

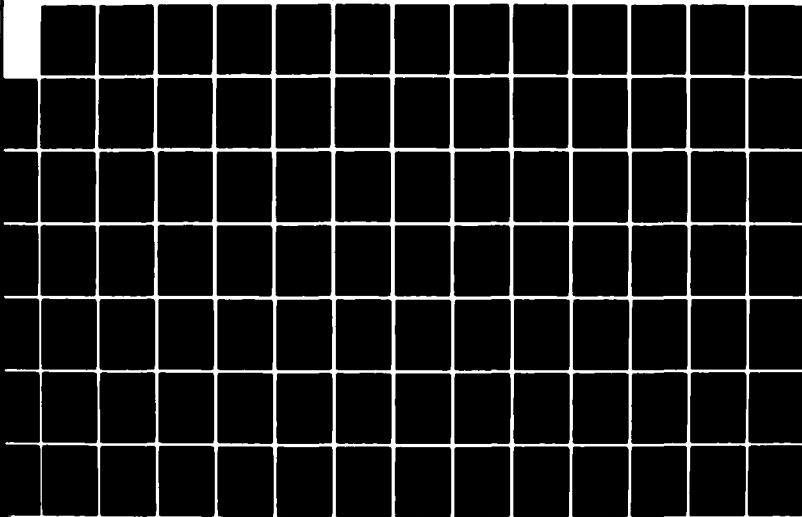
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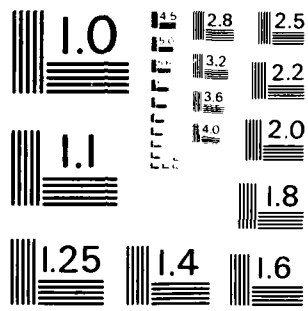
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 A CASE STUDY IN EMPLOYEE MOTIVATION
 VIA RECOGNITION AND
 PROFIT SHARING

 William H. Taggart, First Lieutenant,
 USAF

 LSSR 46-83

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Productivity enhancing initiatives exist in various forms. Enhancing employee motivation to work hard is one means to aid productivity. To assess factors that are potential aids to employee motivation, a case study of Worthington Industries, Incorporated, of Columbus, Ohio was completed. Data selected in the case study involved interviews of personnel at Worthington Industries, a review of company records, and interviews of customers and suppliers to Worthington Industries. Meaningful recognition and profit-sharing systems surfaced as the two key factors to employee motivation in this company. These two factors could assist the Department of Defense in its efforts to motivate its employees. The case study also suggested that a meaningful recognition or profit-sharing system also contributes to job satisfaction. Utilizing a meaningful recognition or profit-sharing program could provide higher productivity and a greater sense of job satisfaction among Department of Defense employees. The Army, Navy, and Air Force were all found to have gain-sharing programs designed to increase employee productivity, but well-executed recognition systems are not common place throughout the Department of Defense.

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A CASE STUDY IN EMPLOYEE MOTIVATION
VIA RECOGNITION AND
PROFIT SHARING

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Logistics Management

By

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First Lieutenant, USAF

September 1983

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has been accepted by the undersigned on behalf of the
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CHAPTER I

INTRODUCTION

This thesis is a case study of Worthington Industries, Inc. of Columbus, Ohio. Worthington Industries was selected as the subject of this report based on impressive records of earnings and productivity. Increased sales and earnings every year for the past twenty years has been routine for Worthington Industries, and for the past ten years, its return on shareholders' equity has averaged 30 percent a year. Cash dividends have also increased steadily since Worthington Industries' stock went public in 1968, and since 1975, dividend growth has been around 45 percent a year (35). Productivity, as measured by sales per employee, was \$309,000 per person in 1982 in its non-union operations. This compares with a median level of around \$102,000 for the metal manufacturing industry and about \$91,000 for all industries (14). Further, rejection rates are consistently less than 1 percent of product shipped, compared to an industry average of less than 5 percent (20).

The following pages elaborate on this introduction by way of a background discussion, a statement of justifications, a problem statement, a list of the research objectives, and the research question. Chapter II reviews the pertinent

literature, while Chapter III discusses the methodology used in this research. Chapter IV presents the results of the data gathered from interviews conducted with individuals employed at Worthington Industries and data gathered from archival records. Chapter V discusses the results. Chapter VI elaborates on those few DOD applications of motivational techniques comparable to what are used at Worthington Industries. Finally, Chapter VII contains conclusions and recommendations.

This effort does not attempt to be all inclusive. Rather, it is an effort to investigate how Worthington Industries uses two factors to facilitate improved productivity: employee recognition and monetary incentives. It is understood that Worthington Industries' performance can be explained only in part by these factors, and that recognition and monetary incentives are only part of the overall picture. Further research will be required to more completely investigate whatever other factors may be at play.

Background

Since the days of Frederick Winslow Taylor and his scientific management principles, organizations have tried to improve their productivity. This effort has been helped to a large extent by improvements in automation and in computer capabilities. Alongside machine and computer technologies has been the technology of human motivation, which has been an important frontier in the productivity process.

Worthington Industries' top managers stress the importance of the employee in their productivity plan and, according to the company's founder and Chief Executive Officer, Mr. John H. McConnell, the employee is key to Worthington's success. McConnell supports a policy of employee recognition and monetary incentives designed to motivate each employee.

McConnell regards employee recognition as the primary factor necessary for high employee output and strong individual motivation to work. In speeches and in writings, he has repeatedly stressed the role that recognition plays in the productivity process. In discussions with Worthington's management staff, one will often hear employee recognition mentioned, especially as it is espoused by Mr. McConnell. According to the company's 1982 annual report, McConnell's system is working! Sales for 1982 were at a record level and were the highest in the company's twenty-five year history (net profit after taxes was \$19,154,000). Sales for 1982 were \$437,625,000. Considering the general economic conditions which prevailed at the time, this is indeed impressive. In that same report, McConnell states, "The key to the company's future success will be our people." This value system, the conviction to adhere to it, and the company's demonstrated successes has brought Worthington Industries' activities to the forefront of national attention.

Justification

At present, the U.S. industrial base seems to be at a low. One source stated that the general condition of the defense industrial base has deteriorated and is in danger of further deterioration in the coming years (29). As a consequence, U.S. national security is being jeopardized (29). One way for the U.S. to alleviate the downturn in productivity would be to increase employee output. Utilizing Worthington Industries' approach could increase productivity while minimizing capital investments in new equipment. Intuitively, it seems likely that if employee recognition aids productivity it also makes for a happier employee. In this respect, the organization gains as does the employee. The same could be true for monetary incentives offered for increased or sustained high levels of output by employees. Under gain-sharing plans, both the company and the employee share in the rewards (10).

Briefly stated, everyone involved in a recognition or gain-sharing plan stands to gain. In the instance of Worthington Industries, employees and the company are realizing gains. If Worthington Industries' concepts could be transferred to other firms, perhaps those organizations and workers could also realize gains. Those same gains, in turn, could help build up our ailing industrial base.

More specifically, if the techniques that Worthington Industries employs to increase or maintain high productivity

could be applied directly to selected Department of Defense (DOD) functions, then the attainment of the defense needs of the U.S. could be greatly enhanced. We may well be able to do more with less. Under conditions of austerity, the DOD might be able to continue its operations without loss of services or capabilities. With the current world political unrest, the U.S. must utilize its assets and capabilities to the fullest. Transferring Worthington Industries' productivity plan to sectors of the DOD may not be a cure-all, even if McConnell's methods prove to be extremely worthy of our attentions, but considering the vastness of the DOD's task, a small percentage gain would equate to a considerable savings.

In looking at the overall picture in the U.S., if productivity or efficiency could be improved across all sectors of our economy, our nation would be far stronger. Our strength does not lie in our military might alone. It lies in our industry, our people, our attitudes and our commitment to a free world. Providing recognition to the work force and using monetary incentives to increase productivity may well be key to our aggregate objective. These items cannot be taken alone, but when coupled with other things (such as legislation encouraging and aiding industrial expansion), they may serve to bolster our defense industrial base.

The purpose of this project then is to investigate the primary causative factors behind Worthington Industries' economic success for possible application to the DOD.

Problem Statement

Providing goods and services effectively and efficiently is a bottom-line goal of every organization. Finding the best approach to accomplish this goal, however, is a formidable task. Organizations strive incessantly to achieve this in the face of theories, opinions, and speculations about what works best. While it is true that many organizations appear to exist in a highly profitable state, the question still remains, "Can it be done better?" Finding the answer to this question challenges even the best of minds.

Worthington Industries is doing it better? Can we learn from them the secret of their success? Can we apply their methods to other organizations and, thereby, help those organizations improve their operations? Can the DOD use those same methods for its betterment? To answer these questions, we must find out what those methods are.

Research Objective

The objective of the research is singular: To learn why employee productivity is so high at Worthington Industries.

Research Questions

There are four research questions this thesis investigates:

1. Is the employee recognition system used at Worthington Industries the primary source of worker motivation?
2. Is the profit-sharing (monetary incentive) program used at Worthington Industries the primary source of worker motivation?
3. What other factors aid employee motivation at Worthington Industries?
4. Could the profit-sharing or recognition program, as it is practiced at Worthington Industries, aid the DOD in increasing worker motivation?

CHAPTER II

LITERATURE REVIEW

Recognition

There is no doubt that recognition is important to us all. Any individual that ever accomplished anything of note desired that someone know about it and acknowledge him/her for it. Not only does the achiever desire recognition for achievement, the achiever will go to great lengths to receive it. Why else does the athlete strive so diligently for months or even years save it be for recognition and the things associated with it?

James F. Lincoln (16:81-101) states that the amateur athlete will strive mightily for recognition and unlike a professional athlete asks not to be paid for his or her efforts. The amateur athlete obtains the respect and status resulting from his/her achievement, and this form of recognition is a potent force in influencing behavior.

While high paying professional careers can result for many amateur athletes, the probability of that kind of success is very small. Most amateur athletes are motivated by an individual desire to achieve a degree of excellence and to be recognized for it. Research suggests that that in itself is a powerful behavior determinant.

Two researchers (Von der Embse and Brown) say that recognition meets an important psychological need of the achiever (32:19). In their writings, recognition is equated to "psychological touching." Psychological touching gets its importance from the need for physical touching during infancy where a disease known as Marasmus can result if a baby is not physically touched from the moment of birth. As an infant grows and matures, physical touching becomes less and less frequent. The psychological touch supplements the physical touch. Ultimately, with the advent of adulthood, the psychological touch becomes the primary method of self-sustainment (32:20).

Further, the individual is strongly motivated to be psychologically touched. One excellent source of psychological touching is the work place. It is here that a large percentage of a person's activities, accomplishments, and achievements are realized. It is also here that interaction with other significant individuals occurs. At home it was the parent, at work it is one's co-workers, superiors and subordinates. The opportunity to receive psychological touching from the work place is significant to the manager.

Von der Embse and Brown stated,

That fact can be effectively used by managers. The essence of motivation lies in providing the psychological touching (recognition) on the job that employees want in return for their working toward achieving management's objectives [32:20].

Von der Embse and Brown go on to say that recognition is so important to employees that if they do not receive the recognition they desire, they will either consciously or subconsciously seek other recognition. This other recognition might be sought from peers or from outside sources. However, a more likely outcome will be to seek recognition through subtle ploys. The result can be negative recognition (32:20-21). In effect, nonperformance may be indirectly encouraged. This aspect of recognition can be compared to the child who is so starving for attention that even parental punishment (a form of attention) is better than no attention at all.

The answer, then, according to Von der Embse and Brown, is to give employees the recognition they seek.

Recognition is also an important aspect of and is closely tied to achievement. In studies done by Herzberg, recognition and achievement were shown to be of top importance to workers (13:60,65-67,72,101). Therefore, when one achieves, recognition could justifiably be seen as an opportunity to positively reinforce that which was achieved. This may sound reminiscent of Pavlov's dogs; however, individuals will respond positively to reinforcement actions on the part of management if those actions are done properly. In the case of the worker, recognition is a reinforcer.

In commenting on the Hawthorne studies, Herzberg further points out that "No manipulation of working conditions or incentives affected productivity as much as the sheer exposure of the work group to observation." Observation is one way of letting employees know that they are being recognized. This observation does not have to be in a negative sense either. The message to employees may well be that they are being observed, that they are accountable, and also rewardable for their good efforts. Properly handled recognition through observation can provide to the employees the understanding that good deeds bring reward. By the same token employees will sense that inappropriate deeds will be observed and appropriately responded to by management.

Various other researchers and behavioral scientists have sung the praises of recognition as employee motivators. Kellogg (15:143) says that recognition and external rewards must supplement the internal satisfaction of achievement for a more fully motivated employee. Quick concurs with Kellogg. In referring to employees' achievements, he makes the following statement:

. . . granted they probably receive gratification from their achievements. But recognition of those achievements by you [meaning management] is probably at least as important to them [24:9].

Herzberg's findings (previously mentioned) also support this. Quick goes on to tout recognition as positive reinforcement.

Stockhard calls for management to search out the highest potential in all employees and to recognize their contributions in appropriate ways (28:147). Stockhard also says that the recognition must be applied to worthy groups of workers as well, and that high producers who are recognized tend to believe that management is interested in the workers' welfare.

Vough and Asbell call for recognition of employees involved in direct production as well as for other individuals that are typically recognized within a firm (such as top sales people or top managers) (33:202). Vough and Asbell go on to say that typical recognition programs for sales people and top managers are attempts to stimulate the minds of those being recognized. The question the authors ask (and rightly so) is, "Why not stimulate the minds of those who do manual work [33:202]."

Needell and Alwon also call for recognition for supervisors and the employees they supervise or are responsible for (22:53). In the words of Needell and Alwon,

Supervisors at most companies perform at less than maximum efficiency because they are not receiving any encouragement. Listening, recognition, and rewards will motivate not only supervisors but the employees they supervise [22:53].

One supervisor that had attended a seminar by Needell and Alwon said, "I would be happy to devote 150 percent of my time and energy to the company, if only I received a little

A proper recognition program should include the following:

1. Employees should have explained to them what is expected of them (32:22).

2. Employees should always be rewarded or recognized when management's objectives are met (32:22).

3. The recognition should be awarded as soon as possible upon a worker's achievement (15:143).

4. The recognition should be commensurate with the level of achievement (13:143-144).

5. Recognition should be given to all employees on an equal basis (22:23).

6. Recognition awards should not be biased or based on management's personal likes or dislikes for given employees (22:23) (the achievement itself is what must be considered).

7. Recognition must be consistently awarded (15:43).

8. Recognition must not be overdone. Management must be careful to give recognition to the employee only when a real sense of achievement exists within the employee (15:143-144). If excessive recognition is awarded the employees, it may lose its valence and meaning to the employees.

9. Recognition must be awarded to the employee by someone of a rank high enough to be a "significant other" to the employee receiving the recognition (22:22).

10. Recognition should be of a positive nature as much as possible; however, negative recognition cannot be eliminated (22:21). Employees need to know that erroneous acts will be noticed and responded to by management.

11. Further, employees need the feedback about their errors in order to make adjustments and corrections in their activities (18:119).

Still requiring discussion at this point are the types of recognition that management can use. There are several and they may or may not be appropriate depending upon the circumstances of a worker's achievement (15:144).

The experts suggest that verbal praise, written praise (letters of appreciation or commendation), cash awards, merit raises, special benefits, opportunity to participate in management activities, a day with the boss, trips at company expense, jewelry, mention of the employee's name in the company newsletter, and stock awards are all types of recognition. The list goes on. The point here is that the various forms of recognition are available and recognition should be varied depending on the achievement (15:143-144). However, management must be sure to use good judgment in assigning recognition. It must be appropriate to the achievement (15:143-144). The above list is just a sample of the more common forms of recognition mentioned throughout the literature reviewed for this research.

Recognition is important to the individual. Receiving recognition also has hidden benefits for the employees and the employer as well. It can give the work place a better environment and make it easier for the employee to face each day, thereby reducing absenteeism and tardiness. Recognition may also reduce stress to a point where the employee can enjoy a happier, healthier and more productive life. Recognition can encourage the employee to have more trust in the boss and to be less afraid to make suggestions. If all employees are receiving recognition and are rewarded for their efforts on a just basis, a sense of cooperation and acceptance could prevail. Employees would not have to compete so much to have their needs for psychological touching gratified, and ploys designed to achieve recognition would be less likely (32:20).

In conclusion, recognition systems, as summarized in the literature reviewed, surfaced as a major contributor to a happier, more productive employee. However, recognition was never suggested by any author as a stand-alone determinant of increased productivity. It is seen as one of many factors contributing to higher productivity.

Monetary Incentives

In our society money is a significant incentive to work (34:86). Behaviorists generally agree on this. However, a disagreement does seem to exist as to just how much monetary

incentives can increase productivity. Herzberg tells us that money is not a motivator but is a good "mover" (12:306), in that money will encourage people to move from one aspect of their job to another in order to get more money (12:306). Herzberg believes that people get a kick or KITA (a kick in the pants) out of getting money. He says that a KITA leads to movement not motivation (12:24). His solution to increasing productivity is to make the work itself more "meaningful" (12:30). He goes on to say that the key to improving productivity is in redesigning the work to provide intrinsic satisfaction from its performance (12:30).

Locke disagrees. In Locke's words,

The fundamental value which an organization can offer employees in return for their efforts is money, because money is instrumental in satisfying (directly or indirectly) all of their needs, including so-called higher level needs [17:21].

Chambers (6:17) disagrees directly with Locke. He states, "Using money in a system of rewards and punishments is effective at the lower level of needs (physiological and safety) since these levels can be directly affected by money's buying power." Locke's answer:

It is a serious error to assume that money is only relevant to the fulfillment of peoples' lower order needs (and associated values). In the first place, a clear separation of lower and higher order needs is not always possible, in most actions, both are involved. For an example, when an individual buys food, what part of the purchase involves lower order and which part involves higher order needs? When a man buys

hamburger instead of spam? When a woman buys steak instead of hamburger? . . . In all of these situations, it is difficult to say what part of the expenditures go solely towards bare physical survival and what part pertain to psychological needs [17:21-22].

However, Locke recognizes that other factors, such as goal setting, feedback, recognition or achievement enter into the motivational process (17:21). Chambers too accepts other factors in addition to money as aids to employee motivation. In Chambers' words, "The important conclusion to be drawn from the whole theory of money as a motivator, is that no one incentive is the only answer to motivating men on the job [6:23]." Here is where the preponderance of agreement lies. Money can motivate but it does not stand alone (for additional support see 34:86; 10:21; 23:18-21; 31:30).

Accepting the premise that properly utilized monetary incentives can motivate leads one to ask, "What kind of monetary incentive programs are there and how are they implemented?" Currently, there are various monetary incentive plans around. O'Dell in her book on gain sharing (23:20) classifies monetary incentives into two broad categories, individual plans and group plans. Under the individual plans, she includes piecework, time payment, suggestion awards, well pay (as opposed to sick pay), and tuition refund plans. Under the group heading she includes profit sharing, Scanlon plans, Rucker plans, and Improshare.

Because Worthington Industries uses a group plan (profit sharing), the group plans are of the most interest for this literature review. A discussion of group incentive plans follows.

Group Incentive Plans

Profit sharing is probably the most common of the group plans. According to O'Dell, in 1979 approximately 350,000 companies were using some form of group profit sharing (23:22). The advantages of profit-sharing plans is that they are usually fairly easy to administer, they lend themselves to the group environment, they are good for public relations, and will motivate top management (23:22). Two problems exist with profit-sharing programs, however, annual payments and dilutions. Concerning annual payments, it is difficult for employees to relate to something that is going to happen next year or at the end of this year. As a result of the distant payment, annual profit-sharing plans are usually only minimally effective as motivators (23:23). Dilution refers to factors that influence company profits outside the employees' control (i.e., market conditions, casualty losses, reduced sales) (23:23). If profit-sharing plans could be modified to include profit-sharing payments on a more regular basis (such as every quarter), it is possible that the distant payment problem could be greatly minimized (23:23). Profits are the result of gross company sales less

total costs for a given period of time. It seems reasonable to assume that a properly handled, profit-sharing plan could motivate employees to do more to help increase sales and decrease costs in all areas. Naturally, the employee wants to keep wages up; however, reductions in other costs could increase profit-sharing payments to employees, thereby aiding management in increasing employee motivation.

Another popular example of group incentive plans is the Scanlon Plan. As explained by O'Dell, the Scanlon Plan is based on the idea that workers are willing to work and contribute to the betterment of a firm under the right conditions (23:24-26). The plan calls for rewarding both the company and the employee on a shared ratio of the increase in productivity or lessened costs. Employees operating under the Scanlon Plan are encouraged to submit suggestions for improving operations. If their suggestions are accepted and a gain is realized, both the company and the employee benefit. Usually, cash awards to employees are around 75 percent of the benefit realized as a result of the suggestions (23:33). Each employee will generally receive his or her share based on a percentage of that particular employee's hourly wage. Cash awards are made on a monthly basis. The primary criticism of the Scanlon Plan centers around the complicated calculations required to track savings and amounts of payouts earned by employees (23:33). The final payout involves the

use of ratios, formulas, and various combinations of the two. There is also a buffer or reserve account that the company holds to maintain stability within the plan.

O'Dell says the Rucker Plan uses value added to the product as a measure of productivity. The plan is primarily designed for use in production-type operations where product value is easily identified and measurable. Under the Rucker Plan, the increase in value is split 50-50 with employees and the company (23:41). The limitations of the Rucker Plan are primarily its limitation to manufacturing-type operations, and that the formula is more involved and complicated than in other gain-sharing plans. Hence, it is difficult for employees to understand.

Yet another group incentive plan is Improshare. Improshare concentrates on the group effort and quantity of output. It measures productivity gains in hours versus dollars against a standard for a given product. The actual bonus paid to employees is a percentage of bonus hours earned against actual hours worked. Before Improshare is begun within a company, the workers and management agree on a ceiling of productivity increase, hence, bonus size. If this ceiling is consistently reached, a new ceiling is renegotiated. The bonus is split 50-50 between the firm and the employees (10; 23:44).

According to O'Dell, Improshare is not as complicated as the Scanlon or Rucker plans. Therefore, employees are more easily able to understand and relate to it. The main criticism of Improshare is that it is based on quantity of output and it does not solicit ideas for improvement from the employees. The thrust under the Improshare Plan is simply to increase production quantities (23:42).

Several firms have used various group monetary incentive plans and achieved significant gains in productivity. One firm utilizing the Scanlon Plan was able to increase worker wages by 41 percent, while increasing company profits by 250 percent (23:24). As reported in a Government study of incentive programs, a city sanitation department was able to cut personnel costs by \$17,000 in the first year of a gain-sharing program it developed (21:93). Additionally, a city in Texas initiated a bonus program for city auto mechanics (21:54). Seven months after this program started, mechanics were exceeding their previous output by 23 percent. Still another city began a program of issuing bonuses for safer work. As soon as the program was begun accident rates dropped. By the end of the first six months, accidents had decreased 54 percent, generating a net savings to the city of \$231,000 (21:60)! These examples serve to illustrate that gain-sharing programs can produce profitable results.

In some cases, monetary incentives did not perform as expected, or even had disastrous results (7:572-573). However, the literature suggests that these gain-sharing plans were not properly devised or managed in those instances of failure. As an example, in one organization management replaced an existing gain-sharing program with a plan that awarded bonuses based on chance. Under the terms of the plan, employees were able to quadruple their bonus or to get nothing at all. According to one company official, the plan failed miserably (7:572).

In summary, it is fair to say that monetary incentives can increase productivity. However, incentive programs must be well thought out and executed. Management must have an understanding of their company's organizational system and what is important to their employees before embarking on a gain-sharing program. The following is a suggested list of "criteria" developed by Harris (11:24) for a successful gain-sharing program.

1. The reward provided should be related to the worker's performance contributions in terms of his own productivity, effort, skill, etc.
2. The individual's (or group's) contributions and efforts must be clearly identifiable if rewards are to be given for specific performance.

3. Increased monetary earnings must have the potential to satisfy the existing needs of the worker if the worker is to be attracted by them. In other words, the monetary incentive offered must be relative to current or visible future needs.

4. The reward offered as the incentive must meet Government regulations regarding compensation. The level of reward and the frequency of it, for example, must meet minimum wage guidelines.

5. The incentive plan should be easily understood by the workers so that they can calculate personal cost and personal benefit factors readily.

6. The incentive plan should provide for rewards to follow quickly after the performance that justifies the reward.

7. The incentive plan must be within the financial and budgetary capacity of the organization. It must be compatible with the financial resources available. Three other factors not mentioned by Harris that should be considered are suggested by Locke (17:25). They are:

1. The amount of money offered must be sufficiently large to make the extra effort worthwhile; usually this requires at least 5 to 10 percent more money than the employee was making previously.

2. The employee must not lose values by working for the incentives, e.g., in the form of rate cutting, layoffs, physical injuries, or condemnation by fellow workers.

3. The employees must be able to control the performance or outcomes on which the payments are based.

Taken together the list by Harris and the list by Locke provide a fairly comprehensive view of items to consider when designing a gain-sharing or monetary incentive program.

In the way of conclusion, the reader can see, as the literature review suggests, monetary incentives can increase employee productivity if properly implemented and controlled. If any of the suggested criteria must be violated, management should carefully consider the possible consequences in their organization before initiating the monetary incentive program.

The following chapter discusses the methodology used to answer the research questions.

CHAPTER III

METHODOLOGY

Data Gathered

To answer the research questions, two types of data are required, subjective data and objective data. The subjective data consists of responses to interview questions, while the objective data was collected from Worthington Industries' company and from industry records.

In general, the subjective data centered around employee motivation, while the objective data was concerned with the company's measures of performance.

Questionnaire Development

In all, seven separate sets of interview questions were developed, one set for each group interviewed. The process of developing questions was an iterative one. Inputs for prospective questions were received from faculty members in the Air Force Institute of Technology's (AFIT's) School of Systems and Logistics (Organizational Sciences Department), from individuals in attendance at the Oklahoma Air Logistics Center's (ALC's) Productivity Conference (May 10-12, 1983), and from this researcher. From these inputs, a master list was compiled from which the interview question list was drawn. Upon completion, suggested question

The Interviews

Worthington Employees

Those groups interviewed were top management (n = 3), middle management (n = 5), staff members (n = 5), production line supervisors (n = 6), production line employees (n = 25), suppliers (n = 5), and customers (n = 5), for a total sample size of 54.

The sample size for the production line employees was approximately 8 percent of the population of interest (312 permanent full-time employees). Originally, 10 percent (31 employees) of the population was targeted for interviews. However, in order to minimize loss of employee hours due to the interviews, only 8 percent (25 employees) were interviewed. Due to the seeming reliability of the items (i.e., similarity of responses), the 8 percent sample size is viewed as acceptable.

After coordinating with the director of personnel at Worthington Industries, interviewees for each of the other groups were selected.

All interviews of Worthington employees occurred at Worthington Industries' Corporate Headquarters in Columbus, Ohio from 28 June through 1 July 1983. The only exception to this was an interview with one top manager which was rescheduled to and completed on 2 August 1983 at Worthington Industries. All interviews took place during the normal

workday (8 A.M. to 5 P.M.). The average time for an interview was twenty-seven minutes.

For top managers, middle managers, and staff members, interviews were held in their respective offices. Production line supervisors and employees were all interviewed in conference rooms with the door closed (to preserve privacy and to provide an atmosphere of frank, open discussion). In all cases (except top management), interviewees were told that the interviewer was an independent researcher not affiliated with Worthington management in any way, that their answers were strictly confidential, and would be aggregated with the list of responses received during the entire interview process.

During the interview, the same questions were asked in the same order for all interviewees in a given group. The only exception to this was the sequence of questions for production line employees. The question relating to recognition versus profit sharing as a motivator was moved from right after question 15 to follow question 17 (see Appendix, p. 108). This was done after two interviews with production line employees to avoid having to explain what was meant by recognition. Since only two individuals were interviewed prior to the change, and since their answers were similar to the later answers, internal validity is assumed to have been preserved.

The reader should be informed that the research centered around Worthington Industries' Steel and Cylinder divisions in Columbus, Ohio. These two divisions are distinct and separate from one another with Worthington Steel employing 180 full-time employees and Worthington Cylinders employing 132 full-time employees (total 312 full-time employees including both divisions). Worthington Industries' other operations include Buckeye Steel Castings, Columbus, Ohio; Worthington Cylinders, Claremore, Oklahoma; U-Brand Corporation, Ashland, Ohio, and San Juan, Puerto Rico; Buckeye Custom Products, Mentor, Mason, Salem and Upper Sandusky, Ohio; and Advanced Coating Technology, Inc., of Franklin, Tennessee. The total number of employees, including union shops, is approximately 5,000 (20).

Interviewees from top and middle management were selected based on their position in the company. The company founder, company president, and vice president over Worthington Steel and Cylinders as well as the plant manager from each plant were interviewed. This provided a complete chain, from the founder through the various levels of the firm. The selection of these interviewees was not on a purely random basis. In the case of staff and production line supervisors, the researcher was given names and appointments for the interview sessions. In the case of production line employees, their selection for the interview was based on availability at a given time as the production schedule permitted. To

illustrate, when an interview with one production line employee was completed, another production line employee was selected based on whether or not he was needed on the production floor at that moment.

Suppliers and Customers

A list of suppliers and customers to interview was provided by Worthington Industries. These interviews occurred from 22 August through 30 August 1983, and were done in person (two with suppliers and two with customers) or over the telephone (three with suppliers and three with customers). The telephone interviews were conducted where geographic distances precluded personal interviews.

The personal interviews were done to allow for the conversation between the interviewer and the customer or supplier of Worthington Industries to expand into any areas which may have shed additional light on the success of Worthington Industries. Personal interviews were accomplished at the interviewee's place of business or, as in one case, in a location which would allow for confidentiality.

Company Records

The objective data collected from company records consists of profit totals, profit-sharing levels, productivity levels per employee, reject rates, levels of absenteeism, and information on how profit-sharing checks are computed. This data will be listed and discussed in Chapter IV.

Analysis

The objective of the interview process was to investigate what causative factors were present at Worthington Industries to account for its remarkable employee motivation, job satisfaction and organizational success.

To this end Tables 1 and 2 were designed, where responses from each group were tallied and analyzed as they pertained to motivation. Each individual in each group cited reasons for their own motivation (i.e., sources) (Table 1) and what they felt motivated others to work hard (Table 2). To identify common responses, individual data was then summed across each group by source of motivation, and then across combinations of sources and groups as appropriate.

Table 3, relating to job satisfaction, was also included. Originally, this table was not planned; however, 100 percent of those interviewed indicated that they were satisfied with their jobs. With an incredible response like this, it seemed only appropriate to further investigate job satisfaction at Worthington Industries to identify causative factors.

CHAPTER IV

RESULTS

Interviews

Motivation

The evidence is clear that motivation to work at Worthington Industries is high. With average sales per employee in excess of \$300,000, no observed robotics or other special technological aids to productivity, no "corner on the market," or any other thing to credit the high productivity to, one must accept the premise that Worthington Industries' employees are motivated to and do work hard.

To assess the factors that contribute to employee motivation at Worthington Industries, interviewee responses to certain key questions were tallied and are included in Tables 1 and 2. Table 1 concerns those factors that respondents gave as reasons for their own personal motivation. Table 2 concerns those factors that respondents predicted would motivate production line employees. For Table 2 inputs, interviewees other than production employees were asked what motivates production employees to work hard. Production employees were asked if everyone at Worthington Industries was highly motivated (their responses indicated that they were referring to other production line employees;

therefore, those responses were included in Table 2). For clarity, the actual questions asked are listed with each table.

Sources of Personal Motivation: Self Report. From Table 1 it is evident that recognition and profit sharing are clearly dominant sources of motivation across all groups. Self-motivation, company growth, pride, job satisfaction, and freedom were also mentioned. Factors included under "Other" are, respect for John H. McConnell, Company Involvement, Obligation, and Opportunity.

Of particular note are the responses given by the production employees. For this group only four of the eight possible response categories are used. Out of 64 production employee responses, 32 (50 percent) are attributable to recognition, followed by profit sharing (24 responses), self-motivation (6 responses), and job satisfaction (2 responses).

Sources of Production Employee Motivation: Predictions. Table 2 indicates that recognition and profit sharing are viewed by all groups as sources of motivation for production line employees. This table supports the evidence found in Table 1. Of the 61 responses given, 26 favored recognition, 20 favored profit sharing, and pride and job security received three responses. Included in "Other" is team concept, it's required, opportunity, and "Some guys aren't motivated."

TABLE 1

SOURCES OF PERSONAL MOTIVATION: SELF REPORT

Organizational Hierarchy of Respondent (Group)	Sources of Personal Motivation								Total Responses
	Recognition	Pride	Profit Sharing	Self-Motivated	Freedom	Job Satis-faction	Company Growth	Other	
Top Management (n = 3)	1			1			3		5
Middle Management (n = 5)	1		1	2	2		1	1	8
Staff Members (n = 5)	1	1	2	1	1			2	8
Line Supervisors (n = 6)		3	1	3			1	2	11
Production Employees (n = 25)	32		24	6			2		64
Total (n = 44)	35	4	28	13	3	3	5	5	96

NOTE: Total number of responses is greater than the total n, since respondents often gave more than one answer. Responses listed in the above table were gathered via the following question(s):

Top, Middle and Line Management

Question 13--What makes you want to work hard?

Staff Members

Question 9--Do you feel like you want to work hard for Worthington Industries? Why?

Production Employees

Question 14--Does the money you get for profit sharing make you feel like you want to work harder?

Question 17--Does the recognition you get for your work make you want to work harder?

Question 26--Do you work harder here than you have at previous jobs? Why or why not?

TABLE 2
 PREDICTIONS ABOUT SOURCES OF MOTIVATION
 FOR PRODUCTION EMPLOYEES

Organizational Hierarchy of Respondent (Group)	Sources of Motivation						Total Responses
	Recognition	Pride	Profit Sharing	Job Security	Job Satisfaction	Other	
Top Management (n = 3)	3		3				6
Middle Management (n = 5)	5		1	2			8
Staff Members (n = 5)	4		5		2		11
Line Supervisors (n = 6)	2	2	4		3		11
Production Employees (n = 25)	12	1	7	1		4	25
Total (n = 44)	26	3	20	3		9	61

NOTE: Total number of responses is greater than the total n, since respondents often gave more than one answer.

The first four groups' responses were gathered via the following question: What makes the line employees want to work hard? Is there any one thing that inspires the line workers to work hard?

Production employees' responses were gathered via the following question: In your opinion, is everyone here highly motivated? Why or why not?

Job Satisfaction

Table 3 reveals that job satisfaction at Worthington Industries is a function of various factors. Benefits received the modal response at nineteen, followed by people philosophies, opportunity, job security, wages, profit sharing, recognition, and freedom.

It's interesting to note that recognition and profit sharing show up here as contributors to job satisfaction as well as maintaining their role as prime motivators (as seen in Table 1).

The section following Table 3 presents the results of the research categorized by organizational hierarchy of the respondent. All findings reported in the next section were taken from Tables 1, 2 and 3. For Tables 1 and 2, responses tallied under the "Other" heading are not discussed due to their varied and, therefore, inconclusive nature.

Top Management

Sources of Personal Motivation: Self Reports. Top managers attribute their personal motivation to recognition, self-motivation, and company growth. As reported in Table 1, of the five responses given in this category, three are under the company growth heading while personal motivation and recognition each received one response. This data demonstrates that for those top managers interviewed, company growth is their personal prime motivator.

TABLE 3

PERSONAL JOB SATISFACTION

Organizational Hierarchy of Respondent (Group)	Sources of Personal Job Satisfaction								Total Responses
	Freedom	Recognition	People Phi-losophies	Benefits	Profit Sharing	Job Security	Overall Wages	Opportunity	
Top Management (n = 3)		1	1					1	3
Middle Management (n = 5)	2		1	2	1	1			7
Staff Members (n = 5)	2	1	2	1				1	7
Line Supervisors (n = 6)	2		1	2	3			1	9
Production Employees (n = 25)		4	6	14	3	8	8	7	50
Total (n = 44)	6	6	11	19	7	9	8	10	76

NOTE: The total number of responses is greater than the total n since respondents often gave more than one answer to a question.

This data gathered via the following question (identical for all groups): Are you satisfied with Worthington Industries as an employer? Why or why not?

Sources of Production Employee Motivation:

Predictions. As seen by top management at Worthington Industries, profit sharing and recognition motivate production employees to work hard (Table 2). Profit sharing and recognition received three responses each. No other responses were given.

Sources of Job Satisfaction: Self Reports. Top managers at Worthington Industries attribute their personal job satisfaction to recognition, people philosophies and opportunity (Table 3).

Middle Management

Sources of Personal Motivation: Self Reports. As reported in Table 1, middle managers cite self-motivation (two responses), freedom (two responses), company growth, profit sharing and recognition (one response each) as factors accounting for their own personal motivation.

Sources of Production Employee Motivation:

Predictions. Table 2 reflects that middle managers at Worthington Industries attribute the motivation of production employees primarily to recognition (five responses), then to job security (two responses) and last of all to profit sharing (one response). From this data, it is obvious that middle managers at Worthington Industries have a solid belief in the value of recognition as a production employee motivator.

(one response), benefits (one response), and opportunity (one response), as the factors responsible for their own personal job satisfaction.

Line Supervisors

Sources of Personal Motivation: Self Reports.

Table 1 shows pride and self-motivation to be sources of motivation for line supervisors. Profit sharing receives only one response as does company growth and job satisfaction. Interestingly, recognition is not mentioned as a personal motivator by this group.

Sources of Production Employee Motivation:

Predictions. Table 2 reflects that line supervisors believe profit sharing motivates production employees (four responses) along with pride and recognition (two responses each).

Sources of Job Satisfaction: Self Reports. For line supervisors, Table 3 reveals that job satisfaction is a function of profit sharing (three responses), benefits (two responses), freedom (two responses), people philosophies (one response), and opportunity (one response). Again, line supervisors do not mention recognition as a factor contributing to their job satisfaction.

Production Employees

Sources of Personal Motivation: Self Reports.

Table 1 reflects that production employees see themselves as motivated primarily by recognition (thirty-two responses) (50 percent), and profit sharing (twenty-four responses), followed distantly by self-motivation (six responses) and job satisfaction (two responses).

Sources of Production Employee Motivation:

Predictions. Production employees felt that other employees were motivated by recognition (twelve responses), profit sharing (seven responses), pride (one response), and job security (one response). From Table 2, it is easy to see that recognition is of prime importance to the motivation of others as viewed by production line employees. Out of the twenty-five responses received for this group, twelve (46 percent) were attributed to recognition (note that the percentages for self reports and predictions concerning recognition are of a similar magnitude).

Sources of Job Satisfaction: Self Reports. Table 3 reflects that, for production employees, job satisfaction is a function of many things. Numerous responses were given in all categories with the exception of freedom, which received zero responses. Benefits was most often mentioned (fourteen responses), followed by job security and overall wages with

eight responses each. Opportunity (seven responses), people philosophies (six responses), recognition (four responses) and profit sharing (three responses) were also mentioned by production employees at Worthington Industries as contributing to their personal job satisfaction.

All Worthington Industries' Groups

Sources of Personal Motivation: Self Reports. From Table 1, recognition and profit sharing must be seen as prime personal motivators when all groups are taken as a whole. Self-motivation runs a distant third (thirteen responses).

Sources of Production Employee Motivation: Predictions. Table 2 reveals similar findings to Table 1. Recognition and profit sharing are predicted to be primary causative factors in the motivation of production employees.

Sources of Job Satisfaction: Self Reports. The totals for Table 3 suggest that benefits appears to be the major factor contributing to job satisfaction at Worthington Industries. However, all other categories received more than token responses. One must assume that all eight factors work together to aid job satisfaction for Worthington Industries' employees.

Sources of Organizational Effectiveness

Table 4 includes responses from all groups, including customers and suppliers as to what each attributed the success

TABLE 4

FACTORS CONTRIBUTING TO THE SUCCESS
OF WORTHINGTON INDUSTRIES

Organizational Category of Respondent (Group)	People	Customer Service	Quality	Communication	J. H. McConnell	Good Management	Simplicity	Aggressiveness	Other*	Total Responses
Top Management (n = 3)	3	3								6
Middle Management (n = 5)	3	2	2	2	1	1	2		3	16
Staff Members (n = 5)	4	1	1		1				1	8
Line Supervisors (n = 6)	3	2	1		1	3			6	16
Production Employees (n = 25)	7	5	7		1	5		2	14	41
Customers (n = 5)	4	1				1		1	1	8
Suppliers (n = 5)	3								3	6
Totals	27	14	11	2	4	10	2	3	28	101

NOTE: Responses for the table were gathered via the question: Why is Worthington Industries successful?

*Other factors mentioned were employee motivation, integrity, job security, truth, assets, fairness, team concept, sound principles, diversification, hard work, non-union, cost control, value buying and market niche.

of Worthington Industries to. The table clearly shows that "people" are viewed as the primary source of success at Worthington Industries with 27 of 101 responses listed favoring people, followed by customer service, quality, good management, J. H. McConnell, aggressiveness, simplicity, and communication. It is important to note that in Table 4, all seven groups gave at least three responses in the people category. The category marked "Other" included responses citing employee motivation and various other factors. Since employee motivation was previously revealed via Tables 1 and 2, factors relating to employee motivation (sixteen responses in this category) are not listed here. Other factors include truth, profits, team concept, sound principles, diversification, a lean work force, hard work, good attitudes, stable growth, non-union, and fairness (all listed once each).

The following section discusses the results of the interviews with customers and suppliers of Worthington Industries. The following data is not included in Table 4.

Customers

A review of the questions and answers for customers (see Appendix, pp. 115-116) reveals that Worthington's customers have a high regard for Worthington Industries. In particular, Worthington Industries' quality, customer service, and people have impressed their customers greatly.

In regard to quality, all five of the respondents felt that Worthington Industries' quality was better than the competitions, and that reject rates ranged from less than 1 percent to 2 or 3 percent. This is against an industry norm of 5 percent for reject rates. All five said quality was consistent.

Customer service also is reported to be excellent. As one customer puts it, "They have a willingness to work with the customer and take risks if needed." For all customers interviewed, customer service was especially good and important in the area of delivery.

Suppliers

A review of the questions and answers for supervisors (see Appendix, p. 114) revealed that all five suppliers found it a pleasure to do business with Worthington Industries and attributed Worthington Industries' success to its employee management techniques. Further, the suppliers found Worthington Industries' quality, service and people to be exceptional.

Worthington's demand for quality from the vendors was not a big issue. It appeared that in some cases, higher quality materials were required; however, as one supplier said, "It depends on the situation," meaning it depends on manufacturing requirements for a given job.

The best aspect of working with Worthington Industries, as listed by the suppliers, were the people, the attitudes, and

Worthington Industries' integrity. All in all, Worthington Industries is perceived as a much sought after account. As one supplier put it, "If I've satisfied them [Worthington Industries], I've made it."

The final section to this chapter contains pertinent data derived from archival records.

Archival Records

A review of company records reveals the existence of sizable profit-sharing payouts, increasing gross sales, high profitability, low reject rates, and high productivity per employee.

Profit Sharing

This section includes a description of how profit-sharing payouts are calculated (see Table 5) and a listing of profit-sharing payouts to hourly employees of Worthington Industries during the time of June 1977 through and including December 1982 (see Table 6).

As can be seen in Table 6, the average profit-sharing payout per employee is approximately \$8,000 annually. This is in addition to base wages that average \$13,000 per production-line employee. Gross average annual wages total approximately \$21,000.

Productivity per employee for previous years was not learned. However, based on gross sales and the number of

TABLE 5
PROFIT-SHARING PLAN
CALCULATION

1. Operating Income
(Income after all expenses prior to Federal,
State, City Income taxes)

 2. Deferred Profit Sharing 2.5% deducted

 3. Operating Income after deducting Deferred Profit
Sharing (Basis for Cash Profit Sharing and
Executive Bonus)

 4. Profit Sharing 17% of Line 3

 5. Executive Bonus 5-15%

 6. Distributed to employees based on a percentage
of their hourly rate
-

TABLE 6
 WORTHINGTON INDUSTRIES, INC.
 PROFIT-SHARING PAYOUTS TO
 HOURLY EMPLOYEES

	Total Payout*	Participants	Quarterly Average Individual Payout*
Jun 1977	\$ 1,172,263	361	\$3,247
Sep 1977	503,621	367	1,372
Dec 1977	536,811	382	1,405
Mar 1978	748,345	377	1,985
Jun 1978	964,418	393	2,454
Sep 1978	709,869	403	1,761
Dec 1978	787,848	411	1,917
Mar 1979	997,255	410	2,432
Jun 1979	1,231,996	426	2,892
Sep 1979	841,376	443	1,899
Dec 1979	731,863	443	1,652
Mar 1980	896,248	454	1,974
Jun 1980	894,622	449	1,992

TABLE 6--Continued

	Total Payout*	Participants	Quarterly Average Individual Payout*
Sep 1980	\$ 590,246	487	\$1,212
Dec 1980	909,282	484	1,878
Mar 1981	1,390,397	475	2,927
Jun 1981	1,456,322	483	3,015
Sep 1981	1,297,449	498	2,605
Dec 1981	734,744	530	1,386
Mar 1982	730,255	550	1,328
Jun 1982	1,682,531	565	1,916
Sep 1982	752,965	565	1,333
Dec 1982	<u>622,246</u>	<u>578</u>	<u>1,077</u>
Total for the Period	\$20,582,972		
Average Quarterly Payout Per Employee			\$1,985**

NOTE: Included in this table are all employees of Worthington Industries that participate in profit sharing, for a total of 578 hourly employees. Worthington Steel and Worthington Cylinders (of Columbus only) account for 312 of the 578 participants listed above.

*Rounded to nearest dollar.

**Average annual profit sharing is approximately \$8,000.

employees receiving profit sharing, it is assumed that productivity per employee compares favorably with these numbers for the past several years. The reader should also remember that 1982 was a tough year for industry due to the depressed economy.

Net Sales and Revenues

One glance at Figure 1 clearly shows the direction the net sales and revenues have taken in a ten-year period. Sales for 1982 are especially remarkable when one considers the depressed state of the economy during that year.

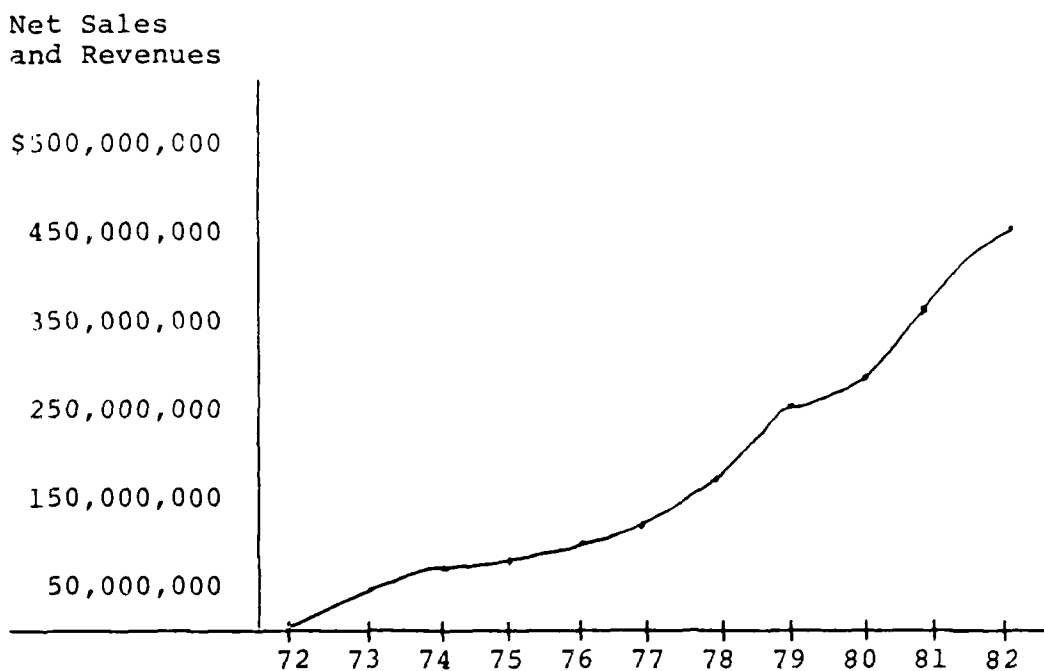


Fig. 1. Net Sales and Revenues (Taken from the 1982 Year-End Annual Report (35))

Net Earnings

Net earnings also show an impressive record of growth over the last ten years. Even though net earnings dropped in 1982 from their 1981 levels, they stayed above the 1980 levels. The recession of 1982 is cited as the cause of the 1982 drop in net earnings. See Figure 2.

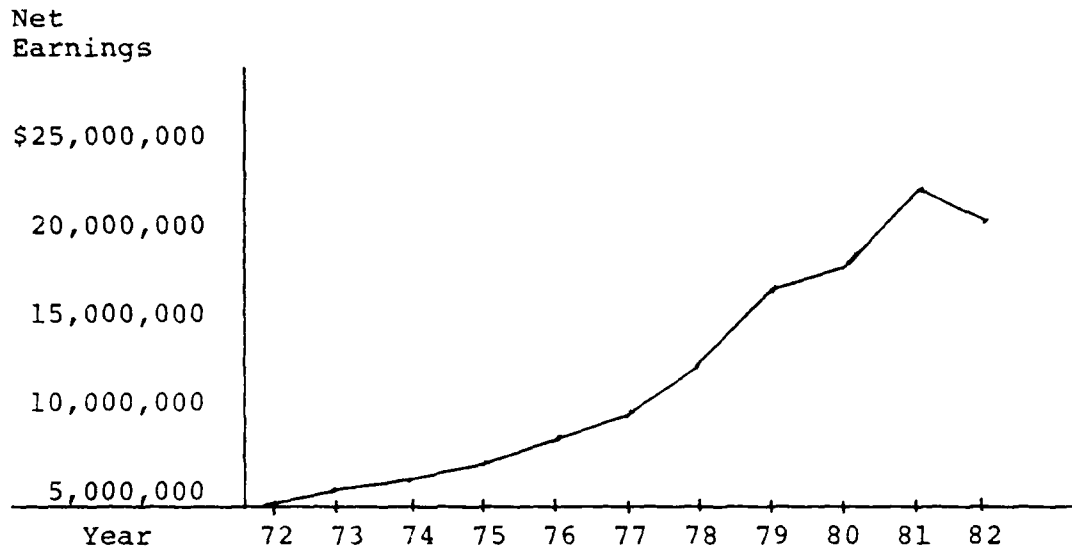


Fig. 2. Net Earnings (Taken from the 1982 Year-End Annual Report (35))

NOTE: The drop in net earnings in 1982 is attributed to the depressed economy at that time.

Reject Rates

As seen in Table 7, product reject rates are very low, resulting in substantial savings to the company.

TABLE 7
PRODUCT REJECT RATES

Year	Rates	
May 31, 1978 - May 30, 1979	.9% .5%	Steel Cylinders
May 31, 1979 - May 30, 1980	1.1% .3%	Steel Cylinders
May 31, 1980 - May 30, 1981	.9% .1%	Steel Cylinders
May 31, 1981 - May 30, 1982	1.4% .4%	Steel Cylinders
May 31, 1982 - May 30, 1983	1.2% .1%	Steel Cylinders

NOTE: This data is for all plants. Taken directly from company records.

In interviews with top management and certain other individuals at Worthington Industries, the following was also learned:

Productivity per Employee, 1982 (measured as sales per employee)	\$309,000
The Metal-Manufacturing Industries Median Level is	\$102,000
All Industries	\$ 91,000
Absenteeism	1%
Industry Absenteeism	3-4%

CHAPTER V

DISCUSSION

Motivation

Top Management

Recognition. As reflected in Table 2, recognition is seen by all three top managers as a factor aiding employee motivation to work hard. This is not necessarily true for the top managers' self reported sources of personal motivation. From Table 1 it is apparent that company growth serves to motivate top managers more than does recognition. Profit sharing may contribute to the valence of company growth for top managers, since as the company grows so would profits. However, a more likely motivator for top managers is the sense of achievement that must accompany corporate growth.

Profit Sharing. None of the top managers cited profit sharing as a personal motivator (Table 1); however, all three top managers believe profit sharing to be a motivator for the production employees (Table 2). Mr. McConnell adds that profit sharing is a form of recognition (20). Top management's belief is that profit sharing provides a sense of company ownership and reward for effort.

When the company does well, the employee does well; hence, motivation to work for the company's best interest.

Middle Management

Recognition. Table 2 indicates that middle managers stress the importance of recognition as a means of aiding employee motivation. Of the five middle managers interviewed, five chose recognition as one thing that inspired the production employees to work hard.

Middle managers basically defined recognition as acknowledgment for achievement. To middle management, recognition is a means of aiding worker motivation. Middle managers did not see recognition as a source of primary personal motivation for themselves, but rather were primarily motivated by freedom and self-motivation.

Profit Sharing. Profit sharing is not seen by middle managers as a prime motivator for production employees (see Table 2). However, two middle managers felt that profit sharing provided recognition to the employees. This data was gathered via question 21 (not included in Table 2) which basically asks if profit sharing motivates production employees. When asked what one thing makes production employees want to work hard, only one said "profit sharing" (see Table 2). This leads one to the conclusion that middle managers view profit sharing as a contributor to employee motivation, while

recognition and job security are the primary sources of production employee motivation.

For themselves, middle managers appear to be motivated by a wide spectrum of factors, none of which can be seen as primary based on the data referenced in Table 1.

Staff Members

Recognition. Only one staff member cited recognition as a primary source of their motivation (see Table 1). However, four of the five staff members interviewed believe that recognition aided production employee motivation (see Table 2). The reason for this is not known; however, when staff members were asked in a different question, "Does recognition make you want to work harder?" (see Appendix, question number 11, p. 102), four said yes.

Profit Sharing. Profit sharing was seen as a motivator of production employees by all five staff members (see Table 2), as well as a source of motivation for them personally (Table 1). The resultant motivation was attributed to more pay for more work, a greater sense of awareness, opportunity, and inclusion in the company team.

Other Factors. Staff members listed a wide variety of factors which they felt were sources of their personal motivation (Table 1). Only job satisfaction and company

growth were not mentioned. This variety of responses is not readily attributable to any known facts. Perhaps, if the sample size were larger, a trend would develop. At this juncture, the data is inconclusive.

Line Supervisors

Recognition. Two supervisors interviewed indicate their belief in recognition as an aid to production employee motivation (Table 2). However, none of them listed recognition as aiding their personal motivation. For line supervisors, pride and self-motivation were the most important (see Table 1).

During the interviews, line supervisors listed the awards banquet, awards for breaking records, profit sharing, benefits, and merit raises as the most common forms of recognition.

Profit Sharing. Profit sharing is seen by line supervisors as the primary motivator for production employees (see Table 2). However, only one line supervisor mentioned profit sharing when asked what caused them to work hard. This would suggest that profit sharing for line supervisors is not a major motivational factor, but that other motivators, such as those previously mentioned, were more important.

Other Factors. Line supervisors saw pride and self-motivation as contributing to their personal motivation (Table 1). During the interviews with the supervisors, this researcher observed that each supervisor had "come up through the ranks" and was extremely proud of the achievement. Hence, these individuals felt motivated to continue with their efforts. Herzberg's theories suggest that achievement is an important source of personal motivation. The supervisors' comments tend to support this view (12:58).

Line supervisors also predicted that pride would be a motivator for production employees.

Production Employees

Recognition. Recognition is a clear incentive to work for the production-line employees (Table 1). All twenty-five production employees interviewed indicated that recognition was a motivator for them. Supervisors predicted that recognition would be a motivator to production employees (see Table 2); and based on the responses of the production employees, one must assume the supervisors to be correct in their belief. Recognition was selected more often as a personal motivator to production employees than was profit sharing. (When asked to choose between profit sharing and recognition, twenty selected recognition over profit sharing, while only five selected profit sharing over recognition.)

For further evidence of the importance of recognition, one could consider the responses to question 19 which asks, "How would you feel if the recognition stopped?" All twenty-five production employees responded negatively to this possibility. The responses to question 19 indicate very strongly that recognition is important to them and they would feel a loss if recognition did stop. Four employees even indicated that their productivity would decrease.

Production employees perceive recognition to be advancements, praise, awards, evaluations, merit pay, gifts, and peer support, all for various achievements. Twenty-one respondents felt recognized for their efforts, three felt somewhat recognized, and one said, "They remember the bad more than the good."

Profit Sharing. Twenty of those production employees interviewed said that profit sharing also helped them to be motivated. Eighteen of them said, "More work yields more pay." Two of them said profit sharing was a form of recognition. Those five that did not accept profit sharing as a motivator either accepted it only conditionally (i.e., "When it's up, yes") or felt it was too diluted, didn't understand how it was computed, or didn't relate to money as a motivator.

The existing profit-sharing program also contributes to a system of peer support for hard work and high output.

Question 27 for production employees asks: "How do you feel about someone who doesn't work hard?" "How are they treated by other employees?" As seen by the responses to question 27 (see Appendix for a complete list of responses), employees who don't work hard are thought of in a negative sense. One can only assume that this negativity is reflected in the actions of the hard workers toward the not-so-hardworking individuals. This must create pressure to do better. Its effectiveness as an aid to increased productivity is an open question.

Other Factors. Self-motivation and job satisfaction were also listed by the production employees as causative factors.

Job Satisfaction

It is remarkable that all interviewees at Worthington Industries indicated they were satisfied with their jobs. Even those few individuals that had a complaint about the company were satisfied. It is also noteworthy that the sources of personal satisfaction are so varied (see Table 3). While it's true that benefits received the modal response, seven other factors were listed as sources for the satisfaction. This evidence indicates that management at Worthington Industries has provided a wide range of factors that satisfy employee needs. This "range of factors" suggests that job satisfaction is a complex issue and that different individuals

consider different things satisfiers. When considering the high productivity that is apparent at Worthington Industries, one must further realize that the high productivity coexists with a high level of job satisfaction. This "coexistence" must be interpreted as the ideal from the perspective of management and the employees (i.e., both groups are satisfied).

Comment

In general, it is safe to say that profit sharing and recognition are hard at work as motivators (and contribute to job satisfaction). This point is even more clearly illustrated via the following two tables (Tables 8 and 9). In Table 8, top, middle, and first-line management is combined with staff members to create a nonproduction employee category which is contrasted with production employees. Further, the responses for pride and recognition are grouped together under recognition, and the responses for self-motivation and freedom are grouped together under autonomy. At a glance, Table 8 reveals recognition and profit sharing to be the primary motivators at Worthington Industries with recognition seemingly the more dominant.

Table 9 was also condensed in like fashion, with people philosophies and recognition combined under recognition. Benefits, profit sharing and overall wages were combined under benefits. From Table 9 it can be concluded that benefits are

TABLE 8

SOURCES OF PERSONAL MOTIVATION:
SELF REPORT (CONDENSED)

Group Classification	Recognition	Profit Sharing	Autonomy	Company Growth	Other	Total
Nonproduction Employees (n = 19)	7	4	10	5	5	31
Production Employees (n = 25)	32	24	6	0	0	62
Total (n = 44)	39	28	16	5	5	93

NOTE: Total number of responses is greater than the total n, since respondents often gave more than one answer.

TABLE 9
 SOURCES OF PERSONAL JOB SATISFACTION
 (CONDENSED)

Group Classification	Benefits	Recognition	Opportunity	Job Security	Freedom	Total
Nonproduction Employees (n = 19)	9	7	3	1	6	26
Production Employees (n = 25)	25	10	7	8	0	50
Total (n = 44)	34	17	10	9	6	76

NOTE: The total number of responses is greater than the total n, since respondents often gave more than one answer to a question.

the primary source of job satisfaction. Table 9 suggests that recognition is also a contributor to job satisfaction. This table leads one to suspect that recognition & benefits are major factors in job satisfaction with the emphasis on benefits. It is likely that Herzberg would question the importance of benefits as a source of job satisfaction (see literature review on recognition).

Archival Records

Company records support the findings of the interviews. Sales and profits are at record levels, with only a dip in profits during the 1982 recession. Quality is consistently high with very low reject rates (see Table 7). Profit sharing for production employees has averaged just under \$2,000 a quarter since 1977. The trend for company growth is strong (see Figure 1), and the company has increased its profits since the 1982 recession. (Note: It was learned during the interviews that the June profit-sharing checks for production employees were approximately \$3,200 gross.)

In general, it must be said that company records and the interview results are in accordance with one another, in that employees have been recognized and given a share of the profits, and production (quantity and quality) and sales are correspondingly high.

Customers and Suppliers

Responses of customers and suppliers clearly indicate that Worthington Industries has an excellent reputation in the business community and that quality and customer service are excellent. This is further verification of Worthington Industries' success.

Summary

The data revealed via this research provides an insight into what motivates people to work. Tables 1 and 8 are of particular interest due to the data displayed therein. These tables might be viewed as a "window" into a small part of the human enigma. They provide a glimpse of "what makes people tick."

Tables 1 and 8 also answer research questions 1, 2 and 3. Research question 1 asks: "Is the employee recognition system used at Worthington Industries the primary source of worker motivation?" Research question 2 asks: "Is the profit-sharing (monetary incentive program) used at Worthington Industries the primary source of worker motivation?" The answer on both counts is that neither can be seen as a primary source of motivation.

Taken at face value and using a simple majority rule, one could reason that recognition is the primary motivator and that profit sharing is second. However,

recognition and profit sharing are so close in responses received (and one could argue in concept also), that one must conclude that taken together they are the primary source of motivation for workers. If one believes, as Mr. McConnell does, that profit sharing is a means of recognition, then recognition would absolutely be prime. However, while profit sharing may provide recognition, it also provides money to those involved in the profit-sharing program. Money may well be a singular source of motivation.

The third research question that is answered by Tables 1 and 8 concerns what other factors used at Worthington Industries contribute to the employee's motivation. Those factors are self-motivation, company growth, pride, and freedom.

It is clear that Worthington Industries is doing it right. Their employees are motivated, satisfied, and are routinely on the job. Product rejects are minimal, customer satisfaction is high, and sales are at record levels. It is also clear that benefits is a potent factor in satisfying Worthington Industries' employees. Table 8 reflects that twice as many employees indicated that some form of benefits were sources of their job satisfaction. This suggest that recognition may not be as important to job satisfaction as is profit sharing.

CHAPTER VI

DOD APPLICATIONS

Introduction

The DOD is vitally interested in increasing productivity. Productivity enhancing initiatives currently exist, most of which are targeted at technological areas such as ventures to increase output with new machinery, the use of robotics, computer aided design and manufacturing, etc. Some DOD productivity enhancement initiatives, however, are directed toward the human resource and it is to that end that this chapter is presented. The discussion which follows examines those DOD initiatives comparable to what we have seen in Worthington Industries; that is, monetary incentives and employee recognition.

Present Applications

Monetary Incentives

Monetary incentives within the DOD take the form of gain sharing. That is, for an increase in productivity or a "gain," the gain is divided between the individual responsible for the gain and the DOD. Currently, the Army, Navy, and the Air Force are testing various gain-sharing procedures

which are aimed at increasing individual employee output. A discussion of some of the more interesting DOD gain-sharing programs follows.

Air Force. The only Air Force gain-sharing program currently underway is at the Sacramento Air Logistics Center (ALC) in Sacramento, California (8). This program awards bonuses to data transcribers for key strokes per hour in excess of a predetermined standard. The bonus is awarded on an individual basis. The average salary for the data entry personnel in the program is around \$850.00 for a four-week period. Bonuses are paid on a weekly basis. Bonuses range from \$1 per week to over \$100 per week. The average bonus is approximately \$25. Section supervisors are also paid a bonus based on what their section achieves (15 percent of the section weekly net award amount) (4).

The total amount paid for the first thirty-two weeks of the program was \$10,459.49. This was paid at a 20 percent sharing rate. The savings to the Air Force for this increased productivity was \$41,981.96. On the average, thirty-nine transcribers have been in the program since its inception. Key strokes per hour have increased from an average of 7,962 to 9,189, an increase of 1,227 key strokes per hour per transcriber. This equates to a 15.4 percent increase

in productivity. Additionally, turnover rates have decreased (4). Savings have continued during the one-year test. (The test is scheduled to end in mid September 1983.)

According to the program manager, problems and concerns for the program have been minimal (4). One grievance was filed by an employee who felt supervisors should not receive any of their bonuses, and there has been some difficulty in loading the computers correctly to track the entries by the transcribers. Overall, the program has been a success.

Army. The Army has several initiatives aimed at increasing worker productivity (3; 25). The Sacramento Army Depot has a very successful program aimed at improving productivity in their ground radio and navigational equipment repair station. While it is one of the smaller programs that the Army currently has underway, there are fifty-six employees involved (3). Of significant size is the gain-sharing operation presently ongoing at the Anniston Army Depot. Approximately 500 personnel are currently involved in a gain-sharing program whereby employees are encouraged to use fewer manhours on a project than is specified under certain performance standards listings. When reductions are achieved, savings are split 50-50 between the participating employees and a depot fund for improving the quality of work

life. The depot's share may also be used for productivity enhancement ventures. Cash awards to individuals are distributed quarterly to employees and range from \$1 to \$700. The net result of the program has been an increase in performance efficiency of 5 percent. Under this program, the employees gain in two ways--cash payments and improved working conditions (2:4).

The biggest complaints concerning the Anniston program are that equal effort among different groups does not always provide equal bonuses; performance standards are not always accurate and, hence, not always fair; and not all employees benefit under the plan.

Navy. The Navy has done a great deal in the area of gain-sharing. Of particular interest are the programs at the Data Processing Office of the Long Beach Naval Shipyard and the Mare Island Naval Shipyard. The programs are similar to the program at the Sacramento Air Logistics Center and have had similar successes (4). The results of the program indicate improved performance rates, increased productive time, reduced overtime, and an elimination of backlogs (5).

Initially, there were some concerns in setting up the program. Union involvement was essential since incentive pay was under their purview. The union's primary concern was that job security would not be affected by the program and

that standards would be set within the reach of the average employee and not just the high achievers (9). Once all concerns were met, the program did so well that tests were continued beyond the original schedule, and now the program is no longer a test but a permanent operation (4).

In another Navy program at the Alameda Naval Air Rework Facility, incentives were used along with supervisory skills enhancement, goal setting, individual performance, feedback, and monetary awards. The results of the test were inconclusive; however, the employees were more highly motivated and productivity increased while overtime and sick leave decreased. The Navy is still evaluating the program. The system paid incentives based on increase in productivity over a standard. Each participating individual was paid 50 percent of the value of hours saved over standard hours. The problem with the test was in the cost of administration which added considerably to overhead expenses. The program analysts concluded that group incentives or cash awards based on overall performance would achieve similar improvements in productivity while holding down costs and improving peer pressure to produce more (5:1).

Recognition

Air Force Regulation 25-3 spells out the general content of various productivity-related programs in Attachment 2 of the regulation. Recognition as a motivator or productivity

enhancement medium is not listed specifically anywhere. Recognition is mentioned under item 1 of Attachment 2, Air Force Suggestion Program. It reads,

This program was established in 1954 by the Federal Awards Incentive Act to recognize and reward persons for suggestions, inventions, and scientific achievements that increased efficiency, economy, or effectiveness [30].

Findings for the Army and Navy are similar. Recognition is often mentioned in the literature as a by-product or a nice to have result, but it was never observed by this author as an objective in and of itself.

In short, no productivity enhancing initiatives in the DOD are designed to use recognition specifically to motivate or improve productivity. Rather, recognition appears to be a by-product of improved quality of work life rather than as a causative factor.

Future Applications

Gain Sharing

An ideal area for implementation of gain sharing is where work is repetitive in nature, quantifiable and measurable. This allows for the calculations of standards upon which gain-sharing plans could be based. Bonuses then would be calculable and payable for work in excess of the standard. Gains might be shared on a 50-50 basis or other split as agreed to by management and unions or workers.

There are, however, some things which would have to be considered. If the employees perceived management's attitude as negative toward the existing levels of output or the employees believed the program was being implemented because management felt the workers weren't doing their best or even a "good job," morale could be adversely affected.

Another concern is the union. Any time a new operation or procedure is brought into the work area, the union must be informed. Union's responsibility is to ensure fair and equitable wages throughout the work place and to protect existing jobs. It is conceivable that the union could see increases in output as excuses to remove slots or decrease hours for the employees or both. To remedy these fears, the union must be brought into the introduction of any gain-sharing program at the inception of the program. Union officials must be part of a new plan, their inputs considered, and their fears addressed. If the union is not considered, the results could be disastrous. As an example, at the Ogden ALC, several quality circles were begun without informing the union. The results were unfortunate; the circles got off to a good start and were improving quality and had good employee support until the union filed a grievance because they were not properly coordinated with at the beginning of the new program. The grievance virtually brought the quality circle program to a standstill. As of this writing,

the grievance is not resolved. However, other quality circles are presently operational (26).

Gain sharing also provides some other benefits to the work place. The increased productivity sharing provides clear and specific goals to the worker; and if management assigned goals that were difficult to achieve, the workers would have hard, specific goals, which according to Locke et al. (19), are factors that, in combination with others, can aid productivity. The bonus payments also would provide recognition to the employee in the form of hard cash.

This kind of gain-sharing program could work anywhere that output can be quantifiably measured. The payments must be timely (at least quarterly) and of significant size to be important to the employee.

Work areas in which output is not easily quantifiable are more difficult to apply gain-sharing programs to. However, it is not impossible. Artificial standards must be developed or designed and a method for assignment of payments must be devised. On the other hand, recognition as a provider of incentive may be more universal in its application.

Recognition

Recognition does not have to take the form of money payments. Before the union interrupted the quality circles process at the Ogden ALC, significant improvements in productivity were made and no cash payments were issued. As

an example, the mean time between failures for a particular sextant was increased from 27 minutes to 264 hours (26; 27). Although other factors certainly contributed to the increased productivity, the workers involved with the circle felt as though they had important suggestions to make and were highly motivated as a result of the recognition they received for their involvement in the program. Some of the workers were so caught up in it that when quitting time came they did not want to quit and even volunteered to take the sextant and other items of work to their homes so that they could continue working (26; 27). In one Army test, workers selected for the gain-sharing program immediately increased their output before any payments were made; and as a result of a contract fall-out, no payments were ever made. Yet, productivity stayed up. According to one Army official, those workers felt as though they had been selected for the job because their abilities as top workers had been recognized (25). (Caveat: This may or may not be a result of the Hawthorne Effect.)

Recognition can be accomplished in a variety of ways in the DOD. Organizations could have regular postings of significant accomplishments, quarterly issuance of letters of appreciation or commendations, or any other form of recognition that is appropriate to a given work place. However, awards are not the only types of recognition that workers

relate to. If DOD management could do what Worthington management does, they could significantly improve operations and productivity at minimal cost. At Worthington, they listen to their employees and then use the employees' ideas. Comments and recommendations for improvements are vigorously sought from the employees.

All three services have suggestion programs which is one form of soliciting ideas. However, the utilization of good ideas takes a long while and it is done in an impersonal manner. In an effective suggestion program, significant others must listen to an employee as he/she volunteers an idea. That significant other, whether it be the foreman, section supervisor or part of the management team must be someone that the workers see as "one to impress" and the significant other must then reflect back to the worker his understanding of the "new idea" and its relative merits. Then those ideas must be acted upon. There is no reason why this technique cannot be expanded within the DOD. The beauty of it is that it can be used in a variety of settings.

The greatest limitation facing this approach to increasing productivity is the great difficulty in educating and convincing middle management of this method's usefulness. The DOD would have to undertake a program to train managers in proper recognition and implementation procedures, and would have to resolve concerns about job security and the effects

of unsuccessful "new ideas" which did not prove successful or were even detrimental.

Summary

The DOD does have programs designed to aid employee productivity. The bulk of the incentive programs appear to be in the capital investment arena with monetary incentives and recognition programs at a minimum. It also appears that there is no effective central focal point for productivity programs within the DOD. Due to the successes that some of the incentive programs have had within the DOD, it seems reasonable to accept incentives as a potential source of increased productivity for the DOD. The search must center around what kind of programs to initiate and where they should be initiated.

The following chapter touches on these issues and makes recommendations for their resolution.

CHAPTER VII

RECOMMENDATIONS AND CONCLUSIONS

Recommendations

It is recommended that the Office of the Secretary of Defense (OSD) initiate a program down through the services to identify those functional areas where trial incentive recognition programs could be implemented. Further, it is recommended that a focal point be established for all activities within the DOD involving incentive or recognition programs.

It is also recommended that the DOD undertake a study to best determine how to implement a formal recognition plan within the DOD. Also, recognition needs to be viewed by the top managers of the DOD as important in and of itself as an employee motivator. Once this is accomplished, recognition, which is seen by this author as a sleeping productivity giant, would gain the importance and position that it so rightly deserves. Additionally, if an effective recognition program could be added to a gain-sharing plan, the results could be even more positive.

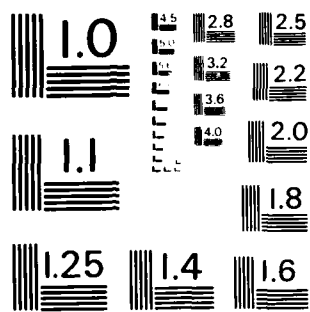
It is further recommended that a team be sent to study the incentive program at Duke University Hospital in Durham, North Carolina. This nonprofit organization is using

techniques that it borrowed from Worthington Industries and is doing well with the program (20). A few years ago the hospital was in financial trouble and morale was low. Today things are vastly improved (20). The purpose of the study would be to look for ways to use Worthington Industries' techniques in those areas where work may not be as easily quantifiable. The results of that study could be an asset in providing motivational aids to hospital commanders who are in the health care business and to the white collar work force within the DOD.

Another area to consider is Government contractors. Encouraging contractors to use incentive or recognition concepts could aid contractor productivity. Aiding contractor productivity is always a DOD objective.

Conclusions

Worthington Industries, Inc., of Columbus, Ohio has shown us the way to higher productivity, happier employees, and high product quality. Their method is simple and straightforward. As John H. McConnell says, "Keep it simple." That he has done, and it has worked. Complicated programs lose their meaning and relativity. The simplicity of the program at Worthington Industries is one of its better assets. In the DOD and in the Federal sector as a whole, things tend to get too complicated and unmanageable. Perhaps, in some cases, complexity is a necessary evil. However, in other cases when



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963 - A

complexity is not needed, it often exists. Another asset of Worthington Industries is its trust in and willingness to work with people. Repeatedly throughout the interviews, this author heard of the worth of "people" to the company. Lets face it, the DOD is people. The human resource is our prime asset, and we must expand to develop people to the best of our aggregate abilities.

APPENDIX
QUESTIONS AND RESPONSES
OF THE INTERVIEWS

INTERVIEW WITH
MR. JOHN H. McCONNELL

As President and Chief Executive Officer of Worthington Industries, Mr. McConnell makes it clear that he has a strong belief in the power of recognition as a motivational tool. According to McConnell, profit sharing, opportunities for advancement, raises, awards for performance, pats on the back, and an identification with the corporate image are all means of recognition. Mr. McConnell believes that recognition is the key to improved productivity and uses the analogy that many athletes perform at high levels of output simply for the recognition they believe they will receive if they excel at their given sport.

Mr. McConnell also believes that if an employee is treated as hardworking and trustworthy, he will behave in a like fashion. As a demonstration of this, coffee and hot chocolate are made available to the employees at no charge. They are asked to monitor themselves and to take coffee breaks when they feel the need, rather than at some pre-determined time. Further, each employee is expected to be aware of and to actively work for reduced production costs and improved quality. As Mr. McConnell states, ". . . all men have great potential and the great progress of the future will not be in machines, but in men."

To further facilitate the productivity of the work force at Worthington Industries, McConnell has provided clean, well-maintained and well-lighted work areas. He believes that for the worker to be effective, he must have a good place to work.

In general, John H. McConnell is a man that believes in the capabilities of other men. He believes that if given a chance, an individual performs and will do more than an adequate job. They must be recognized; listened to; communicated with; allowed to participate in decisions; allowed to share in the profits; given a full day's pay for a full day's work; provided with a safe, clean, secure environment to work in; and treated like responsible, trustworthy human beings. Mr. McConnell contends that if these things are done, motivation to work will be high.

Mr. McConnell also believes in fairness to the employee. As he sees it, employees must be promoted based first on their merit and then on seniority. He believes it is unfair to promote an employee based solely on seniority as is done in so many union shops. At Worthington, if all other things are equal, then seniority is taken into account for promotion purposes.

Additionally, Mr. McConnell stresses the importance of customer service and providing quality products to customers. He states, "We must get the order, supply the

quality and services, and get paid." However, as he says, the Golden Rule must be applied while engaged in the above activities.

To be sure, there are other factors that contribute to the success of Worthington Industries. Mr. McConnell points out that in addition to the way employees are treated at Worthington Industries, he also believes in "thinking better" than the competition, doing what is done well, and not worrying about the competition.

Mr. McConnell is at the head of a company that has grown incredibly in the past few years. His company is a team and he is the captain. But this captain is different; he lets his teammates help him run the ship and share in the experience as well as in the rewards.

RESPONSES OF TOP MANAGEMENT

1. What is your position at Worthington Industries?

Two top managers

2. How long have you worked here?

1. 17 years
2. 25 years

3. Do you know how well Worthington Industries compares to other steel producers? How? What are the indicators that you consider important? Is your data reliable? How is it gathered? Is this data commonly shared among the steel producers?

1. Yes. Read your corporate reports. Bottom line profits and tonnages. Yes. From those publicly held companies that issue quarterly reports. Data is open to the public.
2. Yes, Steel Service Center Institute. N/C

4. Are you satisfied with Worthington Industries as an employer? Why or why not?

1. Absolutely. Their philosophy about people. Here responsibility leads to opportunity which leads to rewards for performance.
2. Definitely.

5. In your opinion are most employees satisfied with Worthington Industries as an employer. Why or why not?

1. Yes. Same as response 1 in question 4 above.
2. Yes.

6. Is the positive publicity Worthington Industries receives justified? Explain.

1. Yes (no elaboration).
2. Yes. The way we treat people.

7. How would you briefly describe the operating philosophy of Worthington Industries?

1. Give good quality and be competitive in the area of customer service.
2. Be a good customer, communicate, practice the golden rule, we ask 100 percent of our employees.

8. Is Worthington Industries different from its competitors? If so, in what way?

1. Yes. The way we treat people, including customers and employees.
2. Yes. Better quality, customer service, integrity.

9. Name three things that are important to Worthington Industries' success?

1. People, integrity of the company, and respect for customers and suppliers.
2. People, our philosophy and our commitment to our shareholders.

10. How do you orient new employees?

1. Give them a handbook to read, show them a movie on company philosophy, and send them to classes on metallurgy and finance.
2. Briefings, OJT, evaluations.

11. If you could change anything at Worthington Industries, what would it be?

1. No changes.
2. Very few--we are well-balanced.

12. In your opinion, are all levels of Worthington Industries' employees highly motivated. Why or why not?

1. Yes. Opportunity, recognition, profit sharing.
2. Yes. Because we hire promotables.

13. What makes you want to work hard?

1. First to make money, to see the company achieve high profits and, secondly, the opportunity to perform.
2. To see our company grow.

14. What makes the line employees want to work hard? Is there any one thing that inspires the line workers to work hard?

1. Profit sharing. Profit sharing.
2. Recognition and profit sharing.

15. Define recognition.

1. Performance awareness.
2. Personal recognition of achievement.

16. Do you feel that the employee recognition program is effective in aiding worker motivation?

1. Yes, but profit sharing is more important.
2. Yes.

17. In your opinion, would people tend to work harder for Worthington Industries than for other firms? Why or why not?

1. Yes. Its expected.
2. Yes. Our total program provides incentive.

18. What keeps you interested in Worthington Industries' employment?

1. The challenge and the fun of helping people.
2. I'm happy to be here. I'm an important part of the company. I'm obligated to those who helped me.

19. Would you continue working at Worthington Industries if the profit-sharing plan was discontinued but your average annual pay was not reduced? Was reduced?

1. Yes. It would depend on how much.
2. Yes. Yes.

20. Who is responsible for product quality?

1. Everyone, it's a group effort.
2. Everyone.

21. Do monetary incentives (such as Worthington Industries' profit-sharing program) instill a desire to work hard in the employees? Why or why not? Is this also true for yourself?

1. Yes. People respond to money. Yes.
2. Yes. They are a part of the company. Yes.

RESPONSES OF MIDDLE MANAGEMENT

1. What is your position at Worthington Industries?

Five middle managers

2. How long have you worked here?

Ranges from 6 to 24 years; the average being 13 years.

3. Are you satisfied with Worthington Industries as an employer? Why or why not?

Yes (5)

Good place to work

Security

Good benefits (2)

Part of a team

Profit sharing

Treated well

Freedom to do the job (2)

4. In your opinion, are most employees satisfied with Worthington Industries as an employer? Why or why not?

Yes (5)

Same as above answers

5. Is the positive publicity Worthington Industries receives justified? Explain.

Yes (5)

Good customer service

Here you are rewarded for a job well done

Good customer service

Concern for people (4)

6. How would you briefly describe the operating philosophy of Worthington Industries?

Concern for people (3)

Be the best

Strong goals and objectives

Freedom to operate with management support

The Golden Rule

7. Is Worthington Industries different from its competitors?
If so, in what way?

Yes (5)
Better customer service (2)
Better quality (3)
Nonunion (2)
Philosophy about employees

8. Name three things that are important to Worthington Industries' success.

Attitude toward employees
Communications (2)
Supervision
Job security
Benefits
John H. McConnell
People (3)
Customer service (2)
Quality (2)
Truth
Simplicity (2)

9. How do you orient new employees?

Informal discussions (5)
On-the-job-training (5)
Briefings
"Osmosis"

10. Is there a formal training program? Describe it.

No, training is primarily OJT in nature (4)
Yes (for sales personnel)/no comment

11. If you could change anything at Worthington Industries, what would it be?

no changes (5)

12. In your opinion, are all levels of Worthington Industries' employees highly motivated? Why or why not?

Yes (5)
Profit sharing (5)
Job security
Recognition (3)

13. What makes you want to work hard?

Respect for John H. McConnell
My own nature
Freedom to do my job (2)
Profit sharing
Company growth
Recognition
Challenge

14. What makes the line employees want to work hard? Is there any one thing that inspires the line workers to work hard?

Recognition (2)
Promotions (2)
Profit sharing (1)
Recognition (3)
Job security (2)

15. Define recognition.

Being recognized for a good job (2)
Thanks for a job well done
To be acknowledged for your contributions
Communicated praise for effort

16. Do you feel that the employee recognition program is effective in aiding worker motivation?

Yes (5)

17. In your opinion, would people tend to work harder for Worthington Industries than for other firms? Why or why not?

Yes (5)
Because of the way they are treated (2)
Profit sharing (2)
Recognition (2)
Freedom to do their job

18. What keeps you interested in Worthington Industries' employment?

The people around me
The way I'm treated
The potential for personal growth
The challenge of my work here
Freedom to do my job

19. Would you continue working at Worthington Industries if the profit-sharing plan was discontinued but your average annual pay was not reduced? Was reduced?

Yes (5)

Yes, depends on how much (5)

20. Who is responsible for product quality?

Everyone (5)

21. Do monetary incentives (such as Worthington Industries' profit-sharing program) instill a desire to work hard in the employees? Why or why not? Is this also true for yourself?

Yes (5)

The more they work the more they earn (5)

It's a form of recognition (2)

Yes (5)

22. What is going to happen when John H. McConnell retires?

No change, he has good people around him (5)

RESPONSES OF LINE SUPERVISORS

1. What is your position at Worthington Industries?

Six Supervisors

2. How long have you worked here?

Range: 10 to 18 years

Average time on the job: 14 years

3. Are you satisfied with Worthington Industries as an employer? Why or why not?

Yes (6)

Their belief in people

The opportunities

Excellent company (2)

Freedom to do your job (2)

It's part of me

Good benefits (2)

Its nonunion (2)

Profit sharing (3)

The challenge

4. In your opinion are most employees satisfied with Worthington Industries as an employer? Why or why not?

Yes (6)

They're appreciated

Freedom (2)

Profit sharing

It's nonunion

It's a good company (2)

They're needed here

Open door policy

Part of a team

Management's belief in people

5. Is the positive publicity Worthington Industries receives justified? Explain.

Yes (6)

They have shown steady growth

They are progressive

Always looking for better ways to do things

Employees' ideas are used

No layoffs

Increasing profits

Generous benefits

John H. McConnell

They are good to the community
They practice the Golden Rule
Company philosophy
Customer service

6. Name three things that are important to Worthington Industries' success?

John H. McConnell and his belief in people
Good people (3)
Profits
Assets
Profit sharing
Fairness
A general good attitude
Good supervisors
Recognition (2)
Management
Customer service (2)
Quality
Team concept

7. Are there any major problems here? What are they?

None (6)

8. What one thing do you like the most about Worthington Industries? What would the average employee say he or she likes the most about Worthington Industries?

Line Supervisors:	Employees:
Job satisfaction	Job satisfaction
Team concept (2)	Profit sharing (3)
The people	Team concept
Freedom	Benefits
Opportunity	Opportunity

9. How are new employees oriented into your shop?

On-the-job-training

10. Is there a formal training program? Describe it.

Depends on the department (5)
No

11. Have you attended any training classes at Worthington Industries?

Yes (management training) (6)

12. If you could change anything at Worthington Industries, what would it be?

No changes (4)
Try to keep the temporary workers
Less diversification

13. In your opinion, are all the employees in your section highly motivated? Why or why not?

Yes (6)
Recognition
Recognition and profit sharing (2)
Good job, good products
I expect and demand it
Good pay
Freedom
Team concept

14. What makes you want to work hard?

Company growth
Pride (3)
Support for John H. McConnell
Self-motivated (2)
Self-improvement
Obligation--an honest day's work for an honest day's pay
I like the company and the job
The money

15. What makes the line employees want to work hard? Is there any one thing that inspires the line workers to work hard?

Team concept
Opportunity (2)
Recognition (2)
Profit sharing (4)
Pride (2)

16. Define recognition.

Pats on the back on a daily basis
Being recognized for good or bad performance
Rewards for predetermined goals
Caring
Rewards for performance
Feedback from supervisor for the job done

17. Does Worthington Industries use employee recognition as a means to aid worker motivation? What forms of recognition are used at Worthington Industries?

Yes (6)
Awards banquet (attendance awards) (4)
Name in newsletter
Record award (3)
Promotions
Profit sharing (2)
Feedback
Benefits (2)
Merit raises (2)
Pats on back

18. Do you feel that the employee recognition program is effective in aiding worker motivation?

Yes (6)

19. In your opinion, would people tend to work harder for Worthington Industries than for other firms? Why or why not?

Yes (6)
Because it's Worthington
Team concept (2)
The way they are treated
Recognition (3)
Profit sharing

20. What keeps you interested in Worthington Industries' employment?

I like the company
Benefits
The whole package
My age (job security) (2)
Recognition
Pride
Challenge (2)
Freedom to do my job
Team concept
Working with people

21. Would you continue working at Worthington Industries if the profit-sharing plan was discontinued but your annual pay was not reduced? Was reduced?

Yes (6)
Yes (2)
Yes, but depends on how much (4)

22. How is employee productivity measured?
Output is compared to historical records (5)
I don't; just look for problems
23. What happens when a bad product or a reject is discovered?
Provide feedback and look for causes (6)
24. Is product quality good at Worthington Industries?
Yes (6)
25. Who is responsible for product quality?
Everyone (6)
26. Do you have any responsibility for productivity improvements?
Yes (6)
I always look for ways to improve (2)
27. Do you have any responsibility regarding quality improvements?
Yes (6)
I always look for ways to improve (2)
28. How do you feel when your section produces a reject?
It's a reflection on me personally (2)
Terribly disappointed
Correct and avoid
N/A (maintenance)
Nothing bothers me more
29. How often do you think of ways to improve productivity or quality? Do you feel comfortable making suggestions?
We are always looking (6)
Yes (6)
30. How do you get improvements adopted into your job?
If it is a small matter (financially), it is done. If
if it is costly, management is asked for approval.

31. Do the employees in your section feel like they are involved in the business? Why?

Yes (6)

They are not just a number, and their ideas are welcomed by management (6)

32. What happens when an employee doesn't perform or begins to slack off?

First, he is counseled verbally; if he doesn't improve, then he is written up. The next step (if no improvement is found), is to give him days off without pay. If he still doesn't improve, he is let go. (6)

33. What is the role of the employee councils? Are you a member? Do you provide inputs to members?

To aid communications between employees and management (6)
No. Sometimes.

34. Are your products better than your competitors?

Yes (5)

I don't know

35. Do monetary incentives (such as Worthington Industries' profit-sharing program) instill a desire to work hard in the employees? Why or why not? Is this also true for yourself?

Yes (6)

More work yields more pay (6)

Recognition also helps (2)

Yes (6)

RESPONSES OF STAFF MEMBERS

1. What is your position at Worthington Industries?

In order to preserve interviewee anonymity, staff positions will not be listed. n = 5

2. How long have you worked here?

Range: 1 to 12 years Average: 6 years

3. Are you satisfied with Worthington Industries as an employer? Why or why not?

Yes (5)
People philosophy (2)
Freedom (2)
Benefits
We're trusted
Opportunity
Recognition

4. Is the positive publicity Worthington Industries receives justified? Explain.

Yes (5)
More is deserved
This place is an example of free market economy at work
No unions
Good products (2)
Pride in work
Especially in the hourly group
Employees are happy
Customer service

5. Is Worthington Industries different from its competitors? If so, in what way?

Don't know (2)
Yes (3)
Good customer service (2)
Good products
Nonunion
The profit-sharing plan (2)

6. Are there any important problems now facing Worthington Industries? What are they?

No
Only the economy (2)
Growth creates some strain (2)

7. What do you like the most about Worthington Industries?

The attitudes and philosophy of Worthington Industries' management
Opportunities
I am trusted
Freedom (2)
Challenge
The people

8. If you could change anything at Worthington Industries, what would it be?

Better communications from the top management down (3)
Nothing (2)

9. Do you feel like you want to work hard for Worthington Industries? Why?

Yes (5)
I am part of the company
I always work hard
Freedom
Recognition
Profit sharing
Opportunity
Pride

10. What makes the line employees want to work hard? Is there any one thing that inspires the line workers to work hard?

Profit sharing (5)
Recognition (3)
Mutual respect
They are a part of the company (2)
No comment
Peer pressure

11. Does recognition make you want to work harder?

Yes (4)
No news is good news--no communication from the top down.

12. How are your efforts, contributions, accomplishments, etc., recognized?

I don't feel they are
Awards
Pats on the back (2)
By being included in the general group
Advancements, monetary recognition

13. Why is Worthington Industries successful?

People (4)
Customer service and quality
Employee productivity
John H. McConnell's philosophies

14. What do the vendors and customers think of Worthington Industries in general?

They think highly of us (otherwise they wouldn't return)
Good reputation
High regard
No upset customers; we are the best. Vendors pursue us--they want to be able to say Worthington Industries buys from them.
Respect

15. Are there any vendors or customers that dislike Worthington Industries? Why?

No (5)

16. Is there a training program? Formal or informal?

Yes, both. It depends on what you do here (5)

17. Do monetary incentives (such as Worthington Industries' profit-sharing program) instill a desire to work hard in the employees? Why or why not? Is this also true for yourself?

Yes (5)
The harder they work the more they get (2)
It makes them more aware
The money gives them a chance to do other things
It makes them a part of the team
Yes (5)

18. What will happen when John H. McConnell retires?

No change, he has a good management team around him. (2)
There may be some difficulties at first, but o.k. in
long run. (2)

We will be o.k. for awhile. His charisma makes you
want to follow him.

RESPONSES OF PRODUCTION EMPLOYEES

1. What is your primary duty at Worthington Industries?

In order to preserve interviewee anonymity, employee duties will not be listed. n = 25

2. How long have you worked here?

Range: 1-1/2 to 14 years. Average: 7 years

3. Are you satisfied with Worthington Industries as an employer? Why or why not?

Yes (25)
Benefits (14)
Good pay (8)
Security (8)
Opportunity (7)
Recognition (4)
Meets my needs
People philosophy (6)
Profit sharing (3)
Good people here (management and employees)

4. What do you like/dislike the most about working at Worthington Industries?

Likes	Dislikes
Benefits (5)	None (23)
Profit sharing (4)	Having to work overtime
The challenge	I don't like the dress code
Sports program	Sometimes they're bossy
People (2)	
Good relations	
No hassles	
Recognition (2)	
Acceptance	
Opportunities (5)	
The money (3)	
The hours	
The freedom (5)	
The relaxed atmosphere	
Peers (2)	
Security	
The work	
The open door policy	
I like it all	

5. Would you recommend working for Worthington Industries to a friend?

Yes (25) [Note: Several individuals indicated that they had recommended Worthington Industries to friends as an employer, and a few even mentioned that some of those friends now work at Worthington Industries.]

6. Are you proud of your work here? Why?

Yes (25)
Good quality (8)
You are recognized for your efforts
It's an accomplishment
It's satisfaction
I learned a new skill
I do more here
My growth
I take pride in whatever I do
I do the best I can
Recognition (2)
Not the biggest, just the best
Good output per man
Expertise is required
Low reject rates
I don't do anything I wouldn't put my name on
It's the best
I give it my best
The quality is good and neat

7. Do you feel personally responsible for your work?

Yes (25)

8. Do you get good quality materials to work with?

Yes (24)
About 50/50. We have poor tools and the equipment is old.

9. What happens if you put out a bad product?

It's returned; they tell me about it and it's corrected. (24)
It causes more work.

10. How do you know if a product you worked on is bad?

I see it myself or the foreman tells me about it. (25)

11. Do you feel a need for quality control inspectors?

Yes (12) [Note: 10 "yes" responses came from the cylinder division where a long production line exists and the item being manufactured undergoes several stages in the production process before it is completed.]

Yes, some guys just push it out the door.

Not sure

No (9)

It couldn't hurt

I am one

12. How do you feel about the free coffee/hot chocolate?
Does the fact that it is free give you any message about the way management feels about the employees?

Part 1

It's a detraction to work

Good (21)

It's a waste (4)

I drink too much

Don't need it

Part 2

No (2)

They care about us (16)

Appreciate our hard work

It's nice of them to do

They want to give us something

They want to help motivate us

13. How would you feel if quarterly sales were down?

Depends on why it is down (economy vs. quality) (5)

It costs us money (5)

Bring it up next time (6)

Down

Lets correct it

I'll help if I can

Just keep trying

It costs me money and then my social life goes down

Disgusted--it hurts the pocket book

We have to do better

Sometimes it's to be expected

It's bad

14. Does the money you get for profit sharing make you feel like you want to work harder? Why?

Yes (20) More work yields more pay (18) Recognition (2)

Sometimes, because I can get more money.

Yes and no. Money isn't always motivation to me--responsibility is.

No, it's too diluted and there is no control.

When it's up, yes. More income and pride in work.
No, it won't make much difference. How is it computed?

15. Is it important to you to have your contributions here at Worthington Industries recognized?

Yes (25)

16. Are you recognized for your contributions? In what way?

Part 1

Yes (21)

Somewhat (3)

They remember the bad more than the good

Part 2

Advancements (7)

Praise (8)

Awards banquet (4)

Evaluations (6)

Merit pay (8)

Gifts (lighters or other small items for records broken) (3)

Peer support (2)

Good work is noticed

17. Does the recognition you get for your work make you want to work harder?

Yes (24)

Somewhat

18. What makes you want to work harder, recognition or profit sharing?

Recognition (20)

Profit sharing (5)

19. How would you feel if the recognition stopped?

Less important

Like I did something wrong

I would wonder why and have self-doubt

Depressed

That there is a problem somewhere

I would have self-doubt. It helps to work hard.

Would wonder why and keep trying

Would wonder why

My motivation would be hurt

They don't care so why should I?

I would feel bad and my productivity would go down
That Worthington Industries was losing its backbone
Like I'm doing something wrong
It won't stop!
Like I lost my best friend
We don't matter
Like a union employee
It won't stop. If it did, something would have to be
wrong.
Bad (2)
I would lose my inspiration
No good (2)
Like I'm not doing my job right
Sometimes I think it has

20. Do the managers know who you are? Does it matter to you?

Part 1
Yes (24)
Mostly (1)

Part 2
Yes (23)
To some degree
I like to be recognized

21. Do you trust Worthington Industries as an employer?

Yes (24)
No (dissatisfied over dress codes)

22. In your opinion, is everyone here highly motivated?
Why or why not?

Part 1
For the most part, yes (23)
No (2)

Part 2
Profit sharing (7)
Recognition (12)
You have to be to work here (3)
Job security
Some guys just put in their time and go home
Pride in their work

23. Why do you think Worthington Industries is successful?

Because of the profit-sharing program

Good upper management (5)

They are aggressive (2)

Sound principles

They are diversified

Recognition of the employee (4)

John H. McConnell

Concern for people (4)

The people here (3)

The quality (7)

Customer service (5)

A lean work force

Profit sharing (2)

Hard work

Good attitudes

Trust in the employees

Stable growth

Nonunion

Fair treatment of the men

24. If you could change anything at Worthington Industries, what would it be?

Add another operation (business) to break the seasons

No changes (13)

Make them more personable

I would make more temporary workers permanent

Improve quality

Shorter waiting period for the temporary workers

Improve communications

It's too political

Better air conditioning out on the floor (4)

The benefit program. I don't like the \$200 deductible

I would try a different shop here (2)

I would eliminate profit sharing and put in a bigger base pay

25. How do you feel about the employee councils? Are you a member?

Part 1

Not much good (3)

It helps communications (18)

It's good (8)

It's too negative

It's a gripe session

Part 2

No (20)

Yes (5)

26. Do you work harder here than you have at previous jobs?
Why or why not?

Part 1

No (5)
Yes (15)
Sometimes (2)
No Comment (3)

Part 2

I always work hard (6)
If you don't, you will get overrun (2)
Advancement opportunities (4)
It's required (4)
It depends on the schedule
I enjoy it here
I just like it better here
The profit sharing (3)
Recognition (3)
Pay

27. How do you feel about someone who doesn't work hard?
How are they treated by the other employees?

Part 1

They cost us money (6)
They are not helping themselves
He is loafing
He is hurting his chances to advance
Help him (4)
They have a problem
Someone should tell management (2)
I avoid them
I'd like to nail a couple of them
It's hurting everyone
They don't belong here
I hold it against them
I don't like it (2)
I tell them to "hubba hubba" (2)
I'm concerned only if it affects me

Part 2

Not well
They are pressured by their peers (6)
They let it ride
Avoid them (3)
No comment (2)
Helped by the others to change (3)
He is talked about (2)
No differently (3)

Conflicts arise
They hope management takes care of it
Everyone gets on their case
Not as well

28. What single reason keeps you interested in Worthington Industries' employment?

Advancement opportunity (12)
The company itself (2)
The money (4)
Job security (6)
I just like it here
Profit sharing
The people

29. Would you continue working at Worthington Industries if the profit-sharing plan was discontinued and your pay stayed the same? Dropped?

Part 1
Yes (25)

Part 2
Yes, but it would depend on how much (19)
Yes (3)
No (3)

30. How would you describe product quality at Worthington Industries? Why?

Good to excellent (25)
The people (25)

31. Will the company continue to be successful when John H. McConnell retires? Why or why not?

Part 1
Yes (22)
I hope so
I don't know
There is no reason to expect a change

Part 2
There are good people under him who will take over and continue with his philosophies (23)
I don't know if management would carry on his ideas
No opinion

32. Are your ideas for improvements listened to? Are they accepted?

Yes (22)
Sometimes (25)

33. Who is responsible for product quality?

Everyone (22)
The lab
The plant manager and the workers
Quality Control

INTERVIEW QUESTIONS FOR SUPPLIERS OF WORTHINGTON INDUSTRIES

1. Why do you do business with Worthington Industries?

They are a good company to work with
Solid integrity and they buy a lot
Integrity, potential
Good potential and highly reputable
Good reputation

2. What sets Worthington Industries apart from its competitors?

Quality and service
Integrity, quality and service
The way they interact with their people
Quality and service
Quality and the people

3. To what do you attribute the economic success of Worthington Industries?

Employee motivation, recognition and treatment
People motivation
Cost control over labor and steel. Volume buying.
Dedicated employees
Good niche in the market

4. Does Worthington Industries have higher quality standards for the material you supply them than other companies that you supply materials to?

Yes
No
No
Yes
As good or better

5. What is the best aspect of working with Worthington Industries? Worst?

Part 1	Part 2
Spirit of cooperation and respect	None
Their overall attitude and activities	None
Integrity	None
The people	None
Too many to count--a good feeling	None
If I've satisfied them, I've made it.	

INTERVIEW QUESTIONS FOR CUSTOMERS OF WORTHINGTON INDUSTRIES

1. Why do you do business with Worthington Industries?

Good quality and service
Good quality, service and price
Good quality, service, price and consistency
Good quality, service, price and reputation
Good quality and service

2. What sets Worthington Industries apart from its competitors?

Customer service
Customer service, quality and their motivated employees
Customer service
Customer service, quality and price
Quality of the product and the people

3. To what do you attribute the economic success of Worthington Industries?

Their people and recognition of their people
Diversification, customer service and their employees
Employee motivation
Good managers, labor relations
They are aggressive

4. Do you believe the quality of material you receive from Worthington Industries is better than their competitors? What facts lead you to this conclusion?

Yes, the reject rate is 2-3%. Normally, we expect 5%.
Yes, few problems with their quality
Yes, almost NO rejects
Yes, less than 1% reject rates
Yes, very low reject rates (less than 1%)

5. Is Worthington Industries' quality consistent?

Yes
Yes (very)
Yes
Yes
Yes

6. Has Worthington Industries' product quality changed in the last few years? If so, in what way?

- No If any, slightly better
- No N/A
- No Always good
- Yes Improved statistical process control
- No Always remains high

7. Are there any problems in working with Worthington Industries?

- No
- No
- No
- No
- No

8. What would another company have to do to get your business away from Worthington Industries?

- Better quality, better service at a better price
- Be better overall at a cost savings
- Improve quality, price and service over a period of time
- I don't think they could
- Provide superior quality, pricing and service

9. What is the best aspect of working with Worthington Industries? Worst?

- | Part 1 | Part 2 |
|--|--------|
| Their people | None |
| Their service | None |
| Their people | None |
| Their cooperation, consistency, dependability and innovativeness | None |
| Their people | None |

REFERENCES CITED

1. Acker, David D. "Productivity Enhancement a Clear and Present Challenge," Program Manager, March-April 1983, pp. 5-15.
2. Addis, Roxanne, and George E. Wildman, Jr. "Anniston Army Depot--Excellence Through Innovation," Resource Management Journal, Summer 1983, pp. 4-13.
3. Anthofer, Cynthia Kelley. Office of the Comptroller, DRCCP-D, Department of the Army, Alexandria VA. Telephone interview. 2 September 1983.
4. Berger, Charles. Program Manager, SM/ALC/XRX, Sacramento CA. Telephone interview. 2 September 1983.
5. Bretton, Gene E. A Performance Contingent Reward System That Uses Economic Incentives. San Diego CA: Navy Personnel Research and Development Center, February 1978.
6. Chambers, Lieutenant Colonel James E., USA. "The Changing Role of Money as a Motivator." Unpublished research report, unnumbered, U.S. Army War College, Carlisle Barracks PA, 23 April 1982.
7. Collins, Samuel R. "Incentive Programs: Pros and Cons," Personnel Journal, July 1981, pp. 571-575.
8. Dahms, Major Robert, USAF. Headquarters Air Force, Department of Productivity, Andrews AFB MD. Telephone interview. 3 September 1983.
9. Dockstoder, Steven L., Delbert M. Nebeker, and Chandler E. Shumate. Performance Contingent Reward System: A Field Study of Effects on Worker Productivity. San Diego CA: Navy Personnel Research and Development Center, 1978.
10. Fein, Mitchell. Improshare. American Institute of Industrial Engineers, 1981.
11. Harris, J. O., Jr. "How to Manage People at Work," Wiley Professional Development Programs, 1977.
12. Herzberg, Fredrick. The Managerial Choice. Homewood IL: Dow Jones-Irwin, 1976.

13. _____, Bernard Mausner, and Barbara B. Snyderman. The Motivation to Work. New York: John Wiley & Sons, Inc., 1967.
14. Hachler, Joani Nelson. "Letting the Grapevine Decertify Unions," Industry Week, May 2, 1983.
15. Kellogg, Marion S. Putting Management Theories to Work. Houston: Gulf Publishing, 1968.
16. Lincoln, James F. Incentive Management. Cleveland: The Lincoln Electric Co., 1951.
17. Locke, Edwin A. A New Look at Motivation: Theory V. College of Business Management, January 1982.
18. _____, J. F. Bryan, and L. M. Kendall. "Goals and Intentions as Mediators of the Effects of Monetary Incentives on Behavior," Journal of Applied Psychology, 1968.
19. Magnus, Margaret, "Employee Recognition: A Key to Motivation," Personnel Journal, February 1981.
20. McConnell, John H. Chairman and Chief Executive Officer, Worthington Industries, Inc., Columbus OH. Personal interview. 28 June 1983.
21. National Commission on Productivity Work Life. Employee Incentives to Improve State and Local Government Productivity. Publication number CP75015. Washington: Government Printing Office, 1975.
22. Needell, Cheryl U., and George W. Alwon. "Recognition and Reward: Keys to Motivating Supervisors," Management Review, November-December 1982, pp. 53-56.
23. O'Dell, Carla S. Gainsharing Involvement, Incentives and Productivity. New York: AMACOM, 1981.
24. Quick, Thomas L. Person-to-Person Managing. New York: St. Martin's Press, 1977.
25. Siciliano, Thomas. Office of the Comptroller, DPCCP-D. Briefing to AFLC Productivity Conference, Oklahoma City ALC OK, 11 May 1983.

26. Singleton, Don. Program Analyst, Ogden ALC OK. Briefing to AFLC Productivity Conference, Oklahoma City ALC OK, 10 May 1983.
27. _____. Program Analyst, Ogden ALC OK. Telephone interview. 7 September 1983.
28. Stockhard, James G. Rethinking People Management. New York: AMACOM, 1980.
29. U.S. Defense Industrial Base Panel. The Ailing Defense Industrial Base: Unready for Crisis. Washington: Government Printing Office, 31 December 1982.
30. U.S. Department of the Air Force. Air Force Productivity Enhancement Program. AFR 25-3. Washington: Government Printing Office. 25 February 1982.
31. U.S. Government Accounting Office. Productivity Sharing Programs: Can They Contribute to Productivity Improvement. Washington: U.S. General Accounting Office. 3 March 1981.
32. Von der Embse, Thomas J., and Herbert E. Brown. "Authentic Motivation: How Psychological Touching Works," Supervisory Management, February 1979, pp. 19-23.
33. Vough, Clair F., and Bernard Asbell. Tapping the Human Resource. New York: AMACOM, 1975.
34. Weitzel, James B. "Money Talks, Sometimes," Best's Review, January 1982, pp. 86-87.
35. Worthington Industries. Annual Report. Worthington Industries, Inc., Columbus OH, December 1982.