUIDE TO IMPROVING PRODUCTIVITY AND PROFITS

DAVID BAIN

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About the Author

David Bain is president of his own management consulting firm, David Bain Associates (located in Joliet, Illinois), and publisher of *Productivity Perspectives*, a management newsletter. He has served as general manager, vice president, and consultant to various manufacturing and distribution companies, all of which he has assisted in improving quality, service, and profit by increasing productivity.

Upon receiving his B.S. degree from Southern Illinois University, Bain joined the Buick Motor Division of General Motors and worked in various managerial positions of increasing responsibility in the functional areas of quality, engineering, and manufacturing. At age 31 he had complete responsibility for Buick's Riviera car line assembly plant.

On the basis of "outstanding potential," Bain was selected by GM's top management to attend Michigan State University's two-year Advanced Management Program for experienced managers of proven ability. He received his M.B.A. degree upon completing that program.

Bain left GM in 1972 for the purpose of broadening the scope of his responsibilities beyond engineering and manufacturing so as to include finance and marketing as well. He has served as general manager, vice president, and consultant to diverse manufacturing and distributing businesses whose annual sales have ranged from $3 million to over $1 billion.

Without benefit of major capital investment and by utilizing what resources were available, Bain has assisted in increasing productivity within all the companies with which he has been associated. In all cases, the efforts of David Bain and of those managers and employees who have worked with him have resulted in substantially improved quality, service, and profit.

This book is dedicated to my wife, Sandy, whose encouragement has sustained me throughout the lengthy process of organizing and then committing my thoughts and experiences to writing; to our sons, Craig, Eric, and Kevin, whose interest in and enthusiasm for the project added to that support; and to all those with whom I have worked, both employees and managers, who have shared my interest in and contributed to improving quality, service, and profit by increasing productivity.

Introduction

The United States has been in the productivity doldrums for several years, and there is growing concern about the causes of and the solutions to this perplexing problem. No other single issue is of greater common interest to government, business, and labor than the issue of productivity. It is the area in which leaders from all groups alike recognize improvement as the key to meeting their common needs and expectations. Government leaders view improved productivity as critical to balancing budgets, eliminating trade deficits, conserving scarce resources, and improving services provided. Business leaders see it as the means to reduce costs, improve profit margins, and increase market share. Labor leaders see it as the means to control the growth of job-eliminating imports and to improve worker compensation.

While explaining in further detail the reasons why we should be interested in improving productivity, this book is basically a how-to-do-it book. It builds on the concept that a compatibility exists between individual needs and the needs of any organization. Thus, if an approach is structured around these common needs, individuals' satisfaction with their job and organizational results will improve. For various reasons, the leadership of most organizations today goes about fulfilling its responsibilities in a manner that erodes an inherently strong foundation for fulfilling common needs. Yet the organization can fulfill its needs in a manner that both recognizes and supports the fulfillment of employee needs. If we are to improve productivity in the years ahead, we must analyze the impact of the organization on the individual. We must examine the conditions under which the organization is a threat to the individual, the specific organizational patterns of behavior that are the greatest threat, and the means of minimizing such threats. We must discover how to design organizations and systems in a way that individual talents are used to the maximum and human satisfaction and dignity are preserved. We must learn how to make technology serve people not only in the end product but also in the doing.

The ideas within this book are practical, not theoretical. They are intended to bridge the gap between intellectual understanding and emotional involvement. To achieve improvement, we need to understand those factors that contribute to and those that inhibit productivity. Those inhibiting factors are more often internal and controllable than external and noncontrollable. Thus it is within our managerial power to improve productivity.

This book is an action plan aimed at assisting you achieve that worthwhile goal. The ideas presented here have evolved over 20 years, during which I managed diverse organizations, union and nonunion, manufacturing- and service-oriented, continuous operations and job-shop operations, large businesses and small businesses, all in various locations. The ideas have all contributed to the development of a plan which has yet to fail to improve productivity. That success is, of course, due as much to the commitment of the implementing managers as it is to the plan itself. The most important requirement for your achieving similar success is to obtain the same commitment to making the plan work. The first steps toward fulfilling that requirement are to read this book, honestly evaluate, in terms of employee need fulfillment, the work climate for which you are responsible, and then adopt the outlined plan as your own. The price you pay in terms of individual effort will be repaid many times over in the forms of improved productivity and the personal satisfaction gained from having increased your contribution to improving results. Rather than watching what happens, you will influence what happens. And that is what management is all about.

David Bain

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PART

1

Understanding Productivity

CHAPTER

1 Key Aspects

Productivity—What It Is and What It Is Not

What is productivity? Productivity is the ratio of some output to some input.

$$\text{Productivity} = \frac{\text{output}}{\text{input}}$$

Productivity is not a measure of production or output produced. It is a measure of how well resources are combined and utilized to accomplish specific, desirable results.

$$\text{Productivity} = \frac{\text{output}}{\text{input}} = \frac{\text{results achieved}}{\text{resources consumed}}$$

The concept of productivity recognizes the interplay between various factors in the work place. While the output, or results achieved, may be related to many different inputs, or resources, in the form of various productivity ratios—i.e., output per labor hour, output per unit of material, or output per unit of capital—each of the separate productivity ratios is influenced by a combination of many relevant factors. These influencing factors include the quality and the availability of materials, the scale of operations and the rate of capacity utilization, the availability and throughput capacity of capital equipment, the attitude and skill level of the work force, and the motivation and effectiveness of the management. The manner in which these factors interrelate has an important bearing on the resulting productivity as measured by any, of many possible, ratios.

A basic productivity ratio with which we are familiar is "miles driven per gallon of gasoline." The "input" measure of gasoline is not used as a gauge of the efficiency of the gasoline alone but as an indicator of the efficiency of the car's performance. This takes into consideration many factors, including speed, traffic, traffic lights, and the efficiency of the car's engine, as well as the efficiency of the gasoline itself. The "output" measure of miles driven is a gauge of the effectiveness, or magnitude, of the results accomplished; thus:

$$\text{Productivity} = \frac{\text{total output}}{\text{total input}} = \frac{\text{total results achieved}}{\text{total resources consumed}} = \frac{\text{effectiveness}}{\text{efficiency}}$$

Production, performance, costs, and results are components of the productivity effort. They are not singularly equivalent terms. Most people associate the concept of productivity with manufacturing because productivity is most visible, tangible, and measurable within that activity. Economists have supported this traditional definition by defining productivity as output per unit of labor input. This perspective must change so as to include all segments of work. Education, government, service groups, and professional groups must all continue to be interested in and concerned about productivity. Productivity touches us all as consumers, taxpayers, and citizens. When people complain they can no longer afford to meet their weekly food bill, repair their cars, pay their taxes, and clean the polluted environment, they are talking about more than money. They are talking about productivity—the capacity to utilize our existing resources to meet the ever-expanding demands on the individual.

The Significance of Productivity Growth

Productivity is important in achieving national, business, and personal goals. The primary benefits of greater productivity growth are pretty much common knowledge—more can be produced in the future, using the same or fewer resources, and our standard of living can be raised. The future economic pie can be made bigger by improving productivity, thereby allowing a bigger slice of that pie for each of us. Expanding the future economic pie can help avoid the clashes between contending groups fighting for smaller pieces of a smaller pie.

From a national perspective, productivity improvement is the only source of increased real national wealth. The more productive use of resources reduces waste and conserves scarce or expensive resources. Without productivity improvements to match them, all increases in wages, other costs, and prices contribute to inflation. Steady growth in productivity is the only way our nation can solve such pressing problems as inflation, unemployment, an increasing trade deficit, and an unstable currency.

From a personal perspective, productivity growth is the key to increasing the real standard of living and best utilizing the available resources to improve the quality of life.

In business, productivity improvements can lead to more responsive customer service, increased cash flow, improved return on assets, and greater profits. More profits provide investment capital for the expansion of capacity and the creation of new jobs. Improved productivity contributes to the competitiveness of a business in its markets, both domestic and foreign.

Business profit can be improved by either increasing sales or by reducing costs or by a combination of both. It is not uncommon for management's focus to be on increasing sales volume with a lesser emphasis placed on controlling, if not reducing, costs. This attitude is the result of conditioning brought about by the expanding markets and increasing sales enjoyed by many businesses in the 1960s and extending, for some businesses, through the 1970s. The sale of additional units results in a diminished fixed cost per unit which automatically increases profitability, providing there is no offsetting increase in variable cost per unit. In some businesses, particularly those that are capital or equipment intensive and in which the fixed element of cost is higher, per unit profit can actually increase with higher volume despite significant increases in variable per unit costs.

Managers, like people in general, seem to have a tendency to migrate toward the comfortable. Rather than confront the issue of controlling costs, it is generally more comfortable to ride the wave of increasing demand. Thus increasing productivity, i.e., the reduction of unit costs while at least maintaining or preferably increasing the volume of outputs, has generally not been given proper emphasis. Until we experience either reduced demand for our products or services, or a demand that is growing at a lesser rate than that to which we are accustomed, productivity and cost control tend to take a back seat to efforts to increase sales.

Cost control has a leverage on profit that few managers have stopped to consider. Due to a company's dependence on profit margin, the positive impact of a single dollar of cost reduction on a company's profit has a far greater effect than does an increase in sales of the same magnitude (see Table 1-1).

In its broadest sense, productivity includes all resources and their costs and as such presents the greatest opportunity to improve profit in any for-profit business and to provide more service for every dollar spent in nonprofit organizations.

The Productivity Trend within the United States

The history of productivity in this country over the past few years does not make for pleasant reading. Following World War II, U.S. labor productivity grew by more than 3 percent per year. In the mid-1960s, productivity started to decline, and the record for the 1970s shows a further erosion of the produc-