WHY SHOULD A DOD MANAGER KNOW ABOUT PRODUCTIVITY? (U)

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BY

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**Why Should a DOD Manager Know About Productivity**

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On 25 February 1986, President Ronald Reagan signed Executive Order 12552 which established a comprehensive program for the improvement of productivity in the Federal Government. The goal of the program is to achieve a 20 percent productivity increase in appropriate functions by 1992. It further aims to improve the quality and timeliness of services and products provided by the Federal Government. Subsequently, former Secretary of Defense Weinberger issued a statement that DOD managers must be immersed in productivity initiatives. It is my opinion that before DOD managers can attempt to achieve the Executive Order's goal or be immersed in productivity initiatives, they must know about productivity. This study will discuss the importance of productivity increases. It asks, what is productivity? It reviews past public policy on productivity and views the impact of the present policy on DOD public managers. The study will provide an overview of successful productivity programs. Finally, it will provide recommendations for DOD managers who seek increased productivity in their organizations.
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WHY SHOULD A DOD MANAGER KNOW ABOUT PRODUCTIVITY?

AN INDIVIDUAL STUDY PROJECT INTENDED FOR PUBLICATION

by

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29 March 1988
On 23 February 1986, President Ronald Reagan signed Executive Order 12582 which established a comprehensive program for the improvement of productivity in the Federal Government. The goal of the program is to achieve a 20 percent productivity increase in appropriate functions by 1992. It further aims to improve the quality and timeliness of services and products provided by the Federal Government.

Subsequently, former Secretary of Defense Weinberger issued a statement that DOD managers must be immersed in productivity initiatives. It is my opinion that before DOD managers can attempt to achieve the Executive Order's goal or be immersed in productivity initiatives, they must know about productivity. This study will discuss the importance of productivity increases. It asks, what is productivity?

It reviews past public policy on productivity and views the impact of the present policy on DOD public managers. The study will provide an overview of successful productivity programs. Finally, it will provide recommendations for DOD managers who seek increased productivity in their organizations.
INTRODUCTION

Before managers can assume responsibility for certain matters, they must understand them. The question raised by the title of this study involves comprehension as opposed to responsibility. A manager could be responsible for a function without fully understanding it, but to successfully implement a policy on productivity, he must know the subject. For this reason, an attempt will be made to define productivity. Then there will be a discussion of productivity as public policy. It will be noted in passing, the relationship between productivity and such matters as measurement, qualitative factors, conditions, and methods that a manager would deal with in policy implementation. So this paper should provide a manager with firm ground to build a productivity program upon.

BACKGROUND

The private manager is concerned with profits for his corporation which come from increased productivity. But a DOD manager¹ is not concerned with profitability, rather he wants to increase a warfighting capability and defense readiness.² Why then should a DOD manager know about productivity? Today, defense expenditures account for almost 30 percent of total federal expenditures. This figure includes the defense payroll plus its purchases of goods and services. Significantly, "Federal, state and
Local governments comprise almost sixteen percent of the civilian labor force and thirty-five percent of Gross National Product. Accordingly, productivity in government operation will affect productivity in the economy overall. Therefore, more efficient utilization of defense personnel and purchases of goods (computers, airplanes and battleships) and services is important to both defense readiness and economic growth. Moreover, an economist recently asserted that "if the United States wants to maintain its relative economic position, it will have to restore the productivity growth rates that were enjoyed during the 1950s and 1960s." Another economist noted that the output per worker per hour rose at an annual average of 3.1 percent during 1948-1966; then dropped to 2.1 percent in 1966-1973; it declined further to 1.7 percent for the 1973-1980 period. If this trend continues, then the United States position as a world economic power could be in jeopardy. This decline could jeopardize our ability to support our Armed Forces as well as maintain our current standard of living.

Like his private counterpart, a LDD manager must be concerned about productivity. The businessman wants to make his product or service more competitive in the marketplace and thereby contribute to economic growth. On the other hand, the public manager, by being more productive, could
bring about a savings, which means more resources available for other defense functions or could lower defense expenditures overall. A lower cost could reduce taxes, which then could spur savings and investment and potentially further economic growth. Although this seems simplistic, it does indicate the significance of each manager, public or private, as integral parts of our economic system.

Besides a decline in productivity, the recent high budget deficits are causing reduced governmental spending; thus selected defense programs may be cut, or organizational structure may be reduced. Managers facing these changes will need to utilize the resources at hand in the most effective and efficient manner. To accomplish this task, a manager will need to be more productive. So it does not matter whether one is in the public or private sector. At a time of shrinking resources, we all must look to increased productivity. If managers are to increase productivity, they must know about it. Private managers would not attempt to initiate productivity programs until they understood the subject and knew company policy. Likewise, we should not expect DOD managers to implement productivity policy until they know public policy and understand what productivity is. It is, therefore, the purpose of this study to assist DOD managers in understanding and appreciating the utility of productivity in the public sector.
DESCRIPTION OF PRODUCTIVITY

In 1911, Frederick Taylor, the founder of scientific management, described productivity in relationship to prosperity. He stated "the greatest prosperity can exist only as the result of the greatest possible productivity of the men and machines of the establishment, that is, when each man and each machine are turning out the largest possible output." Taylor viewed productivity as the link between greater prosperity for both the organization and employee. Albert N. Link, a noted economist, wrote that "Productivity is one of the most important factors influencing our economic well-being..." and "a useful barometer of economic conditions." Unlike Taylor, who was concerned with specific tasks to increase worker productivity, Link describes productivity in the macro arena, noting its effects on the U.S. economy. Thus, productivity can mean different things to different individuals. Paul Mall, a management consultant, nicely summarizes these diverse views of productivity:

"Executives, managers, and businessmen see it as the means for improving profits, competition, and costs. Laborers, workers, and employees see it as the means for improving profits, competition and costs. Laborers, workers, and employees see it as the means for enlarging their compensation benefits. Government officers, public administrators, and civil servants hope that it will balance budgets, release more resources, and improve services. Educational administrators, teachers, and researchers look to productivity as
a means to reach more students, improve the learning process, and extend budgets."

so Mali observed that productivity is involved with all segments of society: different professional groups looking at it in different ways. He noted that for some it creates a real crisis, for others a problem, but to most it is a challenge."” DOD managers must meet this challenge of productivity. They must know about it so they can use the resources provided in a manner that contributes to the defense readiness and warfighting capability while, at the same time, getting the most for each dollar spent for both capital expenditures and wages.

WHAT IS PRODUCTIVITY?

The Random House College Dictionary defines productivity in the economic sense as "producing or tending to produce goods and services having exchange value."” Paul Samuelson observes technically it is "a term referring to the ratio of output to inputs (total output divided by labor inputs is labor productivity). Productivity increases if the same quantity of inputs produces more output. Labor productivity increases because of improved technology, improvements in labor skill, or capital deepening."” So we can find any number of definitions for productivity.
But to better understand the term, it may be best to explain what it is not. Productivity is not production because it is not concerned with how much is produced; instead it indicates how efficiently production is being accomplished. However, it is not efficiency.

Nor is productivity effectiveness, which is related to the volume of results and its completion in a timely manner. Nor is it just performance: production, efficiency, effectiveness, and performance are all parts of a productivity effort, but they are not synonymous with productivity.

If neither production, efficiency, effectiveness, nor performance are productivity, then what is it? Mali noted in his book that an author he read identified 15 different definitions in the literature. Mali explained these many different viewpoints by noting different emphasis, reference points, and degrees of skill. For example, Mali stated that if the reference point was a national view of the country, you would have to consider many factors before you could arrive at a definition. On the other hand, using an individual firm as the reference point, you would have to consider a more focused cause-effect relationship. Thus, giving different criteria for each point, you would arrive at a different definition.12
While there are many definitions of the term productivity, some definitions apply to both the public and private sectors. For example, the Department of Commerce defined productivity as a ratio between output and input. In this case, output divided by input is an expression of the quotient when the output is divided by the input. In equation form, it is:

\[
\text{output} = \text{Productivity} \\
\text{input}
\]

Vough, a former Vice President for IBM, shares this view. He was concerned about profits and viewed the equation this way: the greater, the value of the outputs relating to the cost of the inputs, the greater the profit.

But in the Department of Commerce, as in DOU, there are no profits. Rather, there are many sectors which do have measurable inputs and outputs. A more productive sector will lower the tax dollar spent per function.

Although Vough and the Department of Commerce were seeking different results, they were still able to use a common formula for assessing productivity.
CURRENT FEDERAL DEFINITION

Despite the number of definitions of productivity, the public administrator is most concerned with the one proposed by the Executive Office. The most recent definition can be found in Executive Order 12592 dated February 1986. According to the Order, "the term productivity means the efficiency with which resources are used to produce a government service or product at specified levels of quality and timeliness." Although the order does not elaborate, it clearly implies that federal managers should be seeking the highest quality results (output) in a timely manner while utilizing the least amount of resources (input).

In my opinion, this Executive Order dictates that federal organizations need to show an improvement in service and at the same time reduce the cost of providing that service. So, as I noted earlier, FED managers are challenged to bring their resources together efficiently. To do this, they must understand what productivity is.

In summary, productivity takes into account production, efficiency, effectiveness, and performance. By accommodating these factors, it has become a managerial tool. The public manager should carefully observe the explanation presented in Executive Order 12592, he
needs to seek productivity in accordance with this order. Also, the manager must take into account the ratio of output and input in order to assess productivity. Both sides of the equation will have to be related to the organization and measured for it to be a useful tool. Lawrence Korb nicely sums up the role of productivity in defense management when he writes, "By building on productivity, the cornerstone of excellence, we can all contribute to our mutual objective of improved readiness."

To build on this cornerstone, we must know it. Hopefully, the preceding explanations have clarified the definition.

PUBLIC POLICY

being equipped with a definition of productivity, I will now turn my attention to productivity policy. First, I will discuss federal policy, then DoD productivity policy. Because to implement a successful productivity program, a public manager should be aware of the federal policy and the policy's origin and development. Thus, we must review past policy.

INITIAL PRODUCTIVITY POLICY

Today's public policy on productivity began with President Kennedy's 11 October 1962 memorandum to all executive agency heads requesting that a positive
program for improved manpower utilization be established so that vital functions of the federal government could be carried out with the minimum number of employees. President Kennedy thus viewed the productivity equation from only the labor input side. Consequently, the Bureau of the Budget sought to use productivity indices as a managerial tool for public administrators. Until this time, productivity measures had been developed for private organizations and the national economy. But only a few attempts had been made to calculate federal agency manpower productivity.

To implement this program in 1962, the Bureau of the Budget invited five federal organizations to join in in developing measures of productivity. While the Bureau was not successful in developing measures for the five agencies, they did achieve results in four. The results demonstrated that some functions can be measured and that productivity can be a valuable instrument for federal managers in a variety of applications, including the budget process. President Johnson enlarged the manpower utilization program by a number of actions that were focused on getting the most for each dollar spent. Again, the focus was only on labor input.
From this modest beginning, our government entered an area that private industry had begun back in the nineteenth century. Nevertheless, productivity measures were developed, and federal managers found them useful in making more informed decisions in planning, budgeting and carrying out the operations of the government.

President Nixon established the National Commission on Productivity in June 1970 to seek ways to increase output in government and private industry. In 1975, Congress passed legislation to organize a permanent National Center for Productivity and Quality of Working Life, which replaced the Commission. The Center became an independent agency within the executive branch, but it had no regulatory powers. It could only advise and comment on various means of increasing productivity.

The bill required each Federal agency to assess how its own regulations, policies, and programs affected productivity. Also, the legislation barred the Center from considering issues included in collective bargaining agreements without the consent of the parties to the agreement. 

In 1978, President Carter decided to let the agency expire. He passed the responsibility for productivity improvement to another organization. The Joint
Financial Management Improvement Program, the Office of Personnel Management and now the Office of Management and Budget, have each been put in this leadership role. Each of their efforts have been dismantled in turn, so the lack of any central leadership has been cited by both the U.S. General Accounting Office and the Grace Commission. However, both have indicated the importance of a strong productivity policy. "They seem surprised that the task has not been accomplished."

EXECUTIVE ORDER 12552

With the findings of the Grace Commission in mind, on 25 February 1985 President Ronald Reagan signed Executive Order 12552. Thus he established a comprehensive program for the improvement of productivity for the Federal Government. The goal of the program is to achieve a 20 percent productivity increase in appropriate functions by 1992 and to improve the quality and timeliness of services and products provided by the Federal government.

Under the productivity program each Executive department and agency is responsible for developing a productivity program. The program should include long-term goals of productivity improvement, objectives for improving services, identification of annual
functions which have a high priority for improvement.
and development of a productivity plan.

The productivity plan requires an annual update which
includes:

a. Productivity objectives to be accomplished for
the reporting year.

b. Identify specific functions for productivity
improvement.

c. Describe functions and why agency is
selecting function.

d. Explain measurement system to gauge quality,
timeliness and efficiency, and baseline data for each
function.

e. Establish performance standard for each
function.

f. State the productivity increase expected for
each function in terms of quality, timeliness or ratio
of outputs to inputs.

g. Describe the methods and techniques that will
be used to achieve productivity improvement.

h. Indicate any resources required initially to
implement the program and specify the expected resource
saving.23

Executive Order 12552 gave direction of the
productivity program to the Office of Management and
Budget (OMB). It authorizes OMB to set productivity
goals, policies, principles, standards, and guidelines
for the effective administration of the order. The
Office of Personnel Management (OPM) was given
authority to review incentive practices, programs, and
policies which relate to productivity of the federal
work force; to develop programs to recognize negative impacts on employees; and to develop and implement training programs for federal employees related to the improvement of productivity. DOD was also to identify statutory barriers that inhibit productivity and propose their elimination; and in consultation with the agencies covered by Executive Order, DOD should develop organizational performance standards for their common functions that are appropriate for improvement in quality, timeliness, and efficiency.24

DOD's PRODUCTIVITY POLICY

DOD's productivity program began in response to federal policy established by the National Productivity Center in 1975. While the federal program has experienced highs and valleys, DOD's program has continued to expand over the years. In my opinion, the main reason for this growth is the productivity policy of the former Secretary of Defense, Caspar W. Weinberger. He stated that "Productivity gains do not just happen; they must be aggressively pursued."25 In this context, DOD undertook and expanded its productivity initiatives. Today, these productivity programs all share a common purpose, which is to assist DOD to achieve its two basic goals.
1. To contribute directly and indirectly to creating and supporting armed forces of such quality and excellence as will guarantee the fulfillment of basic national security objectives.

2. To ensure that the Department of Defense always attains the highest possible level of defense capability and readiness through the most efficient use of funds provided by the American taxpayer.26

To achieve these goals, Secretary Weinberger implied in a 1985 statement, that DOD managers must be immersed in productivity initiatives. In summary of the statement, which the former secretary sent to every flag and general officer and senior executive in the Department of Defense, he charged that they must heighten awareness of the productivity enhancement process; recognize and reward employees who contribute to productivity improvements; incorporate productivity goals and incentives in the PPBS; maintain quality of work life and morale; provide training equipment, and efficient organizational structure; seek a competitive advantage and challenge every individual to contribute.27 Weinberger's charges reiterate with specificity for DOD managers, President Reagan's Executive Order. Or could it be that the Order was a spinoff of a successful DOD productivity program? In either case, it is imperative that a DOD manager understand the productivity policy. Because for the policy to be successful, it will have to be implemented by all DOD managers. Thus, we again have answered why a DOD manager must know about...
productivity. He must know it because it is part of public policy and must be implemented by the manager.

HIGHLIGHTS OF DOD PRODUCTIVITY PROGRAMS

With a decision to hand and public policy under way, I will now highlight some of the current DOD productivity programs. Since DOD has taken the initiative in implementing productivity programs, defense managers should be aware of the highlights of some of the significant programs.

CAPITAL INVESTMENT

In addition to the overall public policy, a DOD manager must know the DOD position on productivity. The DOD Productivity Program was established in 1975 and initially focused on capital investment programs. With funding starting in 1977, the productivity investments were geared to technology which could improve methods of operation and increase individual output. In turn, these improvements would lead to a higher level of productivity in the organization. Projected fiscal year 1988 funding is 220 million dollars; lifetime savings from these capital investment programs are expected to average approximately fifteen dollars for each one dollar invested.
QUALITY CIRCLES

Quality circles bring five to fifteen employees together on a voluntary basis; they meet to identify, analyze, and solve problems associated with the working environment. Normally, the groups meet once a week for an hour. The concept behind the quality circles is that the individual doing the job knows more about the process than anyone else. Therefore, that person is an ideal source for changes for improving it. These circles were first started in Japan during the early 1960s to solve quality control problems. They were not successful in the United States until the mid-70s. Only by 1975 was the first quality circle established in DOD; now over 2,200 of them meet weekly in DOD.29 As with private industry, most DOD circles involve only blue-collar workers. Including the first-line supervisor as a participating member. By mid-1985, it was estimated that the return on quality circle investment ranged from $4-28 for each DOD dollar invested in training and time devoted to problem solving.30 Besides dollar savings, the DOD organizations using quality circles have enjoyed intangible benefits, such as a better morale, improved communications between labor and management, higher quality products, reduced absenteeism, greater safety awareness, and leadership development.
EFFICIENCY REVIEWS

Since 1982, the efficiency review program has been another significant productivity program in DOD. Under this program, DOD has sought to reduce growth in manpower requirements. The policy of the program is to identify performance work statements for quality, quantity, and timeliness of output. It then applies engineering principles to improve the efficiency of each function, seeking to perform it with the least amount of manpower.\(^2\)

During 1985, it was documented that $32 million were saved as a result of efficiency reviews and 845 manpower spaces were reallocated.\(^3\) That is, the spaces were freed to be applied to unfunded requirements. DOD is planning to continue to review manpower spaces and by 1990 expects to have reviewed 1.5 million jobs.\(^3\)

PRODUCTIVITY EXCELLENCE AWARD PROGRAM

The Secretary of Defense Productivity Excellence Awards were established in 1983 to acknowledge individuals or groups of employees (military and civilian) who, through their work, suggestions and initiatives, have contributed to significant improvements in defense operations. It was noted in a 1985 Defense Management Journal article that suggestions and incentives will realize cost avoidances of $1.6 billion from 1981 through 1988.\(^4\) The same article noted that during the
1967 Annual Productivity Award Ceremony, 60 men and women received DOD's highest award for productivity. Furthermore, it was stated in the journal that the initiatives of those honored demonstrated what an open mind and desire to improve our assumption on the job.

Other DOD PRODUCTIVITY PROGRAMS

DOD sponsors other productivity programs as well as specific programs developed and utilized by a given service or agency to increase productivity. Other DOD programs include the Asset Capitalization Program, Depot Maintenance, Inter-Servicing and Joint Contracting, DOD Test Equipment Improvement Program, Productivity Incentives (gainsharing), Model Installation Program, Commercial Activities (A-76), and Personnel Management Demonstration Projects. It appears that these programs, plus the programs discussed earlier, seem to focus mostly on capital investment projects and the blue-collar worker, with limited white-collar employee participation.

In addition, even though DOD supports over 2,000 quality circles and enjoys successes in other programs, an Institute for Defense Analyses Report, July 1986, for Assistant Secretary of Defense (Force Management and Personnel), noted that only a small percentage of the civilian and military personnel have been affected or involved in productivity.
CONCLUSION

I have reviewed productivity in theory and practice as a public policy to answer the question posed by the title of this research paper, 'Why Should a DUD Manager Know About Productivity?' It is my opinion that DUD managers should...
Understand productivity because they must be the leaders in implementing policy. PUB managers can inform everyone in productivity programs and cut their teeth in the policy.

During management participation, we noted earlier, both the General Accounting Office and the Ombudsman Commission attributed apathy as a reason for past failures in productivity. As major improvements in PUB efforts are going to occur, then PUB managers must assume the leaders of these efforts. First, they must adapt to new productivity programs or initiate additional programs to better utilize our scarce resources. Second, PUB public managers have the responsibility for existing public policy, they must ensure that all PUB employees are involved in productivity improvements. As currently stated, today only a small percentage of PUB is currently involved or affected by productivity programs.

Because productivity involves everyone, managers must use these programs to include their entire staff. Finally, current policy does not include any penalties for non-compliance. If everyone is going to be involved, then managers must put teeth into the policy and hold each employee accountable for productivity improvements. Past productivity programs lacked this measure and failed.

In conclusion, I recommend that PUB managers continue to expand their knowledge of productivity and productivity.
Improvement programs in federal professional management journals, consulting with academic and contracting with private industry, provide a means to improve productivity. After expanding their knowledge base, managers need to disseminate information on productivity to their employees to include seminars, lectures, and graduate classes in public management. DOD managers must ensure that job standards are developed which include productivity measures so that each person can be held accountable for productivity improvement. In this manner, direct penalties and rewards are tied to job performance. Finally, there are some areas in which DOD can assist its managers in accomplishing productivity programs. DOD should place productivity as one of its highest goals so that it receives constant visibility and attention. In addition, DOD could establish productivity teams. These teams could visit all DOD agencies, facilities, and installations to present productivity briefings and assist managers in developing productivity programs. Also, it is important that DOD expand its productivity awards program to recognize all productivity savings programs. Likewise, DOD must ensure that all managers are accountable for productivity in their respective organizations. With everyone working together for productivity improvement, the challenge of Executive Order 12552, to achieve a 20 percent productivity increase by 1992, can be accomplished.
1. A DOD manager is an active or civilian in a management position in the Department of Defense.

2. Throughout this paper the term DOD manager or public manager are synonymous.


8. Paul Malo, Improving Total Productivity, p. VIII.

9. Ibid.


12. Malo, pp. 4-5.


18. Ibid., p. 4.


24. Ibid.


27. Ibid.


29. Korb, p. 20.

30. Ibid., p. 21.

31. Cox, p. 39

32. Ibid.

33. Korb, p. 29.

34. Cox, p. 36.


36. Ibid., pp. 1-12.

37. Vough, p. 11.
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