MEASURING MANAGERIAL PRODUCTIVITY: PERCEPTIONS OF AND PRACTICES USED BY MANAGERS

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

Productivity has been a concern of American business men and women for many years. Techniques and methods for producing goods faster and more efficiently have been tried. Some strategies have been successful and some have not. Technology has played an important role in improving production.

Still, American business and industry is concerned about declining productivity. Business men and women claim there must be a way to reduce costs and at the same time to maintain the quality of goods and services. In order to ensure maximum efficiency in a business, the effectiveness of managers may need to be studied. Exactly how much work is accomplished at lunch, on the golf course, and other places where managers frequently make business contacts is difficult to determine. The efficiency and effectiveness of managers and work accomplished in the office seem to be equally difficult to evaluate.

Only through the evaluation of current methods, can improvements be suggested. To measure managerial productivity, a common definition must be developed and tools to help managers be more effective must be identified. Thus, work measurement of management performance is essential in improving managerial productivity.

Statement of the Problem

The purpose of this study was to identify how middle-level and senior-level managers define managerial productivity; to determine what emphasis is placed on managerial productivity by these managers and their organizations; to determine what techniques, skills, and characteristics these managers feel are important to improve productivity; and to determine current and recommended practices for measuring managerial productivity.

Specifically, the questions to be answered by and about middle- and senior-level managers and their organizations were:

1. How do they define managerial productivity.
2. Has the individual manager given increased attention to improving productivity during the past year?
3. Has the organization given more emphasis to measuring managerial productivity?
4. What programs and/or guidelines, if any, do organizations use to improve managerial productivity?
5. What differences are there, if any, toward managerial productivity improvement by particular age groups and/or particular levels of management (middle and senior)?
6. What differences are there, if any, toward managerial productivity improvement by males and females?
7. What techniques, skills, and characteristics are viewed as necessary in improving managerial productivity?
8. What automated equipment are they currently using?
9. What automated equipment is important to use as tools in improving managerial productivity?

10. What techniques are currently being used to measure managerial productivity?

11. What techniques are recommended for measuring managerial productivity?

Need for the Study

Productivity has become a common term in the business world today. Increased productivity would seen to bring about better living standards for all Americans. Dushkin (n.d.), Ranftl (1979), and Presnick (1980) all agreed that increased productivity promises a more comfortable life for our society. Dogramaci (1981), Dickinson (1980), and the National Center for Productivity and the Quality of Working Life (1978) stated that economic, social, and political well being would come from increased productivity.

The current interest in productivity is because of the soaring costs of the workforce within the office environment. Presnick (1981) quoted an estimate that two-thirds of current labor costs represent top managers, middle managers, technical and professional staff, and other administrators. Brancatelli (1981) noted that many reliable estimates indicate that equipment, compensation and support costs for white-collar workers will reach the $1.5 trillion mark by 1990. He felt companies expecting to survive with that level of office costs need productivity gains promised by office-of-the-future programs. Byron (1981) noted that in 1980 "workers, ranging from clerks to chief executives, earned more than $760 billion in wages and salaries, or more than 25 percent of the total output of the economy" (p. 66). Getting control of that skyrocketing cost, and making sure the money is well spent, he said, has become

one of the most critical challenges facing business today. Abraham (1981) showed Bureau of Labor Statistics reports that white-collar workers will represent 51 to 55 percent of the America's work force in 1985, and labor costs for office workers are continuing to rise. One way to drastically improve the bottom line and to help organizations become more effective is to measure and improve productivity in the most expensive segment of the work force, upper-level management.

Apparently, the recent emphasis on productivity has made managers more aware of their individual performance levels. Byron (1981) stated that after years of encouraging their employees to work more efficiently, the managers themselves will now have to improve their own output. Even though productivity has been studied for some time, Presnick (1980) indicated managers are just now beginning to realize that the next emphasis on the improvement of productivity is managerial productivity, which could result in considerable cost savings. Seemingly, managerial productivity provides the greatest potential for reducing costs in the office because the highest paid segment of office workers is upper-level management. A baffling reality for the organization is that while business has figured out how to maximize the use of investments in technology the most important variable in the productivity equation--people--remains an elusive resource of which to gain control (Margolis, 1979).

Professionally, a manager links working better, faster, and "smarter" to career improvement. Because of the new awareness of office productivity, managers may find importance in constantly looking for better ways to improve their own performance.

Connell (1981) stated that even in the academic world, there is an urgent need to introduce some of these concepts into the curriculum and

to develop new approaches and techniques for measuring managerial and professional productivity. A common definition or understanding of managerial productivity does not seem to be universally accepted. In addition, there is no apparent measure for use in evaluating the effectiveness of the manager. So in order to note improvement upon managers' productivity, there must be a way to measure it. A measure can be developed only after discovering the managers' perceptions of their own productivity; how, if at all, managers are evaluating their current productivity levels; and what tools may be helpful in improving the productivity of managers.

Scope and Limitations

This study was limited to a survey of managers listed as members of ten Administrative Management Society (AMS) chapters from Regions 10 and 11 located in the Midwestern United States. Responses from middle-level and senior-level managers, as identified in the first section of the questionnaire, were used in analyzing the data. Care should be taken in generalizing the results of this study to other levels of managers, to other areas of the country, and to other organizational memberships.

Definition of Terms

To clarify the interpretation of data, the following terms are defined as used in this study:

Knowledge worker - those whose job performance requires the use of information (includes clerical/secretarial and executives and managers with emphasis on executives and managers) (Rotolo, 1980).

Management: Middle management - implements strategies, policies,

and procedures developed by top management. Operating decision maker; trouble shooters (Productivity Management, 1982); job functions somewhat unstructured.

Management: Top [senior] management - develops strategies, policies, and procedures; decision maker; planner; (Productivity Management, 1982); job functions highly unstructured.

Productivity - total output divided by total input.

Upper-level manager - middle-level or top-level manager.

CHAPTER II

REVIEW OF RELATED LITERATURE

This study is concerned with productivity measurement at the middle- and top-managerial levels. Literature was surveyed to gain information concerning (1) overview of productivity, (2) productivity in management, (3) productivity measurement, (4) tools for achieving productivity, and (5) technology affecting managerial productivity.

Productivity is a word common to all phases of business. Many people have formed opinions and theories regarding productivity and productivity measurement techniques designed for their respective job descriptions. Nationally, improved productivity is viewed as a necessity.

Overview of Productivity

Currently there is a great emphasis on productivity because it is believed that productivity means a better life for our society. According to the National Center for Productivity and Quality of Working Life (1978) the combination of rising productivity and economic growth can produce a social bonus that can be spent in many ways to enrich everyone's lives including environmental improvement, relief from poverty, support for an aging population, and nonmaterial gains. Dogramaci (1981) stated that productivity growth has also been consistent with a higher living standard.

However, there has been a decline in productivity over the last few years in the United States. "A lack of basic understanding of productivity and management's inability or unwillingness to do something about it is the basic cause of the nation's present economic slump" according to Sink (1982, p. 2D) in 'OSU Strives to Increase Firms Productivity'.

Many people use the word productivity as an "everyday" word without really understanding or agreeing on the meaning. Craig (1973) stated politicians and economists are concerned with productivity because they feel its movement is integrally related to America's general economic well-being; especially relating to inflation control, economic growth, competition, and balance of payments. He also contended that corporate managers are concerned with productivity because they feel it is a representative indicator of the overall efficiency of their firms. Still, he said, productivity remains one of the most elusive concepts in business and economic literature.

One general definition of productivity is very quantitative. The National Center for Productivity and Quality of Working Life (1978) stated the concept of productivity is deceptively simple: it refers to productive efficiency. Productivity measures the relationship between output and input ... usually stated as a ratio of output to input. Earlier, the Center (1977) noted that productivity refers to the results achieved in relation to the resources applied. It said improving productivity is using present resources to provide more and better results, or using fewer resources to maintain the same level of results.

A less quantitative definition involves the human factor. In general, one would agree that productivity refers to the effective use of all resources, including ... but not limited to, our human resources.

According to Moore and Moore (Dogramaci, 1981), productivity is a measure of how well people are responding to the understood objectives and accepted goals of an enterprise.

With so many definitions of productivity, one would assume measuring and increasing productivity would be easy; but it is not. The National Center for Productivity and Quality of Working Life (1978) stated that in practice, measuring changes in productivity is not so simple. Many types of awareness programs can help provide a better understanding of what it means to increase productivity (Brooks, 1981).

Drucker says "work smarter, not harder" (Margolis, 1979, p. 25). According to the National Center for Productivity and Quality of Working Life (1978) the real output of the Nation's private business sector was two to two and one-half times larger in 1977, than in 1947. About three-fourths of this increase was made possible by using work hours more efficiently, rather than by people working more hours. In an earlier, report the Center (1977) maintained that improvement of productivity is based on whether a desired result is achieved (effectiveness) and what resources are consumed to achieve those results (efficiency). One method of improving productivity and performance is to identify the limitations in the current procedures and then to eliminate these deficiencies (Brooks, 1981).

Few people would deny the importance of productivity. The National Center for Productivity and Quality of Working Life (1978) contended people are in agreement concerning the importance of productivity growth. They observed that people in different types of work make varied suggestions for improving productivity. For example, engineers probably give priority to technological change, businessmen promote capital

formation and deregulation, and labor favors enhancing workers' skills and security. These approaches are extremely interdependent; one reinforces another. To be realistic, productivity improvement policy contains the interaction of many factors and disciplines and a coherent program that uses many sources.

Productivity improvement is not easy. Sink (1982) stated in "OSU Strives to Increase Firms Productivity":

> road blocks to productivity improvement most commonly cited by American managers include such things as insufficient and ineffective training, lack of awareness, understanding and commitment to productivity; and ineffective, poorly communicated and uncoordinated planning. Other trouble areas, are lack of cooperation and coordination; resistance to change; lack of incentive; ineffective leadership skills; lack of implementation effectiveness and lack of labor and management cooperation (p. 2D).

The National Commission on Productivity noted that "productivity gains in this country have been made by such sweeping factors as improved management techniques, infusion of capital, and by better trained and more mobile work forces" ("Speaking Out For Better Output", 1973, p. 62). How are we to change the declining level of productivity to an increasing level? Many businesses now recognize how critical managerial talent is in the perpetuation and profitability of the organization (Mali, 1972).

Productivity in Management

Only recently have managers been concerned about productivity in their own positions. One reason could be due to the various "trends" of management. Bologna listed four distinct eras of management philosophy (Presnick, 1980). These included (1) the "personality traits" era which emphasized the right person for the job; (2) the "B" School approach which emphasized academic achievements; (3) the "technical

skills" era when skills in planning, organizating, motivating, and directing were important; and (4) the present "results-oriented" approach where the emphasis is on productivity. More and more managers themselves are concerned with improving their own effectiveness (Mali, 1972). Another reason so little concern has been directed at managers, is the evidence of at least three traditional obstacles impeding proper analysis of, and improvement in, managerial productivity (McNamara, 1979). First, it is difficult to define managerial performance. The manager's job is filled with so many qualitative and intangible nuances it is virtually impossible to isolate the key performance ingredients of an effective manager. Second, the traditional emphasis is on administrative skills and practical experience. The underlying rationale is that when executives gain competence and exposure in these specific areas, they become more productive. The problem with applying this rationale to top management is that if high-level executives did not already possess technical capability, they probably would not have been promoted at all. Third is the "success syndrome". Some managers possess a high degree of confidence in their ability, and their high positions confirm their perception that they must have been doing something right or they wouldn't be in that position now. This self-assurance, working in combination with the awe accorded American management worldwide, does not foster self-analysis or examination.

Now the emphasis on productivity has been moved to upper management levels. Rozelle of Rozelle, Stokes and Associates warned that middle- and top-level managers are under pressure from subordinates to account for better use of their time (Brooks, 1981). One should be accountable at all working levels in measurable terms. Productivity expert, Hemlen,

stated that at Cities Service Company, white-collar workers, whose status relates to the indefinable nature of the job they do, are far more threatened by having their productivity measured than are factory workers (Adkins, 1979).

A study by Louis Harris and Associates (1980) found that 30 percent of executives, managers, and supervisors claim it would be impossible to measure their productivity, even though 65 percent would favor such measurement if it were instituted. Great improvement in managerial productivity is often inhibited by a misallocation of available managerial resources which is caused by an overemphasis on activity at the expense of value (McNamara, 1979, p. 21-22). Stated more simply, too much emphasis is placed on low-impact areas and not enough emphasis is placed on significant areas. In addition, Byars (1982) contended that direct measures are not made on the number of hours worked for supervisory, management, and other non-production jobs. Only estimates are made for the hours worked by people in these categories. He also felt another problem is that the Bureau of Labor Statistics uses the number of paid working hours rather than the number of actual working hours.

Productivity in upper management is not limited to the office or to the eight to five working schedule. The informal communication system provides another avenue for effective performance. Because of the business completed on the golf course, over dinner, and so on, Deutsch (1980, p. 52) noted "managerial productivity cannot be limited to either systematized planning or to office tasks."

Apparently, improving the process of management is becoming increasingly important. Each organization should examine managerial

productivity and should define just what managerial productivity is to that organization. The basic responsibilities of management are effective and efficient planning, leading, coordinating, controlling, and adaptation (Productivity Management, 1982). Byars (1982, p. 32) said "the efficiency of any work force is influenced by the efficiency of its management". Not only is the department of a good manager organized procedurally, said Newburg (1980), but the manager's thoughts, instructions and supervisory involvement are well organized too. That is why it is important for us to determine how each organization defines productivity and to examine its productive level. According to a study by Dr. Miriam Y. Lacey (1982) of the University of Utah mentioned in "No Best Way to Manage":

> What is considered effective management differs from organization to organization and doesn't necessarily conform to the ideals proposed by behavior theorists. Interpersonal competence, the ability to work effectively with others, largely determines career success and is particularly important in white-collar and managerial positions (p. 20).

Gordon (1982) believed it is important for any organization to effectively monitor the managerial talent flowing through its ranks.

Managers are beginning to look at their own effectiveness and efficiency in new ways. The determination can then be made as to how their productivity can be improved by identifying the limitations in the current managerial processes and by determining what managerial productivity is. Ranftl (1978) stated that tomorrow's manager must be a technically qualified, respected, people-oriented leader who is skilled in the latest techniques of behavioral science and sound business practice.

Productivity Measurement

The concern of productivity at the management level, introduces a new measurement problem. Tracking productivity measurement is difficult to get a handle on because it implies that a before and after condition exists and that these conditions can be used to evaluate some specific improvement (Brooks, 1980). Additionally, the implication is made that a manager will track improvements quantifiably. The manager needs to put in place a tracking program that consistently shows results and allows comparisons of working conditions. When discussing measurable components of productivity Grayson (Cook, 1980) said above 70 percent of our work force, those individuals identified as the knowledge workers or those involved in the service industries, no longer turn out a product that is easily counted. Furthermore, measurement is difficult (Cook, 1980) because there is less structure in the decision-making processes at the higher levels of management (Abraham, 1981).

Presnick (1980) stated that many experts admit there is little knowledge now on measuring the productivity of managers and other knowledge workers. There are several reasons for this, including the inherent resistance to change in the way managers handle information and communicate with others, and the lack of information and analytical procedures for arriving at the most cost-effective combination of applying information technologies such as word processing, telephone communications, and micrographics, to managers and their environments.

Cook (1980) felt that it is hard to measure capital input, and the quality of labor. Metzger, a banking consultant, when he spoke on one of the most serious obstacles to productivity in all service

industries said there has never been any systematic approach developed to measure productivity. In the banking industry no one has yet come up with a sound way to measure it, and because effective criteria has not been developed, it doesn't get measured ("Banking and Productivity", 1981). It would appear that if something cannot be measured there is no standard against which to implement positive change.

A report in "Banking and Productivity" (1981) on General Dynamics, an organization with 18,000 employees, showed that there are no productivity standards for its 8,000 clerical, administrative, and managerial positions even though the company has precise productivity standards upon which its 10,000 blue collar workers are measured and paid.

According to McNamara (1979) many companies still calibrate management productivity in terms of financial criteria which only perpetuates misconceptions about management productivity and impedes progress toward a sounder and more effective approach. Still, a review of corporate practice, public statements, and empirical research confirms there is growing interest in productivity measurement.

Gilbert (1968) stated that work measurement implies measuring work in units of time. "In addition to wanting to know how long various activities should take" Gilbert continued, "a manager often wants to know how often they occur" (p. 15). Apparently, neither managerial work nor productivity, is easy to describe or to define.

Tools for Achieving Productivity

There are several subjective tools managers can use to become more productive. An individual manager can improve his own productivity and help in improving the productivity of his working group and company by using some of the following tools: time management, communication tools

and reports, productivity awareness programs, group interaction sessions, and measurement and tracking programs (Brooks, 1981). Seemingly, managers should be reminded that productivity improvement begins with an individual commitment. It requires the effort of each person to improve his/her own productivity before the business can realize the overall improvement.

In a project at Aerojet-General Corporation the primary objective concerning time management and resource allocation was to refocus most of the managers' efforts on performing tasks that were essential to effective performance. Managers became more productive because their energy, time, and resources were allocated to the high-impact, important areas (McNamara, 1979). Another example was one man who found nothing else contributed more to his productivity than to take fifteen minutes at the end of each working day to think about the next day's work (Pollock, 1980).

Time is only one of the resources available to managers. There are other tools and resources managers can use equally as effectively to improve managerial productivity.

Greenblat (1973) stated that traditionally, management's role has been perceived as one of planning; goal setting; and determining and controlling the use of manpower, methods, and materials. Presnick (1980) also believed that the planning and setting of goals is an important part of the process of managerial productivity. Umstot (1977) supports goal setting because he felt that the process of setting clear, challenging goals resulting in improved productivity is intuitively appealing. Even though the evidence in favor of Management by Objectives (MBO) is less clear, this goal setting technique also seems to result in improved productivity.

Bologna, president of the management consulting firm of George Odiorne Associates, Inc., Plymouth, Michigan, thought a lot could be accomplished using MBO in productivity (Presnick, (1981). However, not just tasks are considered to be goals. Managers engage in other productive activities which may be essential to the direction they are seeking for their companies. Stearns (1981) said that in one management theory, Theory Z, a conversation, a compromise, even cooperation is a goal.

A manager's goals becomes an integral part of that manager's performance (Brooks, 1981). A manager's job-related objectives and personal objectives should coincide to keep time and energy from being wasted. The literature seems to indicate that it is important to consider goal setting as a critical variable in improving managerial productivity.

Technology Affects Managerial Productivity

Automated technologies are also tools to help managers improve their productivity. For example, a terminal easily available to the manager could be used to view data immediately, allowing him/her to make instantaneous decisions. By using the equipment, the manager might also have the capability to send messages to other personnel without leaving his/her desk and without relying on the aid of clerical help. There are many ways in which technology can help a manager improve productivity.

Although technology has been the key to solving productivity problems for the production and the clerical workers (Abraham, 1981), it is not being applied to the office productivity problem on a large enough scale to have a great impact. Apparently, therefore, a great

deal of emphasis on the use of technology should be aimed at the professional, technical, and managerial areas.

Changes are beginning to take place which will directly and personally affect managers. They need to be familiar with and to participate in planning for these changes (Connell, 1980).

Harvey Poppel, senior vice president at Booz, Allen and Hamilton, Inc., New York Management consultants, believed that most managers and professionals spend 18 percent to 30 percent of their time doing "less-productive tasks" such as seeking information, seeking people, and scheduling, and automation can reduce the time spent in less productive tasks (Rout, 1980).

In a Business Week article, "Changing 45 Million Jobs", Poppel (1981) estimated that automation could affect 38 million jobs out of over 50 million existing white-collar jobs. The article also stated that Strassmann of Xerox Corporation's Information Products Group, predicted the change will be on 20 to 30 million of these jobs and will take place by 1990.

Connell (1980) encourages presenting technology so that its ability to improve a manager's productivity is emphasized rather than for replacing his/her legitimate support staff.

Utilities executives are familiar with computer system justifications based on the substantial improvements in productivity at operational and clerical levels brought about by these systems. He also stated the same arguments can be repeated at the top-management level except that even more is at stake (McIntosh, 1982). If executives spend over half of their time processing information, a system that helps them do so in less time should have real value.

The problem appears to be not in the availability of technology for management tools but in forming and convincing managers of the usefulness of these technologies. Byron (1981) maintained that the real gains will come from getting professional and management personnel to use the new equipment, even though office automation is already making large strides among clerical and lower-level administrative workers. According to Connell (1980) resistance to technology must be overcome if efforts to improve office productivity are to be successful and if in-roads are to be made in the managerial productivity area.

Experts now agree that the environment in a highly automated office performs most clerical tasks electronically and encourages extreme improvement in managerial and professional personnels' productivity (Brancatelli, 1981).

The automated capabilities are available to managers. Klimschod (1981) pointed out that only lately have managers begun to realize the cost and time savings possible if executives and other office-based professionals were able to work more effectively. Sutherland (1981) noted that clearly that office automation appears to offer real opportunities for increasing managerial productivity. Today, said Klimschod (1981), the target for improvement is the job of the executive who is forced to do his or her own filing, copying, and memo writing. Chorafas (1982) found that the challenge is to integrate the required elements of an automated office into a system which managers can use to get their work done effectively.

Managers need to be assured of the benefits of using technology. Brancatelli (1981) contended that managers will want an executive work station more if it is a benefit awarded as a symbol of success. Therefore, he stated, integrate new equipment into the "corporate

culture" as one of the benefits of executive power. Brancatelli (1981) felt that the executive will need access to data processing near his/her work area as white-collar workers will depend more and more on use of computing power.

Many personal computers have begun to proliferate in the office; and frequently at the initiative of individual managers (Verespej, 1981). Doug Thurston (Verespej, 1981), owner of Erie Computer Company agreed that managers realize the computer is a tool they can use when they see one in operation.

Sutherland (1981) noted how difficult it is to predict the potential impact of surfacing office automation technologies regarding measurable improvements in managerial productivity.

The article "Measuring Managerial Productivity," (1981) stated as the shift in emphasis for office automation leans towards the manager rather than the secretary, the effects of office hardware on managerial productivity are far less measurable than their effect on clerical tasks. Abraham (1981) noted that assessing the impact of an automated office system on the productivity of principals is much more difficult due to the many intangible benefits which are caused by behavioral effects. He explained further that unstructured and unpredictable activities such as communication, decision making, and most others are the types of tasks carried out by the principal.

Poppel (Schanstra, 1980) said that higher quality (meaning substance, timeliness and accuracy) outputs will be produced by managers and other professionals. These higher quality outputs will enable managers to make better decisions and to become better supervisors.

Office automation seems to be an aid to more efficient office work, which may be one way to increase managerial productivity.

Summary

Presnick (1980) summarized the current situation in managerial productivity measurement:

> Although still in its infancy, the measurement and improvement of managerial productivity is receiving serious attention as the next logical step in making the office of the near future more cost effective. For the pioneers in this area, there is much to be explored; the benefits, however, may very well be substantial (p. 68).

Business educators should be included in this group of "pioneers" in order to adequately prepare future managers for the challenges that lie ahead. Students should be introduced to the concept of productivity, the importance of productive managers, methods of managerial productivity measurement (if developed), and tools and technologies useful in improving managerial productivity.

CHAPTER III

RESEARCH DESIGN AND PROCEDURES

This study was designed to collect data from middle- and senior-level managers to determine how they define managerial productivity; what emphasis they and their organizations give to improving managerial productivity; what techniques, skills, and characteristics they feel are important for improving productivity; what office technologies are used and considered important in improving productivity; and what practices are used and recommended for measuring managerial productivity. Data were collected from selected middle and senior managers by means of a mailed questionnaire, which was developed by the researcher. The analysis of the data was facilitated by using Statistical Analysis System (SAS) (Helwig, 1983).

Development of Questionnaire

Literature was surveyed to determine what common components, if any, were included in the definition of managerial productivity, what techniques and technologies might contribute to managerial productivity; and what measurement techniques, if any, are being used. Sources used to identify appropriate literature included on-line searches of ABI/INFORM, a management and administration in business data base, and numerous professional journals. In addition, the library at the American Productivity Center was used. The researcher was primarily interested in

literature published within the past ten years because of the rapidly changing management techniques and technologies used in business today.

Following the completion of the literature review, selected middle- and top-level managers were interviewed. (See Appendix C). The purpose of the personal interviews was to determine whether managers actually feel a need to measure their own productivity, what techniques, if any, managers used, and what suggestions they had for measuring managerial productivity. Information gained from the interviewees was combined with information from the literature review to write the first draft of the questionnaire.

The first draft of the questionnaire was reviewed by the doctoral committee, a marketing professor, and a management professor. The revised questionnaire was mailed for additional input and revision to the managers who had been interviewed previously.

The final questionnaire was divided into seven sections:

I. Personal Data

II. Definition of Managerial Productivity

III. Improving Managerial Productivity

IV. Criteria in Improving Managerial Productivity

V. Technologies Used in Performing Managerial Tasks

VI. Technologies Which Might Be Useful in Improving Managerial Productivity

VII. Measuring Managerial Productivity

Section I was designed to collect personal data about the managers and to identify middle- and top-level managers based on definitions which were drawn from the literature. The questions related to age, sex, length of tenure in managers' current positions and in any management

positions, and type of business or industry in which respondents were employed.

Section II was planned to develop a common definition of managerial productivity. Some of the more common components of the definition, derived from the literature and manager interviews, were listed with space for managers to agree or to disagree with each of the components. Respondents could also add to this list as a part of the "other" section. Then managers were asked to write their perceptions of productivity in an effort to encourage them to think about additional components they believed should be included in the definition.

The purpose of Section III was to ascertain if managers and their organizations were placing more emphasis on improving managerial productivity this year than in the past year. In addition, they were asked to describe any programs and/or guidelines they have implemented to improve managerial productivity. These questions required only "yes" or "no" answers with space to add a description of organization programs and/or guidelines which are currently in use.

Section IV was designed to gather information concerning the importance managers placed on meeting certain criteria in improving managerial productivity. The list, which was divided into three parts, was drawn from recurring criteria found in the literature and in the interviews. The first part of Section IV, goal-setting activities, included time management; setting daily, weekly, monthly, quarterly, and annual goals; determining goals themselves or by others; and MBO. An "other" choice gave the managers the opportunity to list goal-setting activities which were not included in the questionnaire. The second part of the section, personal development, asked the respondent the importance

placed on formal education; workshops, seminars, etc.; professional organizations; reading related materials; and an "other" category for adding personal development activities which were not included in the questionnaire. The last part of Section IV included a list of interpersonal skills such as flexibility; leadership; oral, non-verbal and written communications; effective listening; positive self-image; security needs for self; social belongingness; and self esteem.

A modified Likert scale was used to make responding easier for the manager. This allowed the mangers to rank each criteria as very important, somewhat important, rarely important, never important, or does not apply.

Section V listed numerous automated technologies by four categories from which managers could indicate those used. Section VI used the same list, but asked managers which automated technolgoies were important for improving his/her own productivity. The rating scale used was very important, somewhat important, rarely important, never important, or does not apply.

Technologies listed in Sections V and VI were divided into four parts: word processing, data processing, information processing, and other electronic capabilities. Word processing included stand alone unit; on-line to computer; integrated with other functions; use of disk or tape storage; dial input from within or outside of the building; taped dictation; and centralized, decentralized, or departmentalized access to word processing. The categories listed under data processing were: use of personal computer at work or at home; use of portable computer; on-line to mainframe; used for decision making; used to generate graphs,

charts, reports, etc.; and use of a terminal at manager's own desk. Other electronic capabilities listed included: data communications, teleconferencing, facsimile devices, electronic mail, and electronic scheduling.

The last section, Section VII, was designed to attempt to describe some effective measurement techniques. Managers were asked to describe the techniques or analyses they currently use to measure their own productivity. The next question asked the managers to respond "yes" or "no" to whether their current measurement techniques were adequate. If the response was "no" they were asked to indicate the limitations of the current process. Finally, the managers were asked to recommend techniques or analyses they felt would be useful in measuring managerial productivity. Section VII allowed managers to think about managerial proudctivity measurement and to indicate their personal feelings on the the subject.

The questionnaire was designed for ease in answering and for meaningful analysis of responses. Complete directions were given at the beginning of each section. A light buff color of bond printing stock was used to insure an attractive questionnaire and to encourage responses. It was printed on 11 x 25 1/2 inch paper and folded in thirds to make the final instrument appear on one page, with no loose sheets.

A code number was written on the last page of each questionnaire to enable the researcher to identify returned questionnaires to eliminate a follow-up mailing to managers who had already returned the survey.

Data Collection Procedure

Data were collected by mailing the questionnaire along with a cover letter to managers. The population selected was memberships of the American Management Association and the Administrative Management Society (AMS), as these were regarded as being professional whose members were concerned about improving themselves as managers.

Since mailing lists could not be obtained from the national offices of these organizations, a letter (see Appendix A, page 80) was mailed to the chapter presidents in AMS Regions 10 and 11 requesting membership lists to be used for the purpose of this study. Of the 20 chapter presidents contacted, ten supplied membership rosters. The 823 individuals who were members of these ten AMS chapters and who were listed as managers, comprised the sample for the study.

A cover letter was written to encourage those managers who received the questionnaire to participate in the study. The letter was reproduced on Oklahoma State University, College of Business Administration stationery, and was cosigned by the dissertation committee chair, Dr. Arnola C. Ownby, Coordinator of the Office Productivity Unit. (See Appendix A, p. 81). Included with the questionnaire and the cover letter was an addressed, postage-paid envelope to allow the managers to return the questionnaire with minimal effort and no expense.

Approximately two weeks following the original mailing, a follow-up letter, written as an additional attempt to encourage managers to participate in the study, another copy of the questionnaire and a return envelope were sent to managers who had not yet responded.

Analysis of Data

SAS was used to tabulate and calculate frequencies and percentages of each response for each question included in the research instrument. Further tabulations and correlations were calculated to determine whether there was a relationship between level and age of managers and whether the respondents were focusing more on improving their own productivity this year than they were a year ago. Cross tabulations and correlations were also calculated to determine if there was a relationship between gender of the managers and their focus on improving their productivity.

Summary

Data were gathered from managers who were members of Regions 10 and 11 of the AMS by means of a questionnaire which was developed by the researcher using literature and personal interviews. The data were tabulated using SAS. Conclusions and recommendations, based on the findings reported in Chapter IV are presented in Chapter V.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF THE DATA

The research questionnaire was sent to 823 managers who are members of the ten Administrative Mangement Society chapters in Regions 10 and 11 that supplied membership rosters. Responses were received from 258 individuals, making a return rate of 31.34 percent. Of these 258, 65 were unusable because the respondents were production and operations managers or not employed as managers, or because the questionnaires were returned blank, unreadable or with wrong addresses.

Data were tabulated and calculated using SAS to indicate frequencies, cumulative frequencies, percentages, and cumulative percentages of responses. These data are reported, analyzed, and interpreted to answer the specific research questions enumerated on pages 2 and 3.

Personal Data

Personal information was collected from respondents to identify the managers who should be included in the study, to establish relationships between age and/or sex and productivity improvement effort, and for general knowledge. This information was obtained from Section I of the questionnaire (Appendix A, page 83) and is reported in Table I on pages 30 and 31.

TABLE I

PERSONAL INFORMATION REGARDING MANAGERS WHO RESPONDED

Personal Data	Frequency	Cum. Freq.	Percent	Cum. Percent
MANAGEMENT LEVEL				
Top level	74	74	39.36	39.62
Middle Level	144	188	60.64	100.00
Did not indicate level	5	-	-	-
AGE GROUPS				
24 - 35	36	36	18.65	18.65
36 - 45	73	109	37.83	56.48
46 - 55	46	155	23.83	80.31
56 - 65	36	191	18.65	98.96
65+	2	193	1.04	100.00
GENDER				
Female	44	44	23.28	23.28
Male	145	145	76.72	100.00

TABLE I (Continued)

LENGTH OF TENURE	In Current Position				In Any Management Position			
Years	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
Less than 5	96	96	49.74	49.74	30	30	15.79	15.79
5 - 10 years	45	141	23.32	73.06	38	68	20.00	35.79
11 - 20 years	33	174	17.00	90.15	65	133	34.21	70.00
More than 20	19	193	9.85	100.00	57	190	30.00	100.00

INDUSTRY OF CURRENT EMPLOYMENT	Freq.	Cum. Freq.	Percent	Cum. Freq.
Communication	6	6	3.18	3.18
Construction	1	7	.53	3.70
Finance, Insurance	47	54	24.87	28.57
Government	11	65	5.82	34.39
Manufacturing	19	84	10.05	44.44
Medical	6	90	3.18	47.62
Mining	1	91	.53	48.15
Oil	11	102	5.82	53.97
Real Estate	1	103	.53	54.50
Service	23	126	12.17	66.67
Transportation	4	130	2.12	68.78
Wholesale/Retail	11	141	5.82	74.60
Other	48	189	25.40	100.00

Of those managers responding to the question regarding management position, about 40 percent indicated that they were top-level managers and about 60 percent indicated that they were middle-level managers. Approximately three-fourths of the managers were male and one-fourth were female. Over half were under 45 years of age and almost half had held their current positions less than five years. However, many of the managers (almost 65 percent) had held some management position, including their current position, for over 11 years. Apparently, therefore, several of the respondents became managers at a young age.

The largest single type of business or industry in which respondents were employed was finance, insurance. Almost one-fourth checked this industry type, while another one-fourth checked the "other" category. A summary of the "other" industry types is shown in Table II below. The next largest industry type was that of service with only 12 percent.

TABLE II

SUMMARY OF "OTHER" INDUSTRY TYPES

Industry	Freq.	Industry	Freq.
Education	12	Human Services	1
Utility	5	Legal	1
Accounting, CPA	4	Management Consulting	1
Office Equipment	2	Media (Advertising)	1
Better Business Bureau	1	Natural Gas Transmission	1
Computerized Tax Acctg.	1	Publishing	1
Data Processing	1	Religious	1
Distribution	1	Research and Testing Lab	1
Energy	1	Training and Development	1
Executive Search	1		

Definition of Managerial Productivity

To determine a definition of managerial productivity, a list of potential components of the definition was presented in Section II of the questionnaire (Appendix A, page 84). The components were: better utilization of human resources; increased performance of manager; increased quality of decision, work, products, and services of manager; increased effectiveness (productive in getting results); increased efficiency (using least wasteful means of completing a task); manager's total output divided by total input; and "other" with space for respondents to add components. Then the managers were asked to write a definition of managerial productivity based on their perceptions of the concept. The frequencies and percentages of responses are presented in Table III, pages 34 and 35.

Managers are consistent in including four of the six listed components in the definition since over 89 percent of those responding agreed to the following: better utilization of human resources; increased quality of decision, work, products, and services of manager; increased effectivenss; and increased efficiency. In addition, just over three-fourths of those responding agreed that increased performance of the manager should be a part of the definition.

Over 65 percent of the respondents disagreed, though, that manager's total output divided by total input should be included in the definition. Furthermore, 45 of the 193 (almost one-fourth) did not respond to this particular component, which likely means either they did not understand the component or they could not decide how they wanted to respond.

TABLE III

COMPONENTS OF THE DEFINITION OF
MANAGERIAL PRODUCTIVITY

Definition Component	Frequency	Cum. Freq.	Percent	Cum. Percent
BETTER UTILIZATION OF HUMAN RESOURCES				
Yes	185	185	99.462	99.462
No	1	186	0.538	100.000
Did not Respond	7	-	-	-
INCREASED PERFORMANCE OF MANAGER				
Yes	139	139	77.222	77.222
No	41	180	22.778	100.000
Did not Respond	13	-	-	-
INCREASED QUALITY OF DECISION, WORK, PRODUCTS, AND SERVICES OF MANAGER				
Yes	168	168	90.811	90.811
No	17	185	9.189	100.000
Did not Respond	8	-	-	-
INCREASED EFFECTIVENESS (PRODUCTIVE IN GETTING RESULTS)				
Yes	182	182	98.378	98.378
No	3	185	1.622	100.000
Did not Respond	8	-	-	-
INCREASED EFFICIENCY (USING LEAST WASTEFUL MEANS OF COMPLETING A TASK)				
Yes	159	159	89.326	89.326
No	19	178	10.674	100.000
Did not Respond	15	-	-	-

TABLE III (Continued)

Definition Component	Frequency	Cum. Freq.	Percent	Cum. Percent
MANAGER'S TOTAL OUTPUT DIVIDED BY TOTAL INPUT				
Yes	51	51	34.459	34.459
No	97	148	65.541	100.000
Did not Respond	45	-	-	-

Listed under "other" were community involvement; workers for company, workers for quality results; increase time for planning and other creative activities; communication skills; compassion; and profitability, sales objectives, and budget guidelines.

Of the 193 respondents, 103 wrote their perceptions of managerial productivity as requested in Section II, Part B, of the questionnaire. Those responses are shown in Table XVII, Appendix B, page 90 - 97. The perceptions listed reemphasized the importance managers placed on utilization of human resources, efficiency, and effectiveness.

In answer to the research question regarding how middle- and senior-level managers define managerial productivity, this survey supports the following: the definition of managerial productivity includes better utilization of human resources; increased performance of manager; increased quality of decision, work, products, and services of manager; increased effectivenss; and increased efficiency.

From an analysis of both the statistical data and the written responses, it appears that the respondents view managerial productivity in a qualitative or subjective manner rather than in a quantitative way.

The human factor seemed to be very important in accomplishing desired results in completing tasks.

Emphasis by Managers and Organizations on Improving Managerial Productivity

Information concerning the emphasis by individual managers and their organizations on improving managerial productivity was acquired through the questions in Section III on the questionnaire (Appendix A, page 84). Inquiry was made as to whether managers gave more attention to improving their own productivity this year than last year, whether their organizations placed more emphasis on improving managerial productivity, and what programs or guidelines the organizations may have implemented toward improving managerial productivity.

In addition to answers to the three items on the questionnaire, correlations according to management level, age group, and/or gender could be determined. Therefore, research questions 2 through 6 listed on page 2 could be answered.

As shown in Table IV, page 37, substantially more managers (76.5 percent) focused more on improving their individual productivity this year than last year. Half of the respondents' organizations emphasized improving managerial productivity but less than half of the organizations (39 percent) had actually implemented programs or guidelines for improving managerial productivity. Table XVIII, Appendix B, page 98, lists the programs and/or guidelines implemented by some of these organizations.

The research question, "has the individual manager given increased attention to improving his/her own productivity over the past year,"

is answered definitely yes. The question was written in such a way as to guard as carefully as possible against a biased answer.

TABLE IV

EMPHASIS ON IMPROVING MANAGERIAL PRODUCTIVITY

	Freq. Yes	Percent	Freq. No	Percent	Did Not Respond
Did you work toward improving your own productivity more this year than last year?	147	76.56	45	23.44	1
Does your organization place more emphasis on improving managerial productivity?	93	50.00	93	50.00	7
Does your organization have programs or guidelines implemented for improving managerial productivity?	75	39.27	116	60.73	2

Apparently, some organizations are beginning to place emphasis on improving managerial productivity; however, the number of organizations which have encouraged improving managerial productivity does not yet constitute a majority.

Workshops and training seminars and annual performance reviews seem to be popular programs and guidelines used by organizations to improve managerial productivity.

Table V, below, shows the total managers who responded to the question of working toward improving their own productivity, categorized by age groups. Younger managers, those 24 - 45 years of age, placed more emphasis on improving their productivity than the other respondents.

TABLE V

MANAGERS WHO ARE WORKING TOWARD IMPROVING MANAGERIAL PRODUCTIVITY MORE THIS YEAR THAN LAST YEAR CATEGORIZED BY AGE GROUPS

Age Group	Yes	% of Total in age group	No	% of Total in age group	Total	Age % of Grand Total
24 - 35	30	83.33	6	16.66	36	19.25
36 - 45	57	79.16	15	20.08	72	38.50
46 - 55	29	69.05	13	30.95	42	22.46
56 - 65	26	74.29	9	25.71	35	18.72
65+	1	50.00	1	50.00	2	1.07
Totals	143	76.47	44	23.53	187	100.00

Responses divided into management level indicated that more of the top level managers in the 24 -35 age group were working toward improving their productivity than in other age groups. This is shown in Table VI, page 40. Emphasis decreases as age goes up; however, at least three-fourths of the total top managers were giving more emphasis to improving their own productivity. The correlation coefficient showed no relationship in top-level managers who work toward improving their managerial productivity and various age groups.

Table VII, page 41, summarizes data concerning middle-level managers working toward improving managerial productivity categorized by age group. At the middle level, more managers in the 24 -35 age group were emphasizing improvement of managerial productivity. Over three-fourths of the respondents at the middle level of management indicated that they were placing more emphasis on improving managerial productivity. There was no relationship between middle managers working toward improving mangerial productivity and various age groups.

Results of the frequencies, percentages, and correlations indicated there was no difference toward productivity improvement by a particular age group at the top nor at the middle level of management.

In addition to the question of whether there is a difference between age group and managerial level in managers who were working toward improving mangerial productivity, was the question whether there was a difference by sex. Table VIII, page 42, indicates that more of the females were working toward improving their productivity than the males. Overall, three-fourths of the managers indicated they were working toward improving their own productivity.

TABLE VI

TOP LEVEL MANAGERS WHO ARE WORKING TOWARD IMPROVING MANAGERIAL PRODUCTIVITY MORE THIS YEAR THAN LAST YEAR CATEGORIZED BY AGE GROUPS

	Working Toward Improving Managerial Productivity					
Age Group	Yes	% of Total in Age Group	No	% of Total in Age Group	Total	% of Total Respondents
24 - 35	6	85.71	1	14.29	7	9.46
36 - 45	22	78.57	6	21.43	28	37.84
46 - 55	16	76.19	5	23.81	21	28.38
56 - 65	12	75.00	4	25.00	16	21.62
65+	1	50.00	1	50.00	2	2.72
Total	57	77.03	17	22.97	74	100.00

Because of the small number of female responses, correlations were not calculated. Still it may be assumed from the table that there were no differences between male and female managers working toward improving their productivity, although a higher percent of total female respondents indicated their emphasis was on managerial productivity improvement.

TABLE VII

MIDDLE LEVEL MANAGERS WHO ARE WORKING TOWARD IMPROVING MANAGERIAL PRODUCTIVITY MORE THIS YEAR THAN LAST YEAR CATEGORIZED BY AGE GROUPS

	Working Toward Improving Managerial Productivity					
Age Group	Yes	% of Total in Age Group	No	% of Total in Age Group	Total	% of Total Respondents
24 - 35	24	82.76	5	17.24	29	25.66
36 - 45	35	79.55	9	20.45	44	38.94
46 - 55	16	61.91	8	38.10	21	18.58
56 - 65	13	73.68	5	26.32	19	16.81
65+	0	00.00	0	00.00	0	00.00
Total	86	76.11	27	23.39	113	100.00

Techniques, Skills, and/or Characteristics Necessary in Improving Managerial Productivity

To determine what techniques, skills, and characteristics managers view as being necessary to improve their individual productivity, a list of criteria were suggested in Section IV of the questionnaire (Appendix B, page 85). This section was divided into goal-setting activities, personal development activities, and interpersonal skills; and respondents were to rank each listed activity or skill.

TABLE VIII

MANAGERS WHO ARE WORKING TOWARD IMPROVING MANAGERIAL PRODUCTIVITY MORE THIS YEAR THAN LAST YEAR CATEGORIZED BY GENDER

	Working Toward Improving Managerial Productivity					
Age Group	Yes	% of Total in Age Group	No	% of Total in Age Group	Total	% of Total Respondents
Female	36	81.82	8	18.18	44	23.40
Male	107	74.31	37	25.69	144	76.60

Goal-Setting Activities. As shown in Table IX, pages 43 - 45, criteria which related to setting goals included time mangement; set daily, weekly, monthly, quarterly, and annual goals; determine your own goals; someone else determines your goals; management by objectives; and "other" with space to list items not included on the questionnaire. All listed items, with the exception of "someone else determines your goals," were ranked at least somewhat important by over 80 percent of the persons responding to the item. Further, over 90 percent ranked time management, setting annual goals, and determining their own goals as being at least somewhat important.

Three items were ranked as very important by over half of the managers responding to the item. They were time management (77 percent), determining own goals (71 percent), and setting annual goals (65 percent).

TABLE IX

TECHNIQUES, SKILLS, AND/OR CHARACTERISTICS NECESSARY
IN IMPROVING MANAGERIAL PRODUCTIVITY
GOAL SETTING ACTIVITIES

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
TIME MANAGEMENT				
Very important	145	145	77.128	77.128
Somewhat important	37	182	19.681	96.809
Rarely important	4	186	2.128	98.936
Does not apply	2	188	1.064	100.000
Did not respond	5	-	-	-
SET DAILY GOALS				
Very important	83	83	44.865	44.865
Somewhat important	81	164	43.784	88.649
Rarely important	17	181	9.189	97.838
Never important	2	183	1.081	98.919
Does not apply	2	185	1.081	100.000
Did not respond	8	-	-	-
SET WEEKLY GOALS				
Very important	68	68	36.957	36.957
Somewhat important	93	161	50.543	87.500
Rarely important	18	179	9.783	97.283
Never Important	1	180	0.543	97.826
Does not apply	4	184	2.174	100.000
Did not respond	9	-	-	-
SET MONTHLY GOALS				
Very important	77	77	41.622	41.622
Somewhat important	81	158	43.784	85.405
Rarely important	22	180	11.892	97.297
Never Important	2	182	1.081	98.378
Does not apply	3	185	1.622	100.000
Did not respond	8	-	-	-

TABLE IX (Continued)

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
SET QUARTERLY GOALS				
Very important	79	79	42.246	42.246
Somewhat important	74	153	39.572	81.818
Rarely important	24	177	12.834	94.652
Never important	2	179	1.070	95.722
Does not apply	8	187	4.278	100.000
Did not respond	8	-	-	-
SET ANNUAL GOALS				
Very important	120	120	64.865	64.865
Somewhat important	49	169	26.486	91.351
Rarely important	11	180	5.946	97.297
Never important	3	183	1.622	98.919
Does not apply	2	185	1.081	100.000
Did not respond	8	-	-	-
DETERMINE YOUR OWN GOALS				
Very important	131	131	70.811	70.811
Somewhat important	49	180	26.486	97.297
Rarely important	2	182	1.081	98.378
Never important	2	184	1.081	99.459
Does not apply	1	185	0.541	100.000
Did not respond	8	-	-	-
SOMEONE ELSE DETERMINES YOUR GOALS				
Very important	10	10	5.556	5.556
Somewhat important	70	80	38.889	44.444
Rarely important	59	139	32.778	77.222
Never important	13	152	7.222	84.444
Does not apply	28	180	15.556	100.000
Did not respond	13	-	-	-

TABLE IX (Continued)

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
MANAGEMENT BY OBJECTIVES				
Very important	66	66	39.521	39.521
Somewhat important	73	139	43.713	83.234
Rarely important	15	154	8.982	92.216
Never important	3	157	1.796	94.012
Does not apply	10	167	5.988	100.000

Those who considered "someone else determines your goals" important were in the minority since 55 percent indicated that it was rarely important, never important, or did not apply.

Three responses indicated they used goal-setting activities which were not listed on the questionnaire. These activities included determining goals in professional organizations, video assisted training, and determining goals in a meeting.

Personal Development. Table X, page 47, shows criteria which relates to personal development including formal education; workshops, seminars, etc.; professional organizations, and reading related materials. Over 89 percent of the respondents rated all of these activities at least somewhat important. Over half rated reading related materials very important and almost half (49 percent) rated workshops, seminars, and so on, very important.

Six respondents added personal development activities which were not listed on the questionnaire. These were hands on training, psychotherapy, networking, publishing management articles, day-to-day experiences, and meeting with others who have similar views.

Interpersonal Skills. Flexibility, leadership, oral communications, facial expressions, tone of voice, personal appearance, eye contact, written communications, effective listening, positive self image, security needs for self, social belongingness, and self esteem were criteria listed under interpersonal skills.

Tabulated data appears in Table XI, pages 48 - 50. All criteria were rated at least somewhat important in over 75 percent of the responses. Except for security needs for self (87 percent) and social belongingness (79.5 percent) 90 percent rated the criteria at least somewhat important.

Criteria were rated very important by over half of the respondents in all cases except security needs for self, social belongingness and self-esteem.

Those criteria considered very important by more than 75 percent included flexibility, leadership, oral communications, effective listening, and positive self image.

In answer to the research question "what techniques, skills, and characteristics are viewed as necessary in improving managerial productivity," it appears that goal-setting is important. It also seems managers felt personal development and interpersonal skills were important in improving managerial productivity.

TABLE X

TECHNIQUES, SKILLS, AND/OR CHARACTERISTICS NECESSARY TO IMPROVING MANAGERIAL PRODUCTIVITY PERSONAL DEVELOPMENT

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
FORMAL EDUCATION				
Very important	84	84	44.444	44.444
Somewhat important	86	170	45.503	89.947
Rarely important	16	186	8.466	98.413
Never important	1	187	0.529	98.942
Does not apply	2	189	1.058	100.000
Did not respond	4	-	-	-
WORKSHOPS, SEMINARS, ETC.				
Very important	92	92	49.198	49.198
Somewhat important	86	178	45.989	95.187
Rarely important	9	187	4.813	100.000
Did not respond	6	-	-	-
PROFESSIONAL ORGANIZATIONS				
Very important	81	81	43.085	43.085
Somewhat important	90	171	47.872	90.957
Rarely important	17	188	9.043	100.000
Did not respond	5	-	-	-
READING RELATED MATERIALS				
Very important	103	103	55.376	55.376
Somewhat important	77	180	41.398	96.774
Rarely important	6	186	3.226	100.000
Did not respond	7	-	-	-

TABLE XI

TECHNIQUES, SKILLS, AND/OR CHARACTERISTICS
NECESSARY IN IMPROVING MANAGERIAL PRODUCTIVITY
INTERPERSONAL SKILLS

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
FLEXIBILITY				
Very important	141	141	74.603	74.603
Somewhat important	46	187	24.339	98.421
Rarely important	2	189	1.058	100.000
Did not respond	4	-	-	-
LEADERSHIP				
Very important	159	159	83.684	83.684
Somewhat important	28	187	14.737	98.421
Rarely important	3	190	1.579	100.000
Did not respond	3	-	-	-
ORAL COMMUNICATIONS				
Very important	158	158	84.043	84.043
Somewhat important	28	186	14.894	98.936
Rarely important	2	188	1.064	100.000
Did not respond	5	-	-	-
FACIAL EXPRESSIONS				
Very important	98	98	52.128	52.128
Somewhat important	78	176	41.489	93.617
Rarely important	11	187	5.851	99.468
Never important	1	148	0.532	100.000
Did not respond	5	-	-	-
TONE OF VOICE				
Very important	102	102	55.135	55.135
Somewhat important	76	178	41.081	96.216
Rarely important	7	185	3.784	100.000
Did not respond	8	-	-	-

TABLE XI (Continued)

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
PERSONAL APPEARANCE				
Very important	121	121	65.054	65.054
Somewhat important	61	182	32.796	97.849
Rarely important	4	186	2.151	100.000
Did not respond	7	-	-	-
EYE CONTACT				
Very important	128	128	68.817	68.817
Somewhat important	55	183	29.570	98.387
Rarely important	3	186	1.613	100.000
Did not respond	7	-	-	-
WRITTEN COMMUNICATIONS				
Very important	136	136	71.958	71.958
Somewhat important	45	181	23.810	95.767
Rarely important	8	189	4.233	100.000
Did not respond	4	-	-	-
EFFECTIVE LISTENING				
Very important	167	167	87.435	87.435
Somewhat important	22	189	11.518	98.953
Rarely important	2	191	1.047	100.000
Did not respond	2	-	-	-
POSITIVE SELF IMAGE				
Very important	156	156	82.540	82.540
Somewhat important	31	187	16.402	98.942
Rarely important	2	189	1.058	100.000
Did not respond	4	-	-	-
SECURITY NEEDS FOR SELF				
Very important	57	57	30.811	30.811
Somewhat important	104	161	56.216	87.027
Rarely important	23	184	12.432	99.459
Never important	1	185	0.541	100.000
Did not respond	8	-	-	-

TABLE XI (Continued)

Criteria	Frequency	Cum. Freq.	Percent	Cum. Percent
SOCIAL BELONGINGNESS				
Very important	35	35	18.817	18.817
Somewhat important	113	148	60.753	79.570
Rarely important	33	181	17.742	97.312
Never important	5	186	2.688	100.000
Did not respond	7	-	-	-
SELF ESTEEM				
Very important	131	131	70.053	70.053
Somewhat important	52	183	27.807	97.861
Rarely important	4	187	2.139	100.000
Did not respond	6	-	-	-

Automated Technologies Used and Necessary for Improving Managerial Productivity

Sections V and VI of the questionnaire, Appendix B, pages 86 - 87, listed automated technologies which were categorized under four divisions: word processing, data processing, information processing, and other electronic capabilities. Respondents ranked their current use of these technologies and the importance of these technologies in improving managerial productivity as being very important, somewhat important, rarely important, never important, or does not apply.

Word Processing. Criteria listed in Table XII, pages 52 - 55, included stand alone unit, on-line to computer, integrated with other functions, use disk storage, use tape storage, dial input within

building, dial input from outside the building, taped dictation, centralized, decentralized and departmentalized word processing.

There were no word processing technologies currently being used by as many as half of the respondents to perform managerial tasks; but over half of the managers listed stand alone unit, on-line to computer, integrated with other functions, use disk storage, and centralized word processing as at least somewhat important in improving managerial productivity. In all word processing technologies, importance for improving managerial productivity was rated higher than actual use to perform managerial tasks.

Taped dictation was important to use in improving managerial productivity for the people who responded. However, many people did not respond to this technology because blank lines were unintentionally omitted from the questionnaire.

Word processing on-line to the computer was more important than self-sufficient unit and integrated systems were even more important. Disk storage was much more useful than tape storage.

Even though less than half of the respondents use dial input, more use dial input within the building (47.67 percent) than from outside the building (29.41 percent). Dial-input was rated more important for improving mangerial productivity than it was being used to perform managerial tasks.

Managers felt centralized word processing would be important to use in improving their productivity even though they stated that currently it does not apply. A few respondents noted in the margin of the questionnaire that their organizations were just beginning to install systems.

TABLE XII

AUTOMATED TECHNOLOGIES
WORD PROCESSING

	Technologies Managers Use				Importance for Improvement			
Technology	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
STAND ALONE UNIT								
Very important	30	30	16.95	16.95	38	38	21.59	21.59
Somewhat important	41	71	23.16	40.11	53	91	30.11	51.71
Rarely important	17	88	9.61	49.72	29	120	16.48	68.18
Never important	4	92	2.26	51.98	5	125	2.84	71.02
Does not apply	85	177	48.02	100.00	51	176	28.98	100.00
Did not respond	16	-	-	-	17	-	-	-
ON-LINE TO COMPUTER								
Very important	40	40	22.60	22.60	60	60	33.71	33.71
Somewhat important	32	72	18.08	40.68	45	105	25.28	58.99
Rarely important	14	86	7.91	48.59	29	134	16.29	75.28
Never important	4	90	2.26	50.85	5	139	2.81	78.09
Does not apply	87	177	49.15	100.00	39	178	21.91	100.00
Did not respond								

TABLE XII (Continued)

	Technologies Managers Use				Importance for Improvement			
Technology	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
INTEGRATED WITH OTHER FUNCTIONS								
Very important	30	30	17.65	17.65	49	49	28.82	28.82
Somewhat important	33	63	19.41	37.06	54	103	31.77	60.59
Rarely important	18	81	10.59	47.65	26	129	15.29	75.88
Never important	3	84	1.77	49.41	3	132	1.77	77.65
Does not apply	86	170	50.59	100.00	38	170	22.35	100.00
Did not respond	23	-	-	-	23	-	-	-
USE DISK STORAGE								
Very important	42	42	24.00	24.00	52	52	30.59	30.59
Somewhat important	32	74	18.29	42.29	42	94	24.71	55.29
Rarely important	17	91	9.71	52.00	31	125	18.24	73.53
Never important	5	96	2.86	54.86	4	129	2.35	75.88
Does not apply	79	175	45.14	100.00	41	170	24.12	100.00
Did not respond								
USE TAPE STORAGE								
Very important	13	13	7.83	7.83	19	19	11.66	11.66
Somewhat important	20	33	12.05	19.88	25	44	15.34	26.99
Rarely important	17	50	10.24	30.13	34	78	20,86	47.85
Never important	9	59	5.42	35.54	15	93	9.20	57.06
Does not apply	107	166	64.46	100.00	70	163	42.95	100.00
Did not respond	27	-	-	-	30	-	-	-

TABLE XII (Continued)

Technology	Technologies Managers Use				Importance for Improvement			
	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
DIAL INPUT WITHIN BUILDING								
Very important	51	51	29.65	29.65	49	49	28.99	28.99
Somewhat important	31	82	18.02	47.67	32	81	18.94	47.93
Rarely important	10	92	5.81	53.49	24	105	14.20	62.13
Never important	3	95	1.74	55.23	9	114	5.33	67.46
Does not apply	77	172	44.77	100.00	55	169	32.54	100.00
Did not respond	21	-	-	-	-	-	-	-
DIAL INPUT FROM OUTSIDE THE BUILDING								
Very important	20	20	11.77	11.77	24	24	14.12	14.12
Somewhat important	30	50	17.65	29.41	36	60	21.18	35.39
Rarely important	17	67	10.00	39.41	35	95	20.59	55.88
Never important	8	75	4.71	44.12	16	111	9.41	65.29
Does not apply	95	170	55.88	100.00	59	170	34.71	100.00
Did not respond								
TAPED DICTATION								
Very important	17	17	26.98	26.98	18	18	28.13	28.13
Somewhat important	9	26	14.29	41.27	12	30	18.75	46.87
Rarely important	6	32	9.52	50.79	9	39	14.06	60.94
Never important	5	37	7.94	58.73	5	44	7.81	68.75
Does not apply	26	63	41.27	100.00	20	64	31.25	100.00
Did not respond	130	-	-	-	129	-	-	-

TABLE XII (Continued)

	Technologies Managers Use				Importance for Improvement			
Technology	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
CENTRALIZED WORD PROCESSING								
Very important	43	43	24.43	24.43	46	46	26.29	26.29
Somewhat important	27	70	15.34	39.77	42	88	24.00	50.29
Rarely important	21	91	11.93	51.71	33	121	18.86	69.14
Never important	4	95	2.27	53.98	9	130	5.14	74.29
Does not apply	81	176	46.02	100.00	45	175	25.71	100.00
Did not respond								
DECENTRALIZED WORD PROCESSING								
Very important	25	25	15.43	15.43	24	24	14.46	14.46
Somewhat important	28	53	17.28	32.72	45	69	27.11	41.57
Rarely important	16	69	9.88	42.59	25	94	15.06	56.63
Never important	9	78	5.56	48.15	12	106	7.23	63.86
Does not apply	84	162	51.85	100.00	60	166	36.15	100.00
Did not respond	31	-	-	-	-	-	-	-
DEPARTMENTALIZED WORD PROCESSING								
Very important	17	17	10.63	10.63	27	27	26.56	16.56
Somewhat important	30	47	18.75	29.36	39	66	23.93	40.49
Rarely important	14	61	8.75	38.13	26	92	15.95	56.44
Never important	7	68	4.38	42.50	6	98	3.68	60.12
Does not apply	92	160	57.50	100.00	65	163	39.88	100.00
Did not respond	33	-	-	-	-	-	-	-

Under each technology managers use in performing their tasks, between 45 percent and 65 percent of the respondents indicated the technology does not apply. This could be because managers are unaware of the usefulness of the tools in performing their tasks or because the technologies are not available. Apparently, fewer than half of the respondents have word processing even though this technology is thought to be fairly common in the business world.

Data Processing and Information Processing. Table XIII, pages 58 -61, lists the various technologies under data processing including personal computer at work, personal computer at home, portable computer, on-line to main computer, used for decision making; used to generate graphs, charts, and so forth; used to generate reports; and terminal at manager's desk. Information processing is the combination of data processing and word processing functions. Over half of the managers indicated they used data processing with on-line to computer, for decision making, and for generating reports. About one-third found using data processing to generate graphs, charts, etc.; using a personal computer at work; and using information processing somewhat important. Although much of the professional literature indicates that more and more managers use terminals at their own desks, only about one-fourth of the respondents stated it was at least somewhat important to use a terminal at his/her desk.

Over half of the respondents indicated using data processing technologies such as personal computer at work, on-line to computer, used for decision making, used to generate graphs, charts, etc.; used to generate reports, and information processing technologies were at least somewhat important for improving managerial productivity. Data

processing used to generate reports for improving managerial productivity was the only technology rated very important by half of the respondents.

In all cases, data processing and information technologies were rated higher in importance to use to improve managerial productivity than in current use of the technologies. However, only use of portable computer and use of terminal at manager's desk were rated twice as high on helpful in improving managerial productivity than in current use.

Does not apply was rated much more frequently in technologies managers currently use than in technologies which were important for improving managerial productivity.

Other electronic capabilities. Other electronic capabilities listed in Table XIV, pages 62 - 63, included data communications, teleconferencing, facsimile devices, electronic mail, and electronic scheduling. Data communications was listed as at least somewhat important more frequently (43 percent of the time) than any of the other electronic capabilities, with teleconferencing listed 36 percent of the time being the second most frequently used.

Importance of using other electronic capabilities for improving managerial productivity was rated higher in all technologies than was current use, however data communications was at least somewhat important in improving managerial productivity in over half of the responses.

Does not apply was rated very often (at least 43 percent) in all five of the technologies regarding managers' current use. This could indicate that managers do not have these technologies available to them at this time. Does not apply was rated between 28 percent and 42 percent in the responses concerning the importance for using these technologies

TABLE XIII

AUTOMATED TECHNOLOGIES
DATA PROCESSING AND
INFORMATION
PROCESSING

	Technologies Managers Use				Importance for Improvement			
Technology	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
PERSONAL COMPUTER AT WORK								
Very important	26	26	14.53	14.53	52	52	29.21	29.21
Somewhat important	31	57	17.32	31.84	50	102	28.09	57.30
Rarely important	11	68	6.15	37.99	17	119	9.55	66.85
Never important	7	75	3.91	41.90	6	125	3.37	70.23
Does not apply	104	179	58.10	100.00	53	178	29.78	100.00
Did not respond								
PERSONAL COMPUTER AT HOME								
Very important	11	11	6.32	6.32	16	16	9.30	9.30
Somewhat important	15	26	8.62	14.94	35	51	20.35	29.65
Rarely important	16	42	9.20	24.14	33	84	19.19	48.84
Never important	12	54	6.90	31.03	15	99	8.72	57.56
Does not apply	120	174	68.97	100.00	73	172	42.44	100.00
Did not respond	19	-	-	-	-	-	-	-

TABLE XIII (Continued)

Technology	Technologies Managers Use				Importance for Improvement			
	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
PORTABLE COMPUTER								
Very important	6	6	3.45	3.45	6	6	3.53	3.53
Somewhat important	9	15	5.16	7.62	18	24	10.59	14.12
Rarely important	17	32	9.77	18.39	41	65	24.12	38.24
Never important	13	45	7.47	25.86	25	90	14.71	52.94
Does not apply	129	174	74.14	100.00	80	170	47.06	100.00
Did not respond	19	-	-	-	23	-	-	-
ON-LINE TO COMPUTER								
Very important	61	61	34.08	34.08	69	69	39.66	39.66
Somewhat important	34	95	18.99	53.07	39	108	22.41	62.07
Rarely important	11	106	6.15	59.22	21	129	12.07	74.14
Never important	5	111	2.79	62.01	3	132	1.72	75.86
Does not apply	68	179	37.99	100.00	42	174	24.14	100.00
USED FOR DECISION MAKING								
Very important	63	63	35.00	35.00	81	81	46.02	46.02
Somewhat important	46	109	25.56	60.56	44	125	25.00	71.02
Rarely important	14	123	7.78	68.33	13	138	7.39	78.41
Never important	4	127	2.22	70.56	5	143	2.84	81.25
Does not apply	53	180	29.44	100.00	33	176	18.75	100.00
Did not respond	13	-	-	-	17	-	-	-

TABLE XIII (Continued)

Technology	Technologies Managers Use				Importance for Improvement			
	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
USED TO GENERATE GRAPHS, CHARTS, ETC.								
Very important	26	26	14.86	14.86	46	46	26.59	26.59
Somewhat important	40	66	22.86	37.71	43	89	24.86	51.45
Rarely important	20	86	11.43	49.14	28	117	16.19	67.63
Never important	7	93	4.00	53.14	9	126	5.20	72.83
Does not apply	82	175	46.86	100.00	47	173	27.17	100.00
Did not respond	18	-	-	-	20	-	-	-
USED TO GENERATE REPORTS								
Very important	71	71	39.67	39.67	90	90	50.85	50.85
Somewhat important	52	123	29.05	68.72	50	140	28.25	79.10
Rarely important	4	127	2.24	70.95	10	150	5.65	84.75
Never important	4	131	2.24	73.18	2	152	1.13	85.88
Does not apply	48	179	26.82	100.00	25	177	14.12	100.00
Did not respond	14	-	-	-	16	-	-	-
TERMINAL AT MANAGER'S DESK								
Very important	20	20	11.56	11.56	38	38	21.84	21.84
Somewhat important	21	41	12.14	23.70	43	81	24.71	46.55
Rarely important	13	54	7.51	31.21	32	113	18.39	64.94
Never important	8	62	4.62	35.84	8	121	4.60	69.54
Does not apply	111	173	64.16	100.00	53	174	30.46	100.00
Did not respond	20	-	-	-	19	-	-	-

TABLE XIII (Continued)

Technology	Technologies Managers Use				Importance for Improvement			
	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
INFORMATION PROCESSING								
Very important	34	34	21.80	21.80	56	56	35.33	35.22
Somewhat important	34	68	21.80	43.59	48	104	30.19	65.41
Rarely important	9	77	5.77	49.36	14	118	8.81	74.21
Never important	4	81	2.56	51.92	4	122	2.52	76.73
Does not apply	75	156	48.08	100.00	37	159	23.27	100.00
Did not respond	37	-	-	-	34	-	-	-

TABLE XIV

AUTOMATED TECHNOLOGIES
OTHER ELECTRONIC
CAPABILITIES

Technology	Technologies Managers Use. Freq.	Cum. Freq.	Percent	Cum. Percent	Importance for Improvement Freq.	Cum. Freq.	Percent	Cum. Percent
DATA COMMUNICATIONS								
Very important	40	40	22.73	22.73	45	45	26.16	26.16
Somewhat important	36	76	20.46	43.18	53	98	30.81	56.98
Rarely important	13	89	7.39	50.57	21	119	12.21	69.19
Never important	5	94	2.84	53.41	4	123	2.33	71.51
Does not apply	82	176	46.59	100.00	49	172	28.49	100.00
Did not respond	17	-	-	-	21	-	-	-
TELECONFERENCING								
Very important	19	19	10.86	10.86	27	27	15.70	15.70
Somewhat important	45	64	25.71	36.57	53	80	30.81	46.51
Rarely important	26	90	14.86	51.43	34	114	19.77	66.28
Never important	9	99	5.14	56.57	6	120	3.49	69.77
Does not apply	76	175	43.43	100.00	52	172	30.23	100.00
Did not respond	18	-	-	-	21	-	-	-

TABLE XIV (Continued)

Technology	Technologies Managers Use				Importance for Improvement			
	Freq.	Cum. Freq.	Percent	Cum. Percent	Freq.	Cum. Freq.	Percent	Cum. Percent
FACSIMILE DEVICES								
Very important	20	20	11.49	11.49	25	25	14.71	14.71
Somewhat important	31	51	17.82	29.31	41	66	24.12	38.82
Rarely important	21	72	12.07	41.38	34	100	20.00	58.82
Never important	12	84	6.90	48.28	12	112	7.06	65.88
Does not apply	90	174	51.72	100.00	58	170	34.12	100.00
Did not reply	19	-	-	-	23	-	-	-
ELECTRONIC MAIL								
Very important	15	15	8.62	8.62	19	19	11.18	11.18
Somewhat important	18	33	10.34	18.97	38	57	22.35	33.53
Rarely important	26	59	14.94	33.91	37	94	21.77	55.29
Never important	8	67	4.60	38.51	8	102	4.71	60.00
Does not apply	107	174	61.49	100.00	68	170	40.00	100.00
Did not respond	19	-	-	-	-	-	-	-
ELECTRONIC SCHEDULING								
Very important	7	7	4.05	4.05	14	14	8.24	8.24
Somewhat important	21	28	12.14	16.19	39	53	22.94	31.18
Rarely important	20	48	11.56	27.75	34	87	20.00	51.18
Nver important	10	58	5.78	33.53	11	98	6.47	57.65
Does not apply	115	173	66.47	100.00	72	170	42.35	100.00
Did not respond	20	-	-	-	23	-	-	-

in improving managerial productivity. This could indicate that managers are not aware of the capabilities other electronic equipment offer as managerial tools.

In answer to the research question, what automated technologies are managers currently using, apparently, data processing is used for decision making and to generate reports; data communications is used somewhat; and word processing is not used in a great number of managerial tasks currently being performed. Word processing, especially on-line and integrated; data processing used on-line to generate reports, charts, graphs, etc., and portable computers; information processing; and data communications are all important to managers to improve their own productivity.

Measuring Managerial Productivity

Techniques or Analyses Currently Used. Responses to the research question "what techniques or analyses do you currently use to measure your own managerial productivity," are listed in Table XV, pages 66 - 67. The measurement which occurred most often was quantitative in nature - use of bottom line figure, company statistics, and quotas - although it was followed closely by whether objectives and goals were met and met on time. Other measurement techniques managers mentioned frequently were subordinates' and supervisors' attitudes and comments concerning the manager's productivity.

Having responded to the types of measurements used, the people surveyed were asked to indicate whether those measurements seemed to be adequate. Over half of the managers (55.51 percent) indicated that they felt their measurement techniques were adequate and 44.59 percent stated

that their measurement techniques were not adequate. Interestingly however, the measurement technique which occurred most often (bottom line figures, company statistics) was listed as an inadequate measurement technique most often.

Techniques Recommended for Measuring Managerial Productivity. Respondents suggested additional techniques for measuring managerial productivity. The additional techniques are similar to the criteria necessary for improving managerial productivity. (See Table XVI, p. 68-69.) Although there was no particular suggestion that appeared more than six times, most suggestions were subjective in nature and many were "people-oriented suggestions. Many managers indicated that they had no idea what measurement techniques could be used.

Summary

Top- and middle-level managers were subjective in dealing with the topic of improving and measuring their productivity. They were concerned with the human element, with goal setting, and with deadlines.

Managers used automated technologies primarily in the form of on-line computers for decision making and report generation. Other technologies used were data communications and teleconferencing.

Managers suggested automated technologies as a way to improve productivity; however, managers do not seem to be personally using office automation at this time.

TABLE XV

TECHNIQUES CURRENTLY USED TO MEASURE MANAGERIAL PRODUCTIVITY

Item	Frequency
Bottom line figure, company statistics, quotas	24
Objectives met on time; meeting deadlines	19
Real production versus goals and objectives	17
Subordinates' attitudes and comments	15
Work units finishing on time; productivity of subordinates	12
Supervisors' attitudes, comments, evaluations	9
Management by Objectives (MBO)	7
Annual and daily goal setting	7
Time management programs	7
Promotability of and responsibility taken by subordinates	6
Personal feeling of accomplishment or nonaccomplishment	5
Meeting company goals	4
Work output versus input	3
Task reports, activity reports; monthly and yearly	3
Review of objectives (minimum acceptable objective system)	3
Customer satisfaction	3
Self evaluations	3
Feedback from outside of the department, cooperation	2
Daily review at quiet time	2
Necessity of repeating instructions	2
Partner evaluations, colleague feedback	2
Number of sales quotas	2

TABLE XV (Continued)

Item	Frequency
Absence of problems	2
Objectives including personal development, professional growth, project development	1
Accuracy	1
Trying new ideas	1
Decisions made	1
Use of all available resources	1
Reference to managerial checklist on desk	1
Actual time versus time billed or estimated	1
Areas audits	1
Assessing the time required to overcome initial inertia and get moving	1
Listening for organizational "noise"	1
Solving problems in short time frame	1
Effectiveness of solving problems	1
Training and performance of management	1
Lack of lawsuits	1
Chart projects with expected completion dates, yearly	1
Objectives by company over-all standards and policies	1
Average output per employee	1
Timeliness, expedience, perception	1
Performance rating	1

TABLE XVI

TECHNIQUES OR ANALYSES SUGGESTED FOR MEASURING MANAGERIAL PRODUCTIVITY

Item	Frequency
Performance objectives, appraisal	6
More frequent status reviews of goal attainment	4
Employee responses, morale	4
Open communication	4
Clearly defined job analysis, expectation sheet, job descriptions	3
Training	2
Expenses versus results, input-output analysis	2
Combination of subjective and objective measures	2
Identify "quality of life" activities	2
Quality of product or services	2
Identify "quality of life" activities	2
Quality of product or services	2
Growth and profit of company in dollars and employee attitudes	1
Measure results	1
Cooperation	1
Establish priorities	1
Statistical records	1
Candid discussions with company president	1
Establish productivity levels	1
Executive staff training	1
Goal setting	1

TABLE XVI (Continued)

Item	Frequency
Staff meetings for all levels	1
Microcomputer software	1
Turnover data	1
Subordinate development	1
Computerize	1
Measure performance over longer periods of time	1

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to identify through the use of a questionnaire how middle-level and senior-level managers define managerial productivity, to determine what emphasis is being placed on improving managerial productivity, by these managers and their organizations; to determine what techniques, skills, and characteristics these managers feel are important to improving productivity; to determine what office technologies are used and considered important by these managers; and to determine current and recommended practices for measuring managerial productivity.

SAS was utilized to tabulate data into frequencies and percentages. Correlation coefficients were run on the data to determine whether there was a difference by age groups of each management level concerning increased efforts at improving their productivity.

Conclusions

The conclusions set forth in this section are based upon the results of the research study reported in Chapter IV.

1. Managers included in their definition of managerial productivity better utilization of human resources; increased performance of the manager; increased quality of decisions, work products, and services of

the manager; increased effectiveness (productive in getting results); and increased efficiency (using least wasteful means of completing a task). Managers perceived managerial productivity as the effective and efficient use of human, natural, and technical resources.

2. Managers are working toward improving their productivity more this year than they were least year.

3. Half of the organizations are placing more emphasis on measuring mangerial productivity this year than last year.

4. A relatively few organizations have specific programs and/or guidelines for working toward the improvement of managerial productivity. The organizations which do have guidelines and programs use training seminars, development meetings, and other workshops, courses, and seminars. MBO is also useful in improving managerial productivity according to these organizations.

5. No differences were shown between management level (top or middle), or age and whether the managers are working toward improving managerial productivity more this year than last year.

6. There was no relationship in a manager's gender to whether he/she was working toward improving managerial productivity more this year than last year.

7. Goal setting, personal development, and use of interpersonal skills are important to managers in improving their own productivity. Managers are people oriented and therefore find importance in improving themselves personally in order to improve their productivity on the job.

8. Managers are not using the automated technologies which are available to them to perform their managerial tasks.

9. Word processing is not viewed as necessary in improving

managerial productivity. Technologies which would be helpful in improving managerial productivity are personal computers at work to be used for decision making and to generate reports and data communications. Other technologies were not important to managers in improving their productivity.

10. Managers currently measure their own productivity by monitoring whether they met their goals and objectives on or before their deadlines; whether their real production met their goals and objectives; and by the attitudes and comments of their subordinates and their superiors. Managers who use these measurement techniques feel their measurement is adequate. Some managers use profitability and company statistics--these managers are not satisfied with their measurement techniques.

11. Managers cannot recommend techniques or analyses in measuring their own productivity because they felt their positions have "unmeasurable" characteristics. Many managers would like a measurement technique to be developed.

Recommendations and Limitations

As a result of the limitations of the study and the findings in the tabulation of the data collected and analyzed, the researcher makes the following recommendations:

1. A study should be conducted to determine whether managers are aware of the technologies that are available and how these automated technologies could be used as tools to perform tasks more efficiently and effectively.

2. A follow-up study should be conducted to determine if organizations which do not currently have guidelines for improving

managerial productivity implement programs in the future.

4. A model for managerial productivity measurement should be developed and implemented in an organization. A long-term study should then be conducted to determine the effectiveness and usefulness of the measurement technique.

5. This study should be duplicated to determine if the responses are similar in different regions of the country and with different sampling techniques.

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APPENDIXES

APPENDIX A

CORRESPONDENCE AND QUESTIONNAIRE

Oklahoma State University

COLLEGE OF BUSINESS ADMINISTRATION

STILLWATER, OKLAHOMA 74078
(405) 624-5064

March 7, 1983

Productivity. The term is in the thoughts of managers at all levels in all types of industries. It has become a major concern nationwide over the past few years because the United States has experienced a decrease in productivity.

As business educators, we are concerned about managerial productivity philosophies held by middle- and upper-level managers. In order to gain information on how these top-level managers define productivity, what emphasis is placed on managerial productivity, and what current practices are being used to evaluate managerial productivity, we need your help.

The Administrative Management Society has a strong reputation for holding outstanding membership of leaders from business and industry throughout the nation. Responses from such people would aid in answering the questions of concern. May we have a copy of the membership roster from your chapter.

Let us assure you that the roster would be used only for the mailing of the questionnaire and that the list would not be shared with any unauthorized persons. If you desire, it will be returned to you when the study is completed. In addition, a copy of the result of the study will be sent to your chapter, if you would like one.

Please indicate on the enclosed postal card if you can send a copy of your AMS chapter roster by March 25, 1983. Also indicate if your chapter would like a copy of the completed study. We will appreciate your assistance.

Sincerely,

Cynthia E. Johnson
Graduate Teaching Associate

Arnola C. Ownby, Coordinator
Office Producitvity Unit

enclosure

April 1, 1983

Last summer you were kind enough to take some time to share your ideas concerning managerial productivity. May I ask your assistance one more time?

Enclosed is a rough draft of the questionnaire that was designed from information gained from interviews with managers such as yourself, and from literature in the field. Would you please answer and evaluate the questionnaire, making suggestions that might clarify or in any way enhance the form. Then, please return it in the enclosed, postage-paid envelope, as soon as possible.

Your time and effort in reviewing this questionnaire is greatly appreciated. A copy of the final results will be sent to you. Also, as was mentioned last summer, you will be acknowledged in final dissertation.

Sincerely,

Cynthia E. Johnson
Graduate Teaching Associate
College of Business
Oklahoma State University
Stillwater, OK 74078
(405) 624-6286

Oklahoma State University
COLLEGE OF BUSINESS ADMINISTRATION

STILLWATER, OKLAHOMA 74078
(405) 624-5064

May 5, 1983

MANAGERS' PERCEPTIONS OF MANAGERIAL PRODUCTIVITY

As business educators, we are concerned about managerial productivity philosophies held by middle- and upper-level managers. In order to gain information on how these managers define productivity, what emphasis is placed on managerial productivity, and what current practices are being used to evaluate managerial productivity, we need your help.

The Administrative Management Society has a strong reputation for holding membership of outstanding leaders from business and industry throughout the nation. Therefore, responses from management leaders, such as yourself, would aid in answering the questions of concern. Would you take a few minutes to answer the questions on the enclosed questionnaire?

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so that we may check your name off the mailing list when your questionnaire is returned. Your name will never by placed on the questionnaire.

If you have questions concerning this survey, please feel free to call Cynthia Johnson at (405) 377-5439. We will look forward to having your completed questionnaire within a week.

Cynthia E. Johnson
Teaching Associate

Arnola C. Ownby, Coordinator
Office Productivity Unit

Oklahoma State University

COLLEGE OF BUSINESS ADMINISTRATION

STILLWATER, OKLAHOMA 74078
(405) 624-5064

May 19, 1983

MEASURING MANAGERIAL PRODUCTIVITY

Managers are concerned about productivity in all levels of their organizations. Some literature suggests that there is a need to evaluate the productivity of managers themselves. Unfortunately, we have only a sketchy idea of how managers define managerial productivity, whether they measure it, and what, if any, automation managers think might be useful in improving their productivity.

Recently, you were sent a questionnaire which might aid in answering these questions. In order that the results represent the feelings of managers, it is important that each questionnaire be compelted and returned. Won't you please help by returning the enclosed questionnaire by May 27, 1983? (If you have already returned the first questionnaire, we thank you for your participation. Please disregard this one.)

Again, you may be assured that answers will be confidential. Please help by returning the questionnaire.

Cynthia E. Johnson
Teaching Associate

Arnola C. Ownby, Coordinator
Office Productivity Unit

MEASURING MANAGERIAL PRODUCTIVITY

I. Personal Data

A. According to the following definitions of various levels of managers please check the management position which best describes your status.

1. ( ) top management - develops strategies, policies, and procedures, decision maker; planner; job functions highly unstructured

2. ( ) middle management - implements strategies, policies, and procedures developed by top management; operating decision maker; trouble shooter; job functions somewhat unstructured

3. ( ) production/operations management - plan, organize, staff, direct, and control all the activities of the organization's productive system

Note: If you checked box 1 or 2 please continue. If you checked box 3, please return the questionnaire. Thank you for your assistance.

B. Please check your appropriate age group.

1. ( ) 24-35
2. ( ) 36-45
3. ( ) 46-55
4. ( ) 56-65
5. ( ) 65+

C. Sex: ( ) Female ( ) Male

D. Length of Tenure:

1. in current position:

1. ( ) less than 5 years
2. ( ) 5 - 10 years
3. ( ) 11- 20 years
4. ( ) more than 20 years

2. in any management position, including current position:

1. ( ) less than 5 years
2. ( ) 5 - 10 years
3. ( ) 11- 20 years
4. ( ) more than 20 years

E. Please check the type of business or industry in which you are employed.

1. ( ) Agriculture
2. ( ) Automobile
3. ( ) Communication
4. ( ) Construction
5. ( ) Finance, Insurance
6. ( ) Heavy equipment
7. ( ) Government
8. ( ) Manufacturing
9. ( ) Medical
10. ( ) Mining
11. ( ) Oil
12. ( ) Real Estate
13. ( ) Service
14. ( ) Recreation
15. ( ) Transportation
16. ( ) Wholesale/Retail
17. ( ) Other, please specify _____

II. Define Managerial Productivity

A. Indicate which of the following would be included in a definition of managerial productivity by placing a check mark in the agree or disagree column. (The following items have been drawn from literature and management interviews.)

	Agree	Disagree
1. better utilization of human resources	___	___
2. increased performance of manager	___	___
3. increased quality of decisions, work, products, and services of manager	___	___
4. increased effectiveness (productive in getting results)	___	___
5. increased efficiency (using least wasteful means of completing a task)	___	___
6. manager's total output divided by total input	___	___
7. other (please specify)		

_____
_____
_____

B. What is your perception of managerial productivity? Response:

III. Improving Managerial Productivity

A. Is your focus more involved with improving your own productivity now than it was last year? ___yes ___no

B. Do you feel your organization places more emphasis on measuring your own productivity as a manager? ___yes ___no

C. Do you or does your organization <u>have</u> programs and/or guidelines to improve managerial productivity? ___ yes ___ no. If yes, what are they and how are they implemented?

IV. Using the scale at the right, please indicate the importance of meeting the following criteria in improving your own managerial productivity by placing a check mark in the appropriate column.

	Very Important	Somewhat Important	Rarely Important	Never Important	Does Not Apply
A. Goal Setting Activities					
1. Job Related:					
a. Time management	—	—	—	—	—
b. Set daily goals	—	—	—	—	—
c. Set weekly goals	—	—	—	—	—
d. Set monthly goals	—	—	—	—	—
e. Set quarterly goals	—	—	—	—	—
f. Set annual goals	—	—	—	—	—
2. Determine your own goals	—	—	—	—	—
3. Someone else determines your goals	—	—	—	—	—
4. Management by objectives	—	—	—	—	—
5. Other, please list _____					
_____					
_____					
B. Personal Development					
1. Formal education	—	—	—	—	—
2. Workshops, seminars, etc.	—	—	—	—	—
3. Professional organizations	—	—	—	—	—
4. Reading related materials	—	—	—	—	—
5. Other, please list _____					
_____					
_____					
C. Interpersonal skills					
1. Flexibility	—	—	—	—	—
2. Leadership	—	—	—	—	—
3. Communications, oral	—	—	—	—	—
4. Communications, non-verbal					
a. facial expressions	—	—	—	—	—
b. tone of voice	—	—	—	—	—
c. personal appearance	—	—	—	—	—
d. eye contact	—	—	—	—	—
5. Communications, written	—	—	—	—	—
6. Communications, effective listening	—	—	—	—	—
7. Positive self-image	—	—	—	—	—
8. Security needs for self	—	—	—	—	—
9. Social belongingness	—	—	—	—	—
0. Self esteem	—	—	—	—	—

V. Using the scale at the right indicate what automated technologies you actually use in performing your managerial tasks by placing a check mark in the appropriate column.

	Very Important	Somewhat Important	Rarely Important	Never Important	Does Not Apply
A. Word Processing					
1. Stand alone unit (self sufficient unit)	—	—	—	—	—
2. On-line to computer	—	—	—	—	—
3. Integrated with other functions	—	—	—	—	—
4. Use disk storage	—	—	—	—	—
5. Use tape storage	—	—	—	—	—
6. Dial (telephone) input:					
a. from within your building	—	—	—	—	—
b. from outside your building (such as home, mobile phone, etc.)	—	—	—	—	—
7. Taped dictation					
8. Access to word processing equipment					
a. Centralized (as in word processing center)	—	—	—	—	—
b. Decentralized (terminal unit at each work station)	—	—	—	—	—
c. Departmentalized (unit or terminal in each department)	—	—	—	—	—
B. Data Processing					
1. Use personal computer at work	—	—	—	—	—
2. Use personal computer at home	—	—	—	—	—
3. Portable computer	—	—	—	—	—
4. On-line to mainframe/central processing unit	—	—	—	—	—
5. Used for decision-making	—	—	—	—	—
6. Used to generate graphs, charts, etc.	—	—	—	—	—
7. Used to generate reports, etc.	—	—	—	—	—
8. Terminal at your own desk	—	—	—	—	—
C. Information Processing--combination of word processing and data processing capabilities	—	—	—	—	—
D. Other Electronic Capabilities					
1. Data communications	—	—	—	—	—
2. Teleconferencing	—	—	—	—	—
3. Facsimile devices	—	—	—	—	—
4. Electronic mail	—	—	—	—	—
5. Electronic scheduling	—	—	—	—	—

VI. Using the scale at the right, please indicate the importance of using the technology listed below in improving your own productivity.

	Very Important	Somewhat Important	Rarely Important	Never Important	Does Not Apply
A. Word Processing					
1. Stand alone unit (self sufficient unit)	—	—	—	—	—
2. On-line to computer	—	—	—	—	—
3. Integrated with other functions	—	—	—	—	—
4. Use disk storage	—	—	—	—	—
5. Use tape storage	—	—	—	—	—
6. Dial (telephone) input:					
a. from within your building	—	—	—	—	—
b. from outside your building (such as home, mobile phone, etc.)	—	—	—	—	—
7. Taped dictation					
8. Access to word processing equipment					
a. Centralized (as in word processing center)	—	—	—	—	—
b. Decentralized (terminal unit at each work station)	—	—	—	—	—
c. Departmentalized (unit or terminal in each department)	—	—	—	—	—
B. Data Processing					
1. Use personal computer at work	—	—	—	—	—
2. Use personal computer at home	—	—	—	—	—
3. Portable computer	—	—	—	—	—
4. On-line to mainframe/central processing unit	—	—	—	—	—
5. Used for decision-making	—	—	—	—	—
6. Used to generate graphs, charts, etc.	—	—	—	—	—
7. Used to generate reports, etc.	—	—	—	—	—
8. Terminal at your own desk	—	—	—	—	—
C. Information Processing--combination of word processing and data processing capabilities	—	—	—	—	—
D. Other Electronic Capabilities					
1. Data communications	—	—	—	—	—
2. Teleconferencing	—	—	—	—	—
3. Facsimile devices	—	—	—	—	—
4. Electronic mail	—	—	—	—	—
5. Electronic scheduling	—	—	—	—	—

VII. Managerial Productivity Measurement

A. What techniques or analyses do you currently use to measure your own managerial productivity?

B. Do you feel that current techniques adequately measure your own managerial productivty? ___ yes ___ no. If no, what are the limitations in the current process.

C. What additional techniques or analyses do you recommend for measuring managerial productivity?

THANK YOU! Your time and cooperation are sincerely appreciated.

APPENDIX B

LIST OF MANAGERS' PERCEPTIONS OF MANAGERIAL PRODUCTIVITY

TABLE XVII

LIST OF MANAGERS' PERCEPTIONS OF MANAGERIAL PRODUCTIVITY

Managerial productivity means influencing people to achieve effective results.

A manager who delegates and is capable of getting the work done in the least amount of time using the minimum amount of personnel, while at the same time holding expenses to the minimum.

Providing the guidance necessary to obtain the desired results - ability to delegate to others - ability to "giving" lower level managers their highest level of achievement - and get them promoted.

The ability to produce by using only the human resources and machinery needed. Eliminating a crowded situation and waste. Be efficient 100%.

Objective/resources = results

Fulfillment of accountability through effective, organized units under accountability.

Getting job done effectively with alacrity.

Managerial productivity is what the CEO wants it to be. This is a real world approach. A top level manager deals in very broad goals and objectives as approved by the CEO. If the CEO is satisfied, your productivity requirements are met.

Getting the work finished in the most efficient, effective manner.

Getting the product sold and serviced, as a high quality product, at the most reasonable cost.

Effectiveness in meeting goals and plans.

Maximization of return through the best possible use of limited resources.

Utilizing human and natural resources in a manner that produces maximum output.

To be informed on the changes and trends in the industry and responsibility involved. To use resources available effectively and to implement change judiciously.

Profitability of branch, within guidelines of budget. Proper control of staffing. Increased sales.

TABLE XVII (Continued)

Getting the job done as correctly and efficiently as possible using manpower and equipment available and letting subordinates use their own expertise and judgment in doing that job--stepping in only if they get too far off the track.

Matching people with right job to produce as efficiently as possible the product or services.

Using the dollar to the best advantage of your clients

Getting important tasks accomplished in an effective manner on a timely basis.

Effectiveness - all else is too hard to quantify.

Within limits of external forces, maximum utilization of human and material resources to produce, a complete, quality product.

Managerial productivity indicates the degree to which a manager is successful in making decisions or implementing decisions from above or from his group to maximize (1) profit and (2) long time consideration of human aspects of the organization in total.

With the resources at hand causes a plus to the net profit of the company. NOTE: This doesn't have to happen in any accounting period. Can be long range.

Managements responsibility is to keep the flow of data moving the company to the final transaction. The constant challenge is to find ways to reduce the time required and still maintain control. My motto is "it doesn't matter if it is a system in use for one month or 30 years, there is still a better way. The number of changes implemented is one guide of productivity. Another guideline is how many more need to be implemented that time hasn't permitted (lack of productivity)."

Efficient utilization of resources.

Planning and achieving objectives and goals through a highly efficient staff and support personnel. These goals and objectives support the overall goal or plan for the corporate organization.

Maximum utilization of human resources to meet department and organizational goals.

Better utilization of human resources and material resources to increase efficiency of total organization.

Obtaining desired results with cost effective approach and building team work throughout the process.

TABLE XVII (Continued)

More done in less time.

An environment in which repetitive physical activities are minimal, replaced by tools or aids to effect that required work; e.g. automation. As a consequence, the manager has more time to devote to fulfilling his/her objectives through intellectual, creative means. Further, through a disciplined use of time and optimal effective use of tools available to expand the scope of the manager's responsibilities/activities.

Normally measured by bottom line of business unit; however, we find many times that using profit only is not a true measure. We can be profitable and not up to peak performance at times. Also at other times efficiently managing without profit in relation.

Managerial productivity must be closely related to the productivity of the department or unit he/she managers. The operating efficiency and productivity of the unit is a true reflection of the manager's capabilities.

The effective use of all resources for which a manager is responsibile.

To know the company's goals and to attempt to obtain those goals by coordinating all resources for maximum use and output.

Getting results (meeting pre-defined objectives) through/with others in the most efficient, timely manner.

The catalyst of change and purpose. Being able to develop policies, procedures, and services that enhances and enlivens the work environment. Being all things to all people at all times is the age of definition and one of the worst.

Being able to movtivate employees to perform to the satisfaction of management, efficiently and with purpose of growth and self satisfaction in the jobs.

Performance includes both quality and quantity.

Maximizing all resources to gain full effectiveness of operations in the most cost efficient manner.

Managerial productivity can be measured by the results achieved through subordinates. To bring this about, the manager by his or her own reports must insure the proper atmosphere to foster proper development of subordinates and production according to standards. This is accomplished by the manager's planning a course of action, organizing the work, leading the staff to take action and controlling the staff's efforts through assessment and direction.

TABLE XVII (Continued)

It relates to the results that are produced for those items under the manager's responsibility and control. It relates to the ratio of the useful or valuable output from the manager's total function to the resources (inputs) consumed by the manager's total function. It does not relate to activities such as number of meetings, memos, phone calls, etc. generated by the manager.
How well a job is performed. Was the project profitable--either short or long range. Attitude of subordinates. Cohesiveness of the group that is managed.
The ability of getting things done through other people which is of a top quality and yet cost effective.
Managerial productivity is the measurement of an organization's progress (or lack thereof) toward identified objectives in an identified time frame. Activity is not productivity unless movement is made toward objectives. Managerial productivity is dependent upon identification of key factors which influence progress toward objectives and directing efforts to understanding and impacting (when possible) those factors.
Managerial productivity is the product of the degree of skill and expertise applied to a product or situation which leads to the economical and timely achievement of the stated objective within the constraints of the company's overall resources.
The ability to get the job done in the shortest possible time with the least amount of resources.
Ability to accomplish tasks on most efficient manner while utilizing all available resources - human and machine.
Ability to motivate employees to production levels.
Best interaction with human resources by example.
Manager's productivity is reflected in the output and morale of his/her department. Not only is the office/department productivity an important sign, but the manager should be contiuously setting professional, personal, and project goals.
While I do not totally disagree with [manager's total output divided by total input] it is the relationship of input and output (quantities) and the measurement of them that concerns me. The input can be adequately defined and measured but the residual and tangential benefits to the company of a manager's actions both inside and outside the company are difficult to identify and even more difficult to measure. This relationship of input to output, when properly measured, would become the "best" indicator of managerial productivity.

TABLE XVII (Continued)

The amount of productive managerial effort created in a defined time period.
Managing, organizing and controlling individuals and production so as to work in harmony, enjoy what we do and continuously do it better. Whether through technological changes, or by working and communicating better. So as to increase profits, minimize expense, and create a better standard of living for everyone.
Ability to improve and monitor productivity through effective leadership; training, developing, motivating and counseling people concerning their responsibility for the quality of that which they do daily at work and for meeting achievable and attainable goals and objectives of which they are equal partners; how well can you bring your team together and get them to improve performance. Note: We have too many mnagers who are not and never will be professional managers.
Meeting or exceeding defined objectives, including personal objectives and employees' objectives. Objectives should relate to output, costs, personal and professional growth, etc.
Management should be concerned with developing people into productive and efficient employees. It seems many managers' productivity is measured only sales or profit standards. Perhaps, the white collar manager is being compared to managers' who have a product to show for their work, while they have a product which is somewhat less measureable.
Utlizing staff in efficient flow of tasks and objectives by encouraging staff to create improvement and enjoy their own particular challenges.
Utilizes human resources to the optimum level in a smooth, easy environment.
Getting the most out of yourself and your people in obtaining goals that you have cooperatively set.
Making appropriate decisions based on available data delegating to proper personnel to make effective use of human resources and appropriate use of manager's time.
Making the best use of the human and other resources available to ensure high quality decision making resulting in high quality service, to consumers and the development of happy, productive employees. A relationship between consumers, employees and managers that is built on trust one for the other is the key to managerial productivity.
Managerial productivity is a result of managing people and making sound decisions in the use of resources at his or her disposal.
Equal or greater results/output with reduced usage of resources.

TABLE XVII (Continued)

Work output achieved with maximum efficiency.

Results.

Getting the highest level of production from the people you manage.

Getting the job done effectively with minimum cost, maximum understanding, minimum frustration and maximum dedication of subordinates.

Managerial productivity is the achieving of the company's goals with the least amount of resource utilization and employee resentment/burnout.

It depends upon the environment, i.e. industry, form of business. In my opinion, the work of a manager is very qualitative in nature and any attempts to measure short-run results are counter-productive.

Ability to guide areas of concern through appropriate studies and implementations at the same time increasing operating efficiency or reducing costs.

Accomplishing specific goals with the least amount of resources (i.e., cash, human resources, etc.).

The competency to apply skills and traits to the demands of the job within the environmental confines, to an optimal level.

Utilizing all resources available to effectively and cohesively achieve company goals.

Being able to get things done through the use of others. Planning and guiding are ingredients that help to accomplish the above.

Accomplishing the work to be done with the resources available, i.e. people and equipment.

The ability to make sound decisions, with minimum time involvement, and few negative repercussions.

Where possible determining total output. However, managers usually manager things that aren't measurable such as so many widgets produced by the division. Therefore, subjective review of a manager's results are used to determine productivity such as customer's satisfacation, employee morale, staff necessary to accomplish the mission, employee turnover, exit interviews, etc.

Achieving results through other people.

Managerial productivity is the ability to effectively create positive results of a business activity.

TABLE XVII (Continued)

Enabling subordinates to be more productive, i.e. multiplying myself though them.

Diagnose problems, motivate, follow through and monitor results, continually improving and upgrading human resources to receive the most output for your dollar.

Leading and guiding staff to work together to achieve objectives in the most effective and economical ways possible including personal and staff growth and self esteem.

Managerial productivity can be evaluated by reviewing strengths, weaknessess and opportunities of the organization managed, and assessing specific programs of action developed to achieve acceptable results on schedule.

Motivating employees to perform and to meet high quality standards. Implementing projects. Creativity.

Time and skills to achieve predetermined goals, utilizing human resources available, at most cost efficient methods.

The amount of work output.

Management must recognize and assume the responsibility of the problem or situation and through cooperative methods with employees, for the common interest of all, work out a solution or objective.

Should be determined based upon staff productivity.

Quality of work, on a timely basis, to fulfill a need through planning, organizing, controlling and divesting.

Number of functions a manager can effectively manage.

Getting the best job done with the resources available.

Effectively getting things accomplished through others.

Assure productivity by others.

The extent to which my division (unit) meets its annual goals and objectives.

Basically it is getting necessary work done while maintaining morale. Effective use of time, talent, and money.

Desired results - objectives reached.

Desirable but not often achieve - lack of training.

TABLE XVII (Continued)

The constant effort toward enhancing your own and your subordinates abilities and efficiency.
The best use of assets, human resources, etc. to accomplish the stated goal in the shortest amount of time and with the least expense.
It is my opinion that a manager's productivity should be measured on the overall performance of the operation(s) he or she is responsible for.
Cultivation of such good communication with subordinates that tasks get performed with rapid and precise efficiency.

TABLE XVIII

LIST OF PROGRAMS AND GUIDELINES ORGANIZATIONS HAVE IMPLEMENTED FOR IMPROVING MANAGERIAL PRODUCTIVITY

Item	Frequency
Workshops, Courses, Seminars	
Training seminars, development meetings	14
In-house courses	8
Continuing education, formal education	4
Tuition reimbursement	2
EEO workshops	1
Annual report; performance reviews	9
Management by Objectives (MBO)	7
Memberships in variety of organizations	3
Management grid	3
Quarterly goals checked	2
Installation of office automation network, new equipment	2
Computer resources available to individuals, input to design of software	2
Setting goals, meeting objectives, self evaluation	2
Priority descriptions	1
Compensation system oriented to performance	1
Outside consultants	1
Time management	1
Negotiation skills	1
Team building	1
Employee opinion survey	1
Company-wide indexes	1
Louis A. Allen Associates, Inc., Management Action Program for Financial Institutions	1

APPENDIX C

MANAGERS WHO WERE INTERVIEWED

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Ms. Lynne Hummel, Regional Marketing Manager, Texas Instruments, Houston Texas

Mr. Wayne Wegner, Area Director, UNINET, Los Angeles, California

Mr. Mike O'Rourke, Branch Support Manager, Computer Sciences Corporation/INFONET, Houston, Texas

Mrs. Sheila Boughner, Account Executive, American Bell, Inc., Oklahoma City, Oklahoma

Mr. Edward J. Weger, Personnel Manager, Hallmark, Inc., Kansas City, Missouri

Mr. C. J. Edwards, District Manager, Spencer Gifts, Inc., Kansas City, Kansas

VITA

Cynthia Elaine Crank Johnson

Candidate for the Degree of

Doctor of Education

Thesis: MEASURING MANAGERIAL PRODUCTIVITY: PERCEPTIONS OF AND PRACTICES USED BY MANAGERS

Major Field: Business Education

Biographical:

Personal Data: Born in Arkansas City, Kansas, October 20, 1953, the daughter of Frank and Carolyn Crank.

Education: Graduated from Stillwater High School, Stillwater, Oklahoma in May 1971; received Bachelor of Science degree in Business Administration from Oklahoma State University, Stillwater, Oklahoma, in 1975; received Master of Science from Oklahoma State University, Stillwater, Oklahoma, in 1979; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1983.

Professional Experience: Business education instructor, Ripley High School, Ripley, Oklahoma, 1975-1981; Graduate teaching associate, College of Business Administration, Oklahoma State University, 1981-1983.

Professional Organizations: Beta Gamma Sigma, Delta Pi Epsilon, National Business Education Association, Mountain-Plains Business Education Association, Oklahoma Business Education Association, Phi Kappa Phi, Society of Data Educators.