MANAGEMENT DEVELOPMENT AS A CAPITAL INVESTMENT

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Systematic management development efforts represent investments that will be returned over a period of time in the form of increased productivity for the organization. This article looks at the several ways in which an organization can maximize its return on investment in human resources.

The American economy is the most powerful on earth. Conflict about where national resources should go is appearing from every direction, but amidst all the conflict, one thing remains clear: there has never been any question about the ability of the American economy to turn out goods and services, or about the leadership capabilities of American managers. On the technical side, the manager deals with research, engineering, data processing, communications, and transportation; and on the business side, with sales, manufacturing, accounting, finance (and perhaps dealing with labor organizations). Given all these ingredients, how can the leader in today's organization make this mix an effective one? The answer seems to be that management is the one key ingredient that makes all the others work well or poorly.

Surveys by financial reporting houses, research by university scholars, and conclusions of those who observe organizational success and failure—these have all at one time or another commented upon why businesses fail. The conclusion: the vast majority of business failures are due to poor management.

On the other hand, in turn-around situations, a heavy infusion of sound managerial practices can quickly turn a loser into a winner. In case after case where someone or a group of someones has turned around a losing situation, it has been with the same technology, the same bricks and mortar, the same products, and often many of the same people doing the bulk of the work. We must conclude, although all of these are obviously very important contributing factors to the success or failure of an organization, that it is the *management* of the organization that spells the difference between success and failure, and that it is the development of sound organizational practices which can turn a loser into a winner.

For example, at the gargantuan end of the scale is the Ford Motor Company. Some twenty to thirty years ago, Ford was losing money at a rate virtually unparalleled in American history. Henry Ford at that time was trying to run a billion-dollar corporation with an absolute lack of managers. The company recruited technicians and paid them well, but when one of those technicians happened to develop some managerial skills and managerial responsibility, he was summarily fired—Henry Ford was the focal point of any and all management responsibility in the Ford Motor Company. This policy nearly lead to the collapse of Ford Motor Company, although for a while the system seemed to work and industrial success without the utilization of a managerial class seemed to be possible.[1] When Henry Ford II took over the Ford Motor Company, he took a step that very few managers have the raw guts to take.

[1] The ultimate failure of this approach, brought to a head after World War II, should lead one to believe that the emergence of a managerial class in Russia will at some point lead to a quite different sort of Communism than is presently practiced there.

Realizing that at that time he lacked the depth and breadth of management experience to run a company the size of Ford, he went out and hired someone who was a better manager than himself—Ernest Breech. Breech gathered around him the group now known as the Whiz Kids and taught them the same system of management that he had learned from Albert P. Sloan back in the 1920's. The switch from the dismal failure of the super-technician approach employed by Henry Ford, Sr. to the phenomenal success enjoyed by Ford Motor Company today, using the effective management approach (the most notable example of such a manager is Lee Iacoca), clearly shows the difference between weak management and effective management in turn-around situations for large companies.

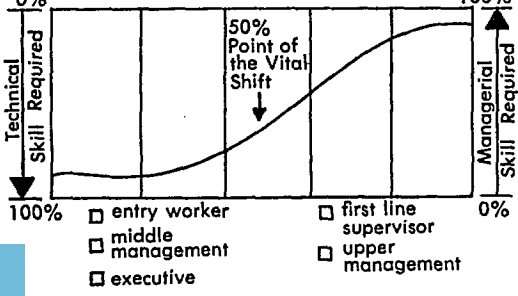
At the Liliputian end of the scale, Standard Realty Corporation, an Ann Arbor based property management firm with a total staff of less than 50, has demonstrated that sound managerial practices can work just as effectively in smaller organizations as in large organizations. Standard, although it also manages conventional apartment projects, has specialized in taking apartment projects that are in trouble and turning them around. Craig Hall, the president of the company, has pointed out that apartment projects generally get in trouble not because of bricks and mortar, but because they are poorly managed. Says Hall, "We don't manage real estate, we manage people. Anyone who manages real estate is in the wrong business." Managerial practices at Standard include management by objectives, job enrichment, and staff commitment to excellence—all practices with which Henry Ford II, Ernest Breech and Lee Iacoca would be familiar. Lining the office walls at Standard are not only books of a technical nature such as real estate law and mortgage banking, but also books by Drucker, Odiorne and Skinner.

It stands to reason that the more effective management can become, the more prepared organizations will be to meet and cope with a never-ending array of challenges. That kind of effectiveness is increased through the study of a growing body of knowledge called "management"—just as knowledge in the technical area can be studied and improved upon. Furthermore, this body of knowledge applies to managers in all sectors of the economy. While there are no statistical indicators on the causes of organizational failures or problems in the public sector such as in hospitals, colleges, or in governments, it would stand to reason that, as organizations, they are not altogether different from businesses.

It might well be argued, in fact, that colleges, governments, and hospitals show a profit just as business organizations show a profit. A business profit shows up on the bottom line or in earnings-per-share, but profit in a college department might take a different form—the form of increased knowledge and skills in students being graduated. A hospital might show a profit in the form of improved patient care or reduced costs; a governmental unit could show a profit in the form of improved services or increased operating efficiency. It thus becomes not a question of profit vs. non-profit, but a question of the form those profits take. I would submit that if an organization does not turn a "profit," it is the management of that organization that spells the difference between success and failure.

Even in the technical field, it is not the technology itself, but the management of that technology, that most often spells the difference between success and failure. For example, recent studies by the Organization for European Economic Cooperation have analyzed the causes of the technology gap between the U.S. and Europe; the results: Europe has proportionately *more* scientists than the U.S., but it lacks the lower and middle managers that the U.S. has to *manage* the technical operations.

While granting the crucial importance of managerial effectiveness for the success of an organization, we must at the same time note a dangerous, but interesting, juncture in the typical growth pattern of managerial skill and responsibility, a point at which a shift occurs in the skill-mix of the job. A person entering an organization generally starts out with a job that is essentially technical in nature,



* Thomas S. Roberts, *The Vital Shift from Managing Workers to Managing Managers,* Society of Automotive Engineers, 1969.

a job that emphasizes *doing* types of work such as selling, designing, accounting, engineering, or building; as the individual moves up through the organization, much of this technical competence has to be left behind and replaced with managerial competence. This shift requires a changed focus on the part of the individual. The diagram below will illustrate this more clearly.

Examination of the diagram shows several things:

1) That there is a skill called management which becomes increasingly important as one rises in the organization.

2) Implied in the diagram is the statement that there is a body of knowledge called management, and that this is an important body of knowledge—one that has grown and can be studied in much the same ways as the technical sciences.

3) That at some point in a career, a manager must make the vital shift—that shift where more managerial skill is required than technical skill.

A crucial management development problem occurs in the middle management ranks when a supervisor who is promoted to a higher level position discovers that he is losing touch with his technical specialty. He can't do the engineering job, or the accounting task. He can't make the traffic nor manufacturing decisions on which he made his reputation. Take the case of a young man of my acquaintance—relatively young, he's about 35. He had shown a high capacity for mathematical and scientific subjects as early as grammar school. He went through high school with a distinguished record in math, science and technical subjects, and was adequate in the rest. He applied to several engineering schools and enrolled in one of the best. After accommodating himself to the tough standards there, he moved on to achieve excellent grades. By the end of his sophomore year he knew that he was going to make it; nothing they could pitch at him could stop him. Because of his record, he was offered a number of jobs, and went with a large chemical firm. He served as a technical aide, and was soon made technical consultant to a manufacturing department. After a short period in quality control, he was assigned to the engineering department designing a new plant. When the new plant was built he was promoted to supervisor in that plant. He had three supervisors working for him. Although these three men weren't college men, he was able to keep things going by controlling them and holding frequent briefing sessions. He was sometimes bothered by the amount of time his supervisory responsibilities took. He was occupied too much in administrative work such as interviewing college recruits, filing reports, making budget estimates and reports, and correcting errors made by his subordinates. He was pretty even-tempered, but he sometimes lost his cool at the foolish errors or plain laxity of his subordinates. Two years after he first assumed the new supervisory position, he was appointed assistant plant manager.

At this point, he began to react to the pressure more openly. It seemed to him that there weren't enough hours in the day, enough competent people doing their jobs, enough backing from top management, or enough time to keep up with his field.

Sound familiar? In this case the man was an engineer, but change the details and he might have been an accountant, purchasing expert, actuary, investment expert, metallurgist, chemist, or any other kind of expert. It really doesn't matter that he learned his field "on the job" or in college. The need is the same and several points become clear.

1. *Men at this stage need further management training.* One education (through college) won't do for a manager any more. After he's worked for a while and succeeded at his career, he needs to take a refresher to regroup his own thinking, and study what it is that he has been doing.

2. *Conventional courses on supervision won't do the job.* Since the need is greatest for supervisory training, most courses aim at this first line group, or at the second line manager at the best. What's needed for the man at or beyond the middle stage are management development courses that deal not with managing workers but with managing managers.

3. *A course doesn't replace self development but accelerates it.* High potential men who have already moved ahead, and are probably on the "fast track" in career growth, must accept responsibility for their own development. Yet the company must do something to help that self development: get it organized better; suggest some germinal ideas; expose him to others in similar positions from other firms.

4. *The better performer gains most from courses on managing managers.* The course which he at-

tends will improve his performance, even though he is a good manager already. It achieves two things: he begins to manage consciously and can recognize his own errors consciously and correct them; secondly, he can become a better teacher of management to those managers who report to him.

5. *As a result of attending a management development course, the middle manager can develop his own management system—one suited to his style of personality.* Good management courses for the manager at or beyond the point of the "vital shift" can aid him in seeing all of the available styles, tools, techniques, and skills of managing. From this kind of information he can develop a personal system of managing which is consistent with best practice, while also "fitting" himself, his followers, the situations in which they are located, and the general economic, social and cultural environment.[2]

The vast majority of the participants in management development efforts (both at the University of Michigan and other leading universities) are fast track managers—selected to attend a particular program, not for remedial work, but to further hone skills that are already sharp. Most participants in the management education activities are already good managers—if they weren't good, they wouldn't have been selected for attendance. The leaders of today's organizations realize only too well that the time to begin developing tomorrow's leaders is today. Just as the time to invest in a machine is now—not when the machine begins to fall apart on the job, the time to invest in a person is now, not when that person begins to fall apart on the job. Preventive maintenance works for both machines and people.

Today, the process of management development is a full-scale operation in which both profit and nonprofit organizations find it beneficial to participate. The Graduate School of Business Administration at the University of Michigan, for example, produces over 21,000 man-days of development a year.

The participants at these courses come from every state and several foreign nations. They come from manufacturers, banks, hospitals, colleges and governments to attend programs ranging in length from two or three day seminars on a particular subject (such as management by objectives) or intensive five-day courses (on topics such as management of managers and new frontiers of management) to a comprehensive four-week executive development program. It's worth while to look briefly at how this came about, not for the purpose of reviewing history notes, but to see how we arrived at where we are today. Estimates of the amount invested by industry in human resource development today range from three to thirty-five billion dollars a year —depending on who you talk to and what figures they include. The portion of that spent on management development alone is at least one billion dollars a year. There's an interesting story behind investment of that scope

People do not naturally have all the skills and knowledge necessary to satisfactorily perform their jobs; a variety of methods have made their impact felt on the development of these skills. Probably the first of these was the trial and error method. Most businesses at the beginning of the twentieth century were small affairs. Their operations were relatively simple, even simplistic by today's standards. As a result, little or no thought was given to the area of training. Development consisted of the owner-manager making a mistake, correcting it, and then vowing never to do it again. Experience was judged to be the best teacher; and while there is no data to back up the assumption, it seems safe to state that experience was often a harsh teacher. It generally gives the test before it gives the lesson.

From the owner-manager, the economy moved ahead to the mass-production/mass-consumption economy. The different operations were broken down so simply that novices could learn their jobs with little or no effort. Specialization, division of labor, and an emphasis upon high speed and high productivity machines required vast new pools of manpower from which to draw. From the farmlands of America came droves of potential workers, displaced by mechanization upon the farms and used to working hard hours. As fast as this labor pool was used up, it was replaced by even larger quantities of first generation immigrants, equally used to long hours and hard work. Training programs at any level were still virtually non-existent. The ample and seemingly endless supply of labor contributed heavily to the lack of training programs. A person was shown a job. If he couldn't do it, he was fired and quickly replaced.

[2] From a Bureau of Industrial Relations, University of Michigan, announcement.

Nor was there any need for supervisory or management training. The faster worker usually became the supervisor, and his job was to set the pace, forcing the other workers to keep up. Tight discipline, close controls, and constant pressures were the management tools of the day. Attention given to the development of a worker's skill was considered not only wasteful but was looked upon as coddling employees, something that the hard-nosed manager of this time frowned upon.

With WW I came the first change in attitudes. Although the changes were not revolutionary, they were important because they were the first step of many in the evolution of training and development as we know it today. "The rapid expansion of industry, the siphoning of manpower to the military, and the closing of European supply sources forced many industries to develop people to fill these gaps. Time was not available to allow the self-development process to take place, and businessment had no choice but to embark on training programs to fill the positions created by the war economy."[3] From this inconspicuous beginning, the field quickly returned to its pre-historic state. As the depression years dawned, the line outside the employment office grew longer each day. Training faded into memory and constant hiring and firing once again became the norm.

As the Missouri sank to the bottom of Pearl Harbor and as Franklin Delano Roosevelt talked of "gaining the inevitable triumph," industry began tooling up. The new war placed previously unheard-of demands upon the American economy. With the bulk of its workforce in uniform, there were few places left to turn for skilled help. In fact, there was little skilled help to be had. Out of the woodwork came 13,000,000 untrained, unskilled, and inexperienced workers. The vast majority of these were trained using Job Instruction Techniques, a method still used today. This previously untrained, unskilled, and inexperienced workforce turned out a supply of war goods reaching from the factory door to the four corners of the world. Their supervisors were trained under a program sponsored by the United States Department of Education (Engineering, Science and Management War Training). Training had become big business, the illegitimate child had finally been adopted as a legitimate activity of business organizations, one that paid off on the profit and loss statement. Not a very large child, to be sure, but one who was to become part of a very large family over the years.

The end of World War II might have brought an end to the sudden re-enchantment with training. After all, the training star had risen once already, only to be quickly retired with the lean years of the depression. Such was not the case. In fact, just the opposite—training received more emphasis in the post-war years than it had during the war. Not for all the right reasons, perhaps, but it was emphasized nevertheless.

"A problem which industry did not even notice had developed. The long years of depression coupled with the war years had caused an unusual situation. A good portion of the top management in American business was approaching the retirement age, and there were no younger executives to fill their shoes. No management training had been carried on during the depression, and World War II had taken many younger people who might have gained experience by the trial-and-error method in industry. The need for skilled labor and management personnel had never before been greater. If expansion was to be carried on, then accelerated training programs were the only answer. No longer could industry depend on the long process of learning by many years of experience. Many of the skills had to be developed from no previous pattern. Training was necessary on all levels in many business organizations. Methods had to be developed to impart this training in as rapid a manner as possible."[4]

With experience from the war years as a base from which to begin operating, the field of training and development within industry has grown considerably in the last 25 years. Consider, for example . . .

- That in 1931 there was one university based management development program in operation; that two more started up during the war years (making a total of only 3)[5] and that now over 200 schools are engaged in this activity.
- That a major electrical manufacturer (as an example) has an annual training bill of $4,000,000 plus an additional $1,000,000 a year that it allocates to its college tuition refund program for employees and that it recently completed a $5,000,000 Corporate Education Center

[3] DePhillips, Berliner, and Cribbin, Management of Training Programs, Richard D. Irwin, Inc., 1960.

[4] *Ibid.*

[5] Gordon & Howell, *Higher Education for Business*, Columbia University Press, New York, 1959.

- That in 1943 the American Society for Training and Development consisted of 15 members while a comparable figure for 1972 is over 8,000

- That American Industry spends a minimum of three billion dollars a year on formal training programs—more than enough to support the Commerce Department, the Justice Department, and the State Department combined. It's enough to support 12 universities the size of the University of Michigan . . . and that three billion dollar figure is the *minimum* estimate. Other estimates range as high as 17 billion a year.

We are going to focus on but one aspect of that total picture in this paper—the area of management education. The total amount spent on this area is at least one billion dollars a year—enough to support four universities the size of the University of Michigan and certainly a figure large enough to be considered a capital investment.

The Nature of Management Development as a Capital Investment

Financial analysts and accountants reading this article—and in particular this section—will probably begin immediately looking for balance sheets, accrued liabilities, profit and loss statements, and cash flow projections. They shouldn't. There are none to be found. The nature of management development is considerably different from installing a new molding machine on a production line. People must be regarded in a different light from an investment in machinery and/or equipment. This is not to suggest that investment in people is not an important investment, but rather that the nature of the investment is different. Indeed, as early as 1922, no less an authority than William A. Paton observed that "in the business enterprise, a well-organized and loyal personnel may be a more important 'asset' than a stock of merchandise . . . At present there seems to be no way of measuring such factors in terms of the dollar; hence, they cannot be recognized as specific economic assets. But let us, accordingly, admit the serious limitations of the conventional balance sheet as a statement of financial condition."[6]

Even the introduction of human resource accounting—such as that at the R. G. Barry Corporation in Columbus, Ohio, has not resolved the problem. The practice of human resource accounting is still in the infant stage and before a complete system could become operationalized, there are a number of problems to be worked out. Nevertheless, we must realize that organizations do make capital investments in their human resources and that the same human resources are a vital and integral part of any successful organization. Indeed, they are an integral part of a national economy.

Theodore Schultz, a former president of the American Economic Association had this to say:

> "Although it is obvious that people acquire useful skills and knowledge, it is not obvious that these skills and knowledge are a form of capital, that this capital is in substantial part a product of deliberate investment, that it has grown in Western society at a much faster rate than conventional (nonhuman) capital, and that its growth may well be the most distinctive feature of the economic system. It has been widely observed that increases in national output have been large compared with the increases of land, man-hours, and physical reproducible capital. Investment in human capital is probably the major explanation for this difference.
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> "Much of what we call consumption constitutes investment in human capital. Direct expenditures on education, health, and internal migration to take advantage of better job opportunities are clear examples. Earning foregone by mature students attending school and by workers acquiring on-the-job training are equally clear examples. Yet nowhere do these enter into our national accounts. The use of leisure time to improve skills and knowledge is widespread and it too is unrecorded. In these and similar ways the quality of human effort can be greatly improved and its productivity enhanced. I shall contend that such investment in human capital accounts for most of the impressive rise in the real earning per worker."[7]

What Schultz said in 1960 is true today—only more so. As other economies develop more and better technologies, we must rely more and more on the human assets of our economy.

Because there are no depreciation tables, projected cash flows, or balance sheets, one might well be inclined to argue that management development is indeed not a capital investment. That if it were a capital investment, there would be return-on-investment numbers, those numbers could be accurately projected over a 15 to 20 year period, and that such is simply not the case.

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[6] W. A. Paton, *Accounting Theory*, The Ronald Press, New York, 1922, pp. 486-87.

[7] Theodore W. Schultz, The American Economic Review, American Economic Association, Vol. 51, no. 1, March, 1961.

While such an approach might well bring cheers from an 1890 bookkeeper with a rubber band around his sleeves, the sophisticated, professional accountant of today would be all too embarassed by his counterpart.

Today, we realize that while the numbers may not exist yet in meaningful form, we must nevertheless treat management development as a capital investment and that the human assets of an organization are often more valuable than the non-human assets.

It is interesting to observe that, while a professional accountant realizes that human assets are an important part of any organization, too often it has been the manager who has overlooked this side of an organization. For example, it would be a foolish company president who would acquire another company without making a thorough check into that company's markets, its equipment, machinery, receivables, liquid assets and accrued liabilities; yet time and time again we see some company president go out and acquire another company without investigating the human assets of that company. This was perhaps most strikingly evident during the late 60's when merger-minded conglomerates were flying high. Juggling the price earning ratio, floating a never-ending array of convertible debentures and issuing letter stock, they forced the price of their stock up to price-earning ratios at a rate that would have left Cinderella dizzy. We can now see that while many wheeler-dealers were able to make the number side of the business look good, they were unable to do the same for the management side. Having built a conglomerate, they and their management team were simply unable to manage it, and many would-be geniuses are now divesting themselves of divisions just as fast as they acquired them during the late 60's. Why? Apparently, they looked at only the number side of the business and forgot to consider the human resource side—the management side.

While the two categories of capital investment—those in human assets and those in non-human assets—are distinct, there are a number of striking parallels that occur. For example, both can be viewed from a cost-benefit point of view. When a manager invests in a piece of office equipment or production machinery, he tries to decide what the benefit would be. If he has alternatives open to him—for instance, a piece of high speed equipment costing $200,000 which would show a return of 18% or a standard piece of machinery which costs only $140,000 and shows a return of 20.5%—he has to sit down with these figures, decide what the company's present and future needs are, determine the impact upon the cash flow and the liquidity of the company, and then make a choice. Whichever alternative he selects, he is making that choice upon the basis of what the benefit will be as opposed to the cost. The benefit may take a variety of forms including less scrap, higher productivity, less downtime, or longer useful life of the equipment.

In much the same manner, the person investing in management development can look at the benefits that might accrue from the cost incurred. Some of these benefits may show up in the form of figures such as reduced turnover, decreased absenteeism, or increased profits. However, the parallel diverges at some points of difference; for example, in human-asset investment, there is usually a time lag between the developmental effort and the corresponding change in the numbers. Installation of a management by objectives system has led to increased profits in enough companies that there is a clear indication that use of such a system will show up in numbers. Installation of such a system is certainly one form of management development for it involves not only attendance at a seminar or a workshop (such as the University of Michigan workshop every month), to acquaint everyone with the nature of the system, but also extensive follow-up work in getting the system off the ground. Yet the pay-off on the bottom line of the profit and loss statement often will not show up for a year or more depending upon the size of the company. Moreover, the numbers cannot be predicted as accurately as they can in the case of a piece of new machinery. Nevertheless, there *are* benefits to be derived and to ignore the application of any cost-benefit analysis to management development is to ignore the value of human assets to an organization.

Other parallels exist in the decisions to use investments of both kinds to solve existing problems or to prevent predictable problems. For example, a medium-sized mid-western manufacturer of specialized farm and industrial equipment recently ran into problems in the purchase of tires. Although the company manufactures the most sophisticated and advanced irrigation machines, they were unable to locate the type of tire they needed to do the job at hand. Tires available in the size they needed

were either extremely low quality, or they were very highly specialized and would have added significantly to the price of the irrigation systems. Increased market demands were rapidly bringing the problem to a head.

The result: a capital investment in machinery. The company installed a recapping line in a corner of the plant and they are not only able to meet the increased market demands for their product, but also pass along the cost savings to their customers. The same company was also facing another type of problem; in seven years, company sales had careened from $5,000,000 to $19,000,000, a rate of growth which had outstripped the company's management systems. The answer: an investment in human assets—a management development program designed to strengthen an already solid management team and to provide the basis for growth in the years ahead.

An Ann Arbor-based service company provides a good illustration for investment used in problem prevention. The company specializes in providing typing and editing services to a variety of local businesses. The service is good—so good, in fact, that business was increasing at a very rapid rate. However, many of these businesses also wanted the materials, once they were typeset, to be printed, and the company did not have any printing facilities. They had to rely on local printers and job the printing out. There were delays involved in jobbing out the printing—printers like to look after their own jobs first—and both delays and mistakes began to increase at a rate faster than the volume of business being handled. The owners of the service company saw that their business was going to continue to grow at an increasingly rapid rate, and that in eight to twelve months in the future, problems associated with jobbing out printing could become a major source of concern and might even jeopardize some of their other work.

Accordingly, not to solve a problem at hand, but to prevent one from arising in the future, they expanded their business vertically. They installed some printing, collating and binding equipment. A customer can now bring in material written long hand, have it set in type on a composer, printed, bound, mailed, or stuffed into envelopes, all under the same roof. The owners were able to foresee problems that might be arising and to take appropriate actions to eliminate those problems before they arose.

In much the same vein, investment in human resources can be used to prevent future problems. For example, by 1980, the number of 20 to 34 year olds in the population will have increased from 40,000,000 to 58,000,000, a 45% increase.

Thus, the population from which organizations will be drawing a large portion of their employees will have altered significantly in the next eight years. The portion of the population now embroiled in changing the large institutions presently shaping American life are going to be the very group from which those same institutions will be drawing a major part of their staff and work force in the year 1980. (It is interesting to note that during the past decade, the leaders of many business organizations have been freely giving advice to the universities on how to handle "these damn kids." During the next decade we can watch some of those same individuals in action, for they will have the opportunity to apply their own advice.) All indications are that the values and beliefs of the generation now entering the work force are significantly different from the beliefs and values of the generation presently employed. Union leaders, industrial leaders, and government officials should all have learned a great deal from a recent strike at an automotive plant where the average age of the work force was 24. They can begin taking corrective action to prevent similar problems in the future. If no such action is taken, then we can expect similar problems to occur with increasing frequency as more and more of that generation enters the work force.

The population at large and the younger generation in particular are increasingly demanding a share of the pie. Rather than toil endlessly at a menial task, they look for increased opportunity for achievement and a sense of responsibility. Jobs will have to be restructured and objectives which challenge and excite the person confronted with them will have to be set. It will be the brave manager indeed who steps ahead of his peers and colleagues and issues the call to arms to begin the mammoth job of restructuring jobs to make them more challenging and more interesting. This different type of investment in human resources is aimed not at problem-solving but problem-prevention. Now might well be the most economical and judicious time to bring this dragon to its knees.

Maximizing ROI in Human Resources

Capital investment in both human resources and non-human resources requires dollar outlays. Both can be used in a variety of manners to increase the probability of organizational success, and both have proven capable of doing just that in the past. Both types of investment will have to continue in the future if our economy is to continue to grow, and both will have to show an increasing rate of return on investment if we are to effectively utilize all the resources that we have at our disposal. The question is not, then, "Should we invest in capital assets or human assets?" That is not the question at all. The question is "How can we maximize our return from both investments?" The task facing the manager is not one of dealing with mutually exclusive events, but of maximizing the return from both of those events. With that thought in mind, let us turn and look at several ways in which the practical manager can maximize his return on investment in human resources.

LOOK FOR JOB RELATED PERFORMANCE CHANGE IN MANAGEMENT EFFORTS

As it has elsewhere, the computer has made its impact felt in the field of management development. Role plays and case studies have proven to be invaluable aids in management development because they bridge that gap between *knowing* and *doing*. They offer participants the opportunity to practice application of skills, learn the consequences of that application, and receive realistic feedback without the possibility of unfavorable impact upon the organization.

Management games offer what is essentially a more sophisticated version of the case study. Computers store vast amounts of data, teams of participants are organized into companies, and then compete with one another under realistic conditions, with the computer providing rapid feedback on the quality of decisions made.

One major automotive firm, for example, conducts a week long course for its dealers. An integral part of the course is a game which runs the entire week. Teams of participants are organized into dealerships and each team makes decisions during the class day. At the end of each day, their decisions are fed into the computer. The next morning the impact of their decision is reported back to each of the teams. Six months of business operations can be covered in one night. The result: an opportunity to practice in simulation actual job performance and a high degree of transferability of the program back to the job.

In another example, one company ran fifteen hundred managers through a speed reading course. The people actually improved their reading speed and comprehension by a factor of 125.4 percent on the average. They now can read the sports page, novels and the company house organ in a much shorter period of time. One observer noted that about one third of them actually read more than twenty minutes per day on their job. He wondered why the other two thirds were trained in that skill. Here we see a behavior change, but not one that is job-related.

Participants are generally considered to be at a management development program to change one of three things—knowledge, attitudes, or skills. While these may be worthwhile intermediate goals, attaining them is not enough; it is the application of these attitudes, skills, or knowledge that is important. They must be translated into new, different, or improved behavior upon the part of the participant in the course—behavior that is related to job performance. Moreover, the behavior change must be related to the development effort—a sort of "before and after picture" which demonstrates that our manager no longer allows bullies to kick sand in his face.

CHECK THE POTENTIAL RETURN ON INVESTMENT BEFORE YOU DEVELOP

One of the most embarrassing questions a training director can hear is: "Just what is management development producing for the company?" At the lower levels of the organization, it is a question that can be answered with relative ease. People at that organizational level are processing goods and hardware. The results of training will generally show up in some index that will provide hard criteria for judging the effectiveness of the training. These indices include: turnover, absenteeism, scrap loss, downtime on machines, units of production, retention rate of new hires, or skill level of machine operators. Information such as this is not only readily available, but is usually closely watched. One or several of these can provide solid information on the results of training at lower organizational levels. The person who looks for equally

quantitative data higher in the organization, however, will be disappointed.

As one moves up in the organization, the questions become more difficult to answer. The measurement and evaluation process involves results that are often more intangible than tangible, that take longer in showing up, and that are heavily larded with opinions, prejudice, and biases. Measurement is much more difficult where the environment supports mystical beliefs that learning, management, and leadership are philosophical and creative—thus placing them beyond the realm of mortal measurement and evaluation.

Between the two polarization points (*how will this pay off in dollars tomorrow* vs. *training is imaginative and creative, thus immeasurable*) lies the world with which the evaluation of management development takes place. That we need evaluation is inescapable. It provides the vital feedback loop that makes management development a system. If evaluation is to be effective, it would seem that an evaluation program should meet the following criteria:

1. Provide information to management as to the result of the training effort—that is, how close did the program come to achieving its established objectives.
2. Be administratively feasible—that is, practical to apply within the resources of the activity and with a minimum of expense and disturbance of personnel.
3. Provide for a systematic and unbiased means of collecting information.
4. Contribute information that can be used to selectively improve the training program.[8]

Without an evaluation and feedback system that meets the criteria described above, there is no way (except by chance) of making the adjustments along the way that are so often vital to the strength of a successful management development system.

Keeping in mind that we are working within an organization setting, it is not too difficult to pinpoint the four key sources of information that can be used for checking return on investment decisions: 1) the superior, 2) the peer group, 3) the trainee himself, and 4) his subordinates. Each of these sources—separately and in conjunction with one another—is effective within the scope of its biases and limitations. (Perceptions of changed behavior will change from source to source.) The indications of changed behavior are many and often complex. Rizzo has suggested a few:

1. *Changes in job performance of the participant.* This includes actual management practices such as the application of human relations and work skills to the job situation; technical innovations; the number of profitable suggestions; percent of management who perform well; and turnover and absenteeism.

2. *Changes in the job performance of the participant's subordinates.* This includes suggestions and innovations; productivity and improved performance; satisfaction and morale; turnover, absenteeism and grievances; and scrap records and down time.

3. *Changes in end-operational results.* This includes policy changes; technological advances; personnel and production records; cost reductions; activity changes (more time spent in planning or coordinating); and structure changes such as new staff services.

It seems reasonable to say that, at best, measuring return on investment from management development is an inexact science. It is nevertheless one of the most important tasks that anyone responsible for management development efforts must take into account.

MAKE SURE THE JOB ENVIRONMENT SUPPORTS THE DEVELOPMENTAL EFFORTS

Another essential step in maximizing return on investment from management development is to decide whether or not the system will support the training which is being given or being planned. It is entirely possible that the performance developed during training will be punished on the job and hence will fall by the wayside.

For example, one company was having problems with its delivery route men. Among other things, they were placing deliveries in front of, or on top of, old stock rather than returning the old stock to the warehouse; yet, a test showed that the route men knew *how* to correctly rotate stock. An analysis of the consequences of their performance offers some explanation of why the skills already acquired were not being performed on the job. In this case, it was

[8] D. Philias Cole, "Measuring the Results of Supervisory Training," *Training and Development Journal*, November, 1969.

decided that although there would be no change in the financial rewards, the supervisors would not criticize the men either for returning spoiled merchandise or for failure to return it when a plausible reason existed. By changing the system, the company was able to support on-the-job performance already learned.

WHAT HAPPENS IF THEY PERFORM PROPERLY:
their wages are unaffected by spoilage rates
they are always criticized when they return spoiled merchandise

WHAT HAPPENS IF THEY PERFORM INCORRECTLY:
they are occasionally discharged, but only in extreme cases
the company inspector occasionally finds old stock at retailers and then the route man is criticized (but often legitimately argues that it was there when he took over the route

In another instance, a British manufacturer ran a course designed to improve supervisory effectiveness. The course was able to change supervisory attitudes, but the supervisors found that the new attitudes conflicted with the practices of management. This conflict brought serious organizational strife, disagreement, frustration, and even embitterment. Of the 97 supervisors who took the course, 19 left the company and another 25 sought other positions. Of those who had contact with top management, 80% became dissatisfied. In all, 83 of the 97 supervisors who took the course said it was a failure because it did not change top management attitudes. The dissatisfied group—those who either left the company or sought other employment—included nearly all the best qualified and most intelligent of the supervisors. [9]

This principle is also readily apparent in the example of the subordinate who goes off to a management development course. He is taught about participative management and all of the benefits that accrue when one allows subordinates to participate in decision-making. This is fine—if his boss happens to be a participative manager. But many times we are teaching participative management to people who work for an autocratic boss. The first thing that happens when our newly-developed manager gets back on the job is that the boss corners him and says, "That may be fine for those professors, but that isn't the way we do things around here." Two weeks of training reversed in one single sentence by the boss. Why? Just because the environment does not support the management development effort.

Without the approval of the superiors, the benefits of training may well be considerably less than when training receives support from the top. Moreover, in instances where there is active opposition to the training, the effort is dysfunctional.

In the article, *Maintenance Systems, the Neglected Half of Behavior Change,* Karen S. Brethower points out that "successful training involves two phases: acquisition and maintenance of behavior. This subdivision of the training function is important because it separates the process of acquiring some particular skill from the process of examining the environment in which the employee will practice the skill. . . . Failure looms from training programs in which there is inadequate consideration of maintenance systems. What happens to the training after training is at least as important to job performance as job training itself."[10] Too many management development efforts today direct themselves only to the process of acquiring behavior. Although they do an excellent job of enabling the participant to become proficient in a skill with which he previously could not perform, management development efforts often fall far short of maintaining that same behavior on the job.

MAKE SURE THAT TRAINING IS THE ANSWER TO THE PERFORMANCE DEFICIENCY BEFORE YOU INVEST IN TRAINING

Ofiesh says that prior to taking that first step in designing a validated system, those responsible for the training effort should ask themselves whether or not the problem is truly one which requires training to solve. [11]

For example, a number of summers ago, I went to work on the production lines at a large automotive plant. The last thing that occured before actually going to work was a meeting with the safety director. I spent about ten minutes with the fellow while he delivered a short lecture on the virtues

[9] Robert J. House, *Management Development: Design, Evaluation and Implementation,* Bureau of Industrial Relations, University of Michigan, Ann Arbor, 1967.

[10] Karen Brethower, "Maintenance Systems, tne Neglected Half of Behavior Change," a chapter in *Managing the Instructional Programming Effort,* Rummler, Schrader and Yaney, eds., Bureau of Industrial Relations, University of Michigan, Ann Arbor, 1967.

[11] Gabriel D. Ofiesh, *Programmed Instruction,* American Management Association, New York, 1965.

and advantages of wearing safety glasses. He explained that burrs coming off the lathe could blind a man or that oil being flung off from one of the moving parts of the engine might permanently damage his eyesight. I was then given training on the correct method of wearing safety glasses.

The first day on the job I noticed that none of the other men working around me had on their safety glasses. None of them seemed overly concerned about possible damage to their eyesight nor were any metal burrs flying off of the machining equipment. Also, the glasses did not fit correctly and by the end of the first day my ears were rather sore at the point where the glasses fit over them.

The second day I was still the only one wearing safety glasses and my ears continued to be sore, so I bent back that portion of glasses that fits over the ears. With this, the glasses began to slide down the bridge of my nose and I was contantly pushing them back up. Since my hands were rather greasy, grease began to get all over my face as well as smearing the lenses of the safety glasses. In addition, that afternoon several of my co-workers took me aside and wondered if I were trying to make them look bad by wearing the safety glasses—and one of those co-workers was 6'4", weighing about 260 pounds.

Needless to say, the third day I didn't wear my safety glasses. Had the safety director passed by my station on the production line, he might have concluded that his training was not thorough enough and hauled me back into his office to recycle me through the safety glasses course. However, the problem was not truly one of training. I *could* perform correctly—but *would not* because there were other things that work on the system which offset the effects of training.

In a more complex example, safety specialists at the Kroger Company recently determined that back injuries sustained by store and warehouse employees resulted in an annual expense of one million dollars, which included insurance premiums, lost time, and training replacements. Investigation revealed that the injuries were caused by improper lifting procedures. Kroger's action in response to this problem illustrates the application of behavioral conditioning as a management technique in such a situation that its effectiveness could be measured in economic terms. The process they used in deciding to apply behavioral conditioning is an example of careful analysis of the problem rather than choosing one solution without examining alternatives.

When the safety director first asked the training representatives to do something about the number of injuries, it seemed that the solution would be to develop a new course on lifting to replace the existing course, which included pamphlets, films, and lifting practice. But instead of accepting this initial idea, they analyzed the problem of injuries to make certain that something other than lack of knowledge of lifting procedures was not the cause. They first asked if the existing course really failed to teach employees to lift properly. They observed that employees were able to lift correctly at the conclusion of the course but that they didn't always do this on the job. Next, they considered whether the method of lifting taught in the existing course was incorrect. Since injuries had not occurred when employees used the recommended lifting procedures, the safety director and training representative decided that those procedures were probably adequate. They determined that the real problem was getting the employees to apply at all times the lifting procedures they had been taught.

This analysis of what had to be done was followed by an analysis of how to do it. Because the existing system of supervisors reprimanding men they saw lifting improperly had changed the men's behavior little if at all, the idea of a more strict system of reprimands was rejected. Instead, Kroger decided to try reinforcing proper lifting. That is, supervisors of store and warehouse employees whose jobs involved lifting were instructed to praise the men they saw lifting properly.

The prospective students, then, were the *supervisors* of the employees whose jobs involved lifting rather than the employees themselves. Kroger decided to teach the use of behavioral conditioning as a management technique by a programmed course.

The course deals specifically with the lifting problem and teaches little of the general theory of behavioral conditioning. The program stresses examples of what to say in particular situations when a worker is lifting correctly. It is written at a level that is easily understood by the supervisors, who averaged an 11th grade education, and takes from 30 to 45 minutes to complete.

The effectiveness of the program was tested by administering it to 100 supervisors in one division of the Kroger Company. This division had averaged several back injuries per month before the introduction of the program. The men were given the usual training in proper lifting at the same time that the supervisors were given the program on behavioral conditioning. Back injuries have been reduced significantly in the division where the system has been put into effect.[12]

TAKE A SYSTEMS APPROACH TO MANAGEMENT DEVELOPMENT

Too often managers look upon management development as a program (or a series of programs) instead of as a system. They fail to realize that management development is a continual process—one carried out over time. It certainly is not a panacea, nor do any cookbooks exist. While there are many benefits to be derived from a management development system, they are not automatically guaranteed just because someone runs a program. The nature of management development is a continual process of adjustment and readjustment, of honing each of the component parts to perfection and then honing some more. A system provides a yardstick to tell us where we've been, where we are, and where we're going. Th vast majority of systems that touch our lives contain four key elements: an input, an activity, an output, and a feedback mechanism to monitor the outputs. Does this concept of systems apply to training? I think it does. We have trainees, trainers, and educational materials (inputs). All these ingredients are welded to form the teaching-learning process (activities). At the end of the process, our trainees should be prepared to perform their new jobs or have developed new skills and behaviors (outputs). It is usually the feedback mechanism that is missing from management development efforts, and yet that is the one element that allows us to make adjustments along the way.

Summary

What we are suggesting here is this: while the internal revenue service permits deduction of management development as an *expense* (treasury regulation 1.162–5), it is *best* regarded as an *investment* item. Just as many managers like to keep two sets of books—one for example, that minimizes their tax liability and one that can be used for operating decisions, the person involved with management development should do the same. While treating management development efforts as an expense item to minimize tax obligations, he should mentally regard them as investments to be returned over a period of time in the form of increased productivity for the organization.

It seems reasonable to predict that management development will continue to receive emphasis in the years to come. Why? Simply put, there are now approximately 36,000,000 people in the age group of 35 to 49—the group from which American organizations must draw the bulk of their managers. According to a recent forecast of the population changes, there will be approximately the same number at the end of the decade . . . at a time when the need for skilled managerial manpower will be considerably higher than it is right now. The forward looking organization is already actively engaged in furthering the development of its managers.

They realize that if you need money in 1978, you can float a bond issue or sell stock. If you need money to write a check on Monday, you can generally make a deposit on Friday. However, when you need managerial skills on Monday, or the next month, or in 1978, you cannot gather up a bushel of skills to be dumped in the in-basket. In a time of need, managerial skills must be drawn upon deposits made over time. If your organization is going to need more managerial skills, now is the time to start making deposits, not in the year 1978.

Ignoring the potential problem is much like observing the well going dry but doing nothing about it. Those organizations that are not systematically investing in their human resources could well lead the way to an overwhelming incidence of corporate harakiri in the late 1970's.

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[12]Brethower and Rummler, "For Improved Work Performance: Accentuate the Positive," *Personnel*, September-October, 1966.

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