

SELF-DIRECTED WORK TEAMS:  
A LIMITED CASE STUDY ON  
MANAGEMENTS IMPACT  
ON THEIR SUCCESS

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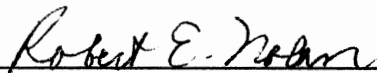
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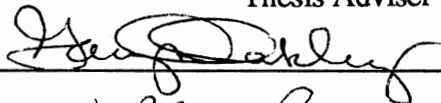
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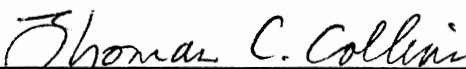
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## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION .....	1
Statement of the Problem.....	2
Purpose.....	2
Need for Study .....	2
Definitions.....	3
Chapter Review .....	4
II. REVIEW OF RELATED LITERATURE .....	5
History .....	5
Success of the Work Team .....	6
Senior Management Involvement .....	10
III. METHODOLOGY.....	14
Subjects.....	14
Instrument/Design .....	16
IV. PRESENTATION OF FINDINGS.....	19
Question 1: When did <u>(company name)</u> first implement a self-directed work team program?.....	19
Question 2: What were the reasons <u>(company name)</u> decided to implement the program? .....	20
Question 3: Please briefly describe the program as it exists at <u>(company name)</u> .....	20
Question 4: How do you plan on determining or measuring the success of the work team?.....	21
Question 5: What actions did senior management take to affect the success of the work team? .....	22

Chapter	Page
Question 6: Please list in order of importance which actions taken by senior management were most effective in contributing to the success of the work team, and why .....	25
Question 7: If you could do it all over again (implement a self-directed work team program in your company), is there anything you would suggest senior management do differently? If yes, please explain. ....	25
Question 8: Has the work team concept lived up to expectations? .....	26
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .....	27
Summary .....	27
Conclusions .....	28
Recommendations .....	29
BIBLIOGRAPHY .....	31
APPENDIXES .....	33
APPENDIX A - INTERVIEW GUIDE.....	34
APPENDIX B - INTERVIEW #1 .....	36
APPENDIX C - INTERVIEW #2 .....	46
APPENDIX D - INTERVIEW #3.....	57
APPENDIX E - INTERVIEW #4 .....	68
APPENDIX F - INTERVIEW #5 .....	75
APPENDIX G - INSTITUTIONAL REVIEW BOARD .....	90

## CHAPTER I

### INTRODUCTION

American business and industry is in the midst of a major paradigm shift caused by changes in the balance of trade with foreign nations, increased manufacturing competition, rapid technological advances, takeovers and mergers, and an ever-changing work force. As a result, many of these companies are turning to innovative programs which are revolutionizing the manner in which they operate. One such concept being introduced in many companies is self-directed work teams. These teams, which consist of intact groups of employees who share a particular function and mission, are fully responsible for a complete work process that delivers a product or service to an internal or external customer. To varying degrees, team members work together to improve their operations, handle day-to-day problems, and plan and control their work. Employees, who for years have been conditioned to take direction from a department supervisor, now find themselves with the freedom and authority to accomplish a given task or project. By empowering the work team to control day-to-day activities, the need for first line supervision is drastically reduced and, in many cases, eliminated. This redistribution of leadership is a unique characteristic of self-directed work teams. Though self-directed, however, the success of the team still rests, to a great extent, with senior level management. In addition to strategic decisions made prior to start-up of the team, senior management plays an integral role throughout not only the implementation process, but also the long term viability of the program. As Loden and Rosener state, "Developing cooperative and committed work groups in which diversity is respected and supported will be the major task of corporate society during the next decade" (Loden, 1991).

Consequently, this key group of individuals possesses the power to provide the support necessary for the team's success.

### Statement of the Problem

The problem which gives rise to this study is that senior level management is unfamiliar with the actions it needs to take in order to ensure the success of self-directed work teams.

### Purpose

The goal of this study was to identify actions, attitudes and information senior management needs to adopt to ensure the success of the self-directed work team. Identifying these factors will help management within an organization to more clearly define their role when implementing a self-directed work team program, ultimately resulting in a greater likelihood of success for the team. The study also attempted to address several strategic issues related to the history and implementation process of self-directed work teams within an organization. Questions of this nature were posed during the research study in order to provide a deeper understanding of how management can impact the success of a self-directed work team as well as to validate study findings.

### Need For Study

Self-directed work teams are often viewed within companies as instruments of change. As such, they rely heavily upon management support for success. This study will examine attitudes and behaviors which, when demonstrated by members of senior management, help increase the chances of success for the work team.

## Definitions

The following definitions were used in this study:

Centralization - Management practice to concentrate decision-making at the higher levels of the organization. Referred to as "Central Control" by a few leaders at the top of the organization (Wellins, 1991).

Empowerment - "An important element of the new management style. It suggests a new kind of organizational structure, with decisions being made by people who are empowered to make them, freed of bureaucratic leadership emanating from the top" (Odiorne, 1991).

Greenfield Operation - A plant start-up that uses work teams from the beginning (Hughes, 1991).

Manpower - The employee population of an organization.

Manufacturing - To produce a part from raw material. For purposes of this study, the word applies to a particular industry which produces parts using mechanical power and machinery.

Non-exempt - An employee who is eligible for overtime pay. The term usually refers to an hourly paid employee.

Ownership - Possession of a particular process, belief, or value.

Productivity - A rate of production by workers.

"Quality Circles" - Programs that allow groups of employees to meet to improve the performance of work operations in their units, with particular emphasis on improving the quality and reliability of individual and group performance (Magjuka, 1991).

"Quality of Work Life" - A movement in business and industry prevalent in the 1960s where managers and supervisors asked employees for ideas that would make their jobs easier and more pleasant.

Scrap - Materials unusable as a result of manufacturing processes, such as human or machine error, or new product testing (Schilder, 1992).

Self-Directed Work Teams - Small groups of people empowered to manage themselves and the work they do on a day-to-day basis. Typically, members of self-directed work teams not only handle their job responsibilities but also plan and schedule their work, make production-related decisions, take action to solve problems, and share leadership responsibilities (Wellins, 1991).

Senior Management - Employees at the top of an organization who have authority, individually or collectively, to influence the strategic direction of part or all of the organization (Wellins, 1991).

Team Development - A process designed to improve the effectiveness of a group of people whose jobs require that they work together (Woodman, 1980).

### Overview of the Study

Chapter II provides a review of related literature on self-directed work teams. In particular, the chapter addresses the history of work teams, composition and purpose of work teams, and the impact of senior management on the success of self-directed work teams. Chapter III provides an overview of the research methodology used for this study, addressing first the subjects and then the instrument and its design. Chapter IV is the presentation of findings on the research conducted. The chapter is divided into eight sections based upon the format of the interview guide. Chapter V contains the Summary, conclusions, and recommendations of the study.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

Chapter II provides a review of related literature on the implementation of a self-directed work team program within an organization. The chapter will examine the history of self-directed work teams in American industry as well as literature which deals with measurements of success for the work team and issues which contribute to the team's success.

#### History

Referred to by Dumaine (1990) as "the productivity breakthrough of the 1990s," self-directed work teams are a relatively new concept which is being embraced by an increasing number of American businesses, both large and small.

Steeped in the philosophy of centralization, American business and industry have had a long-standing relationship with the concept that control and empowerment were privileges reserved for a select group of individuals at the top of the corporate pyramid. The first recorded effort in self-directed teams came in the early 1950s when Eric Trist, now professor emeritus at the Wharton School, conducted research on British coal miners who had been formed into several teams based on technical requirements of their jobs (Wellins, 1991). It was not until the early 1960s that American management began to experiment with the use of teams. The "Quality of Worklife" movement, where managers and supervisors first asked employees for ideas that would make their jobs easier

and more pleasant, was one of the first attempts to promote greater employee involvement (Parker, 1991).

By the late 1970s, employee groups called "quality circles" began to take hold. Originated in Japan, their objective was to identify ways to improve quality and cut cost. The application of self-directed work teams didn't really begin until the early 1980s when pioneers such as Proctor & Gamble, Digital Equipment, and TRW implemented programs to empower employees. Today, hundreds of companies throughout the United States, both large and small and from every industry sector, are experimenting with or have implemented a work team program. A recent survey of 476 Fortune 1,000 companies shows that while only 7 percent of the work force is organized into self-managed teams, half the companies questioned said they will be relying more on them in the years ahead (Dumaine, 1990).

### Success of the Work Team

It is a widely accepted theory among organizational development and human resource practitioners that the degree to which senior management supports a self-directed work team program is directly related to the success of the program. In an article by Bednarek (1991) on C.E.O. support for work teams, the author quotes Ed O'Connor, vice president of human resources for A.O. Smith Corp., Milwaukee, Wisconsin, as saying "The key to success of work teams is the commitment of top management, and not the product, or unions, or even the way things are being done." Other authors such as Stewart (1992), Morris (1989), and Schilder (1992) concur with this theory on the importance senior management plays on the success of the work team. Success, however, can be measured in different ways depending on company expectations.

One measure of success especially pertinent to manufacturing companies is increased productivity. According to Dutton (1991) and Lee (1990), productivity increases when employees are given the opportunity to make their own decisions, solve their own problems, and set their own work schedules. Wellins (1991) states that plants using self-directed work teams are, on average, 30 to 50 percent more productive than their conventional counterparts. A General Electric plant in Salisbury, North Carolina with a work team structure, increased in productivity by 250 percent as compared to other G.E. plants that produced the same product. As a result, "today, more than 20% of G.E.'s 120,000 employees work under the team concept" (Schilder, 1992). Further review of literature on the impact of work teams on manufacturing processes revealed a research project sponsored by the Association for Manufacturing Excellence (AME) and conducted by Professor Robert D. Waldo, Ph.D., a professor of management at the University of Puget Sound. The study specifically focused on results of self-directed work teams in a manufacturing environment. Improvements included increases of 30 percent in productivity, a drop in customer complaints by an average of 71 percent, and a 58 percent decrease in scrap rates (Dutton, 1991). These figures support the theory that the most qualified individuals to make strategic decisions are those who are actually producing the product (Schilder, 1992).

Parallel to increased productivity as a measure of success is the element of enhanced quality in the parts produced. Employees who have been given the authority to direct and manage their own department have a tendency to impose a greater degree of quality in the items they are making. Examples of improved quality include a reduction in service errors by 13 percent at Federal Express Corporation and a reduction of 90 percent in defects at the Volvo Corporation's Kalmar facility (Wellins, 1991). At Northern Telecom's Morrisville facility, in addition to increases in revenues of 63 percent, sales of 26 percent, earnings of 46 percent, and productivity per employee of 60 percent, quality results increased by 50 percent, and the number of quality inspectors

dropped 40 percent (Schilder, 199s). Schilder goes on to say that the concept of ownership in what is produced now becomes a motivator resulting in a higher level of quality.

The old riddle, "Which came first, the chicken or the egg" applies to yet another measure of success for self-directed work teams. After reviewing literature, the question must be raised "Does increased productivity and quality lead to enhanced employee morale or does enhanced employee morale, due to the fact that employees are recognized for their ability to contribute to the value of the organization, lead to higher levels of productivity and quality?" (Versteeg, 1990). According to Cheney (1991), "Executives are faced with a dual challenge: to increase productivity and quality, while simultaneously improving the quality of work life. That courtship between productivity and quality concerns of management and the quality of work life expectations of employees suggests that a happy marriage might be obtained through self-managed work teams." Though improvements in morale are often more difficult to measure, research exists to support the belief that improvements in morale are an important by-product of a successful team. One such study was conducted by Richard F. Magjuka, a professor of management at the Indiana University School of Business in Bloomington, Indiana. In his study on employee improvement programs, Magjuka found that 27 percent felt the purpose of self-managed work teams was "to improve communication and the quality of work life in the firm" (Magjuka, 1992). Further, Kraus (1991), in a paper addressing the impact of work teams on process improvement within an organization, indicated that individual team members benefit as well. Kraus went on to say that individual advantages include "the opportunity to contribute ideas, a sense of responsibility for the success of the decision, and a feeling of satisfaction with the course of action agreed upon." Finally, in a survey on the subject of self-directed work teams conducted jointly by the Association for Quality and Participation, Development Dimensions International, and Industry Week, team members surveyed listed the top three benefits of self-directed

work teams as follows: improved team involvement and performance, positive morale, and the sense of ownership and commitment to the product that teams create (Verespej, 1990).

The streamlining of the structure of an organization is another measure of success, according to several authors. Top management in many organizations is discovering that the traditional multi-level structure of the past is many times a detriment to operations and to the work team concept. Owens (1991), states that "rigid organizational pyramids and authoritarian management styles are deadly to self-managing teams." Lee (1990) states, "Because the team takes on supervisory, and in some cases, managerial tasks, the number of management layers decreases until the organization takes on a flattened, informal structure." Further, Stewart (1992) believes the benefit of work teams "permits greater self-management and allows companies to dismantle unneeded supervisory structures." Consequently, many organizations are looking to self-directed work teams to reduce what Tom Peters refers to as "bloated structures which slow corporate response to change circumstances" (Cheney, 1991).

Other, less frequently mentioned, measures of success were noted in the literature review. One such measure worth noting for this study was in the area of employee safety and health. Senior management at the G.E. plant in Columbia, Missouri, placed responsibility for safety and health in the hands of the work teams. According to Jenkins (1990), "the participative safety management system at the plant had a double advantage. The program reduced costs such as workers compensation rates, and at the same time, served employees by giving them a sense of ownership in developing a safer work environment." Success at this G.E. facility was measured according to reduced accident rates and fewer dollars spent on medical and lost time expenses.

## Senior Management Involvement

The role of senior management is a crucial factor in determining the success of a self-directed work team. Though the team assumes authority over the execution of operations, management retains ultimate authority over the strategic effectiveness and direction of the team (Owens, 1991). The review of literature revealed several issues which, when implemented by senior management, impact this degree of effectiveness or success for the work team.

Based on the literature review, training is a critical element leading to the success of a work team. According to Katz (1990), and Verespej (1990), inadequate training for team members is one of the biggest barriers to success. Likewise, the presence of training during the implementation process for a self-directed work team has its benefits. In the AME research study conducted by Dr. Waldo, 60 percent of the plants surveyed had an ongoing formal training process, with expenditures for training averaging 3.6 percent of the payroll (Dutton, 1991). Team members traditionally are individuals who, for years, have been programmed and conditioned to perform and behave in a prescribed manner. Empowering the team to make their own decisions, set their own schedules, and solve their own problems requires extensive training and development. Training in areas such as job skills, business knowledge, problem solving and team dynamics helps ease the transition from traditional systems to teams, helping everyone to understand change, as well as to deal with their feelings (Schilder, 1992). Lawler (1990) states that two kinds of training are dominant: task training "which is necessary so that individuals can effectively perform multiple functions," and interpersonal skill training which will allow team members to "make decisions, give feedback, and interact with each other in a positive manner."

Cross-training is also an integral part of the training process. This allows team members to perform multiple jobs within the team (Owens, 1991). Management's role in

the learning process is crucial. Stewart (1992) supported this premise by stating, "The 21st century company has to promote and nurture the capacity to improve and to innovate. That idea has radical implications. It means learning becomes the axial principle of organizations. It replaces control as the fundamental job of management." Kaney (1991) is even more direct with his statement; "One of the keys is that early in the process of trying to realign training or build training into the system, the C.E.O. has to make it explicitly important." Other authors such as Wellins (1991), Bednarek (1991), and Cheney (1991), also emphasize the importance of senior management's role in the training process of a self-directed work team. Without their support in prescribing levels of training along with designating the funding to pay for development, the team's ability to succeed is greatly diminished (Bednarek, 1991).

Communication is another key component of a work team program, and one in which senior management can actively participate. According to Wellins (1991), one of the most important things management can do to demonstrate their support for the work team is to communicate clearly defined goals and objectives to the team. As Kraus (1991) states, "Once the process has been determined, management must identify its goals in creating the team. It should prepare a written statement for the team's use in understanding what its mission is and what the limits of the team's responsibilities and authority are." The role of senior management as it relates to communication must also be active. In a study on teamwork and self-assessment techniques conducted by James Taylor, a University of Southern California adjunct professor in human factors, Taylor states management commitment "needs to be seen, needs to be visible, needs to be heard" (Fotos, 1991). Communication is also vital between the work team and other departments with whom they interface (Kraus, 1991). Without clearly defined requirements and expectations identified by management to all of the parties involved, the work team is subject to problems which can undermine its effectiveness. Bob Hughes, director of management services at the Indian Meridian Area Vocational-

Technical School in Stillwater, Oklahoma summarized it best in an article on self-directed work teams when he said "Communication is paramount. Everything must be communicated, and always through two-way channels. Open communication builds trust, which is often lacking at the outset of a work team transformation" (Hughes, 1991).

Senior management support for the work team can also be demonstrated by the amount of resources provided to the team. For a work team to be successful, it must have access to the information needed to make appropriate decisions. Hackman (1989), asks the question, "Does the group have ready access to the data and forecasts members need to invent or to select a task-and situation-appropriate strategy for proceeding with the work?" Owens (1991) goes on to say "One of the three elements of self-managing teams is that team members must have access to resources such as materials, information, equipment, machinery, and supplies." A company which implements a self-directed work team for the sole purpose of reducing expenses, however, will often overlook this point. Though expenses may be down as a result of eliminating supervisory positions, expenses in other areas may increase. As Verespej (1990) states, "an obstacle for self-directed work teams is the reluctance of companies to make the investment to help work teams succeed. Upper management must be prepared to spend some bucks." The "bucks" and other resources necessary for a work team to function effectively should come from senior management.

Senior management is also responsible for granting authority to the team. According to Versteeg (1990), "Empowering employees -- giving them the responsibility for the business -- is the key." Success of the work team in this regard means support from management to establish an acceptable level of authority and communication of this authority to all employees affiliated with the work team. According to Parker (1991), "Leaders at the top of the house must be prepared to say the right words and then to make them come alive on a daily basis." This establishes not only accountability, but also



credibility for the team. Without it, the team is subject to problems which could have a negative effect on its success.

These factors are all critical components of support by senior management. When implemented, each had the ability to affect the success of the team.

## CHAPTER III

### METHODOLOGY

The goal of this study was to identify actions, attitudes and information senior management needs to adopt to ensure the success of the self-directed work team. Research methodology focused on information gathered directly from individuals who were qualified to comment on the issues most directly related to management's impact on self-directed work teams. Chapter III addresses the procedures involved in identifying the subject matter experts, the instrument used to gather the data, and the manner in which the data were compiled.

#### Subjects

A set of criteria was assembled which would ultimately identify those individuals who were qualified to participate in the study. This list was based on parameters set forth in the Statement of Problem, Purpose of Study, and personal capabilities of the researcher. Individuals were subsequently selected based on the following criteria:

1. Member of senior management within an organization which had implemented a self-directed work team program. It was also essential that the individual have direct knowledge of the implementation process. Having started at, or transferred into the organization following implementation of the work team program would not have been satisfactory for participation.
2. Organization in which the subject was employed must have been successful in implementing a self-directed work team program. A number of companies were contacted who had attempted a team program. For a variety of reasons

not pertinent to this study, most of these companies had not been successful in implementing a work team program and were consequently eliminated from consideration as participants in the research process.

3. Employed by a company whose primary interests are within the manufacturing industry. To maximize the integrity of research data gathered, it was imperative that the subjects come from the manufacturing sector of the work force as opposed to other sectors, such as service or information.
4. Proximity of organization. In order to minimize travel costs for the researcher, it was important to establish a 150 mile radius from Tulsa in which the subjects would be located.

Since it was hard to know how many companies met the criteria for participation in the study, it was difficult to assimilate the exact size of the total population. The final list of participating companies was compiled as a result of contacts made to various individuals familiar with the work team concept as well as those companies in the Tulsa area which had implemented a work team program. Individuals contacted included the director of Human Resources at Kimberly-Clark, an associate professor in the College of Business at Oklahoma State University, and a consultant with a professional development company in Dallas, Texas. Input from these three individuals resulted in five companies who met the required criteria. Calls were then made to each company to identify the individual who would serve as subject matter expert. As a result, five subjects were identified and contacted by telephone to inquire as to their interest in participating in the study. Following a discussion with each subject as to the purpose and scope of the study, each consented to be interviewed.

Subjects interviewed were:

Chris Schneider, Director of Human Resources - Kimberly-Clark; Tulsa,  
Oklahoma

Harold Sargeant, Director of Human Resources - First Brands Corporation; Rogers, Arkansas

Dave Archer, Plant Manager - Armstrong World Industries; Stillwater, Oklahoma

Chad Cravens, Manager Manufacturing Engineering - Halliburton Services; Duncan, Oklahoma

Larry O'Brian, Quality Assurance Manager - Norris-O'Bannon; Tulsa, Oklahoma

#### Instrument/Design

Based upon the purpose of the study, it was determined that personal interviews would be the primary research method for the study. Further, the subjective nature of the study required data which were best gathered through personal one-to-one dialogue. Through the interview process, the researcher was able to qualify and clarify responses from the subject in order to gain more concise and comprehensive information.

Appointments were made with each subject several weeks prior to the interview. Upon arrival, the researcher again explained the purpose of the study along with the process by which he was selected to participate. A small tape recorder was used at each interview to record conversations, a copy of which is included in the Appendix section of this report. Following receipt of permission to use the tape recorder, the researcher discussed the confidentiality of the study findings and explained the release document which each subject signed. Questions were then posed to each subject according to the interview guide. Interviews lasted from thirty minutes to one hour and were conducted in the office of the respondent.

The guide (Appendix A), which was designed by the researcher for the basis of oral interviews with colleagues and local business leaders interested in self-directed work

teams, consisted of eight questions. Questions one and two were intended to gather historical information on the self-directed work team program at each company. The two questions were also designed to serve as introductions into subject matter more closely associated with the nature of the problem. Question three focused on the design of the program at each company. As indicated by several respondents, self-directed work teams are usually tailored to meet the specific needs of the organization. Thus, in order to ensure the credibility and applicability of data collected from the subjects, it was essential that the programs be similar in design and purpose. Integral to the purpose of the study was the element of success as it related to the work team. Question four was included in the guide to solicit information which would define success. Again, it was critical to the integrity of the data that success be measured in a similar manner among the companies interviewed. Questions five, six, and seven focused on the strategic issue of management's involvement in the success of a self-directed work team. The questions specifically addressed actions management took which had a positive impact on the team. Information obtained from these questions comprised the conclusion and recommendations of the study. The final question on the interview guide was general in nature and was intended to provide the subject with the opportunity to summarize the work team program.

A critical review of the interview guide was conducted by a senior project manager with a Dallas-based professional development company, and a professor at a university in central Arkansas who has conducted numerous seminars on self-directed work teams. The guide was edited to reflect their input. Because of the limits of time and availability of qualified subjects, however, no field test of the guide was conducted.

## Data Collection

Immediately following each interview, the recorded conversation was transcribed by a word processing professional. Once the final interview had been completed, the researcher read through all of the transcriptions, highlighting common responses to each question. Follow-up telephone calls were made to each subject to clarify responses to certain questions. Following a second review of the transcriptions, the researcher cut out specific statements and assembled them according to each question. This method made it easier to assimilate the information into common responses thus identifying response trends. Conclusions and recommendations were based on these trends.

## CHAPTER IV

### PRESENTATION OF FINDINGS

The goal of this study was to identify actions, attitudes and information senior management needs to adapt to ensure the success of the self-directed work team.

In addition to gathering data which would identify these rudiments, the interview guide also addressed several related issues which would help validate and lend credibility to the findings of the study. The interview guide was individually administered through an interview process to each of the five respondents. Chapter IV presents the data obtained from the interview guide and interviews.

The findings were organized according to each of the eight survey questions and are presented in a descriptive format.

Question 1: When did (company name) first  
decide to implement a self-directed  
work team program?

Responses to this question indicated that programs were implemented from as early as twenty years ago to as recently as October 1991. For three of the five respondents, the program was first implemented in the late 1980s. Several respondents indicated that implementation had taken place in an evolutionary process with different departments converted to work teams at varying times.

Question 2: What were the reasons (company name)  
decided to implement the program?

Answers to this question covered a wide range of issues. There were, however, several common responses which surfaced during the interviews. Three out of the five respondents felt that improvement in quality of the product was an important reason for their company implementing a self-directed work team program. Improved competitiveness in the market was also a response by three of the subjects. Other responses included improvements in safety, production, communication, profitability, and efficiency, as well as less layers of management, general change in operating philosophy, and greater emphasis on getting employees involved in the operation of the company. Only one of the subjects indicated that improvement in customer satisfaction was a contributing factor.

Question 3: Please briefly describe the program  
as it exists at (company name).

The programs at each of the five companies were tailored to meet the specific needs of the individual company. Compensation programs to support the work team concept, for example, appeared to be different at each of the companies. These differences can be attributed to the fact that the companies serve different markets with different products, thus requiring diverse skills from a broad range of manufacturing positions. Though none of the companies was structured exactly the same, there were three issues which were evident in all five of the programs.

The first similarity was the dedicated team concept. Programs at each company consisted of independent cells, units, or teams dedicated to a specific product line or production process. Size of the teams ranged from seven to twelve members. One of the companies indicated that the plant as a whole was considered a team with "several hun-



dred" smaller independent units. Another respondent mentioned that the self-directed concept was in use in only one manufacturing section. As one respondent commented, "There is no 'I' in team."

Another factor which was evident in all five of the programs centered on self-management. Though several of the teams contained a group leader, coach, or facilitator, the primary philosophy of the team was self-sufficiency. According to one respondent, "Within that operation, they have responsibility for managing the production of it, the quality of the product we are making, they manage the rotation of people throughout the team, they manage the vacations, attendance, training, they help interview new employees, they run the probationary program on employees, they help us with training programs, teaching the courses, they participate in and have leadership responsibilities in a number of plant-wide committees where one representative from each team in the plant would come and serve on a safety committee or an issues committee or activities committee." Likewise, the teams were held accountable for their success or failure.

A third factor common in all five companies was the composition of the teams. Each of the existing teams was comprised of non-exempt production workers. Respondents agreed that team success was maximized when the concept was implemented in a section where job tasks were similar. Only one company indicated that they had implemented the concept in an office environment.

Question 4: How did you plan on determining or  
measuring the success of the work team?

It was determined that the study should look at elements which had the greatest potential of positively affecting the success of the work team. Therefore it was essential that the study determine key measurements of success for each company. Responses to

this question, which were fairly consistent among the five respondents, fell into two categories: subjective data and measurable data.

Most of the subjective data centered around criteria which were based more on opinion than tangible facts. One company, for example, determined that the success of the teams was measured through attitude surveys and employee morale. Still another respondent stated that success was achieved when the team was "doing more white collar, middle management tasks," a measurement that would be difficult to gauge in quantitative terms.

The majority of responses on measurements of success centered on the data that could be tangibly measured. Among the responses given were customer complaints, reject rates, on-time deliveries, absenteeism, accidents, productivity measures, and the number of grievances filed. Each of these measurements could be easily acquired and tabulated to chart the impact the team was having on operations. The question as to whether any of the companies had actually conducted a measurement of success was not posed.

Question 5: What actions did senior management take  
to affect the success of the work team?

Responses to this question clearly indicated two actions which contributed to the success of the work team.

The first of the two actions which was cited in all five interviews was communication. Respondents felt that senior level management could contribute significantly to the success of the team by communicating openly to team members. Issues such as the vision of the team and goals/objectives should be explained up-front to the members of the team. Respondents indicated that the communication needed to be direct and candid in explaining the rationale behind the change in structure and operations. After the initial

explanation had been communicated to team members, follow-up meetings were suggested in order to resolve problems, clarify responsibilities and set or modify objectives. Three of the five respondents indicated that periodic meetings were held with employees to communicate pertinent information as well as to gather information from employees which might be instrumental in decisions related to the team. The three respondents felt that two-way communication was pertinent for the benefit of management as well as for team members.

One respondent stressed the importance of sharing information which would aid the team in meeting its performance objectives. For example, management should communicate data which would allow the team to set work schedules and assignments accordingly. Further, information on issues such as productivity costs, market share, customer feedback, and competition helped the teams to "buy into" the process and take more seriously their responsibility in contributing to the overall profits of the organization.

Still another respondent indicated that taking the time to sit down and communicate with the employees reflected a level of commitment on the part of management to the success of the team. As one respondent commented, communication results in "building a trust relationship" between the employees and managers.

As a follow-up to communication as a key attribute in the success of the work team, two respondents also felt that management had to "walk their talk." According to one respondent, this was the "most critical" element in management support. Management can't grant authority to the team and then "second guess or ignore the decisions the team makes." Consequences of such actions would severely impact management's credibility as well as the credibility of the work team program. The respondent went on to say that "people will quickly see whether or not you're (management) sincere about what you're doing." Failure to "walk their talk around what they espouse" could affect

the employee's perception of management's commitment to the process and consequently impact the success of the team.

The second action which respondents (four out of five) felt was an integral element in contributing to the success of the team was training. Respondents felt strongly that members of the team should go through a series of training and education sessions targeted at improving the skills necessary to make the team successful. The types of skills mentioned most frequently by respondents were behavioral skills training such as group dynamics and team building. These skills would help members of the team to work more compatibly together in building a spirit of oneness among team members. Respondents also felt that training was a critical component in upgrading SPC (Statistical Process Control), decision making, problem solving, and quality awareness skills. A comment made during one of the interviews compared the education process to basic training in providing fundamental skills to team members.

Two of the respondents noted the correlation between training and commitment to the work team concept on the part of management. Training often equates to time and money, two factors which, in a production environment, are critical to operations. As one respondent commented, "When production people are taken away from their machines, they're not producing anything." He went on to say that this simple fact is often a "hard pill to swallow" to senior managers who are held accountable for getting the product manufactured and shipped. Another respondent stated, "Training is not a magic wand which you can wave and get immediate results. It takes time and it takes dollars. It takes commitment of resources to get people trained to where they are capable of performing comfortably within their new roles." This appears to be a sentiment held by several respondents and an important contributor to the success of the team. The respondent from the one company summed it up well when he said, "The key to the whole thing is training, training and then, when you think you've done all you can, train some more."

There did not appear to be any clear concerns among respondents on the amount of training provided to employees. As to the source of training, two of the companies conducted the training in-house and two brought in outside facilitators to conduct the training.

Though other answers were given to this question, no one response was stated by more than two respondents. Other answers included creating a recognition and compensation program which supports the team philosophy. Two of the respondents mentioned the importance of management within an organization visiting a facility with a team program already in place and operational prior to implementation of a work team program.

Question 6: Please list in order of importance which actions taken by senior management were most effective in contributing to the success of the work team, and why.

Only one of the five respondents provided a clear, orderly ranking of factors. In his response, the subject mentioned management commitment first, communication second, and training third. The other four respondents each voted communication as a major contributor to team success, while three mentioned training. It should be noted that several of the respondents mentioned communication and/or training as by-products of management commitment to the work team process but did not list them as separate action items that management could exercise. As one respondent suggested, without management commitment to the self-directed work team process, the entire program is at risk from the start.

Question 7: If you could do it all over again(implement a self-directed work-team program in your company), is there anything you would suggest senior management do differently?

If yes, please explain.

All five of the subjects indicated that they were satisfied with the actions taken by senior management. One respondent commented that the process of implementing a self-directed work team had been an evolutionary process, one which they learned while they went along. He went on to comment that there is no blueprint for implementing a work team. Each company is unique and things continually change even within a specific company. As a result, it would be extremely difficult, if not impossible, to determine what management could do differently if given a second opportunity.

Question 8: Has the Work Team Concept  
Lived Up to Expectations?

Only one of the respondents indicated that the work team concept had not quite lived up to original expectations. He went on to qualify his statement, however, by saying that the program was "on the right road." The other four subjects all felt that the program had met, and in several cases exceeded, the original expectations. As a result of the success, two of the companies are in the process of expanding the team concept to other work groups in the production area.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Research indicated that implementation of a self-directed work team program within an organization had substantial impact on production, quality, morale, and safety (Parker, 1991). Research also revealed a relationship between the role of senior management and the success of the work team (Wellins, 1991). The purpose of this study was to investigate actions taken by senior management in order to identify the factors which have the greatest potential of contributing to the success of a self-directed work team.

This chapter concludes the study by providing a summary of findings, recommendations, and conclusions.

#### Summary

The subjects in this study were five individuals employed by companies which had successfully implemented a self-directed work team program. All five subjects were considered subject matter experts by virtue of their positions within the senior management ranks of their respective organization as well as their direct involvement in implementing a self-directed work team program. Personal interviews were conducted with each of the five subjects based on a predetermined set of eight questions.

The interviews revealed two primary issues which contributed to the success of the work team. The first of these issues was communication. Respondents were unanimous in their assessment of the importance of communication in contributing to the team's success. Likewise, several respondents felt that it was equally important that

senior management carry out what they advocated. Communication not only provided the team with information necessary for them to perform their assigned tasks and objectives successfully, it also allowed management to gain valuable insight into how the team is progressing. Effective two-way communication was an important ingredient in quickly identifying problems which might jeopardize the success of the team. According to respondents, communication was not limited to verbal input. It was equally important for the team to receive appropriate reports and documents which were essential in the decision making process. In-house publications were also instrumental in reporting successes of the team to the rest of the organization thus building pride among team members. Regardless of method, respondents all felt that communication was an important factor in contributing to the team's success.

Training was the other variable respondents mentioned as it related to the success of the work team. As a resource that usually requires dedicated commitment of time and money, training was not a factor which could be directed by the team, according to respondents. For training to be effective, management must be committed to allocating the time and money necessary to equip the team with the skills necessary to perform their jobs. Types of training important to the process included skill-based training as well as behavioral training such as team building and group dynamics.

### Conclusions

The following conclusions are based on the author's interpretation of the data gathered from both the study and the review of related literature.

1. Communication is an important element to management's involvement in the successful implementation of a self-directed work team program. The communication program should be supported by senior management with frequent participation directly from the corporate office. The program should be clear and



concise from the very beginning of the implementation process with issues such as mission and goals of the team clearly defined. Communication should be a two-way process with information flowing both to and from the top of the organization.

Finally, the communication program should be a comprehensive, planned program consisting of various types of verbal and written input such as monthly production reports, customer feedback, comments, and quarterly/annual reports.

2. It can also be concluded from the findings that training is an important factor in supporting the team's success. Like communication, it is apparent that for training to have a positive impact on the success of the work team, it has to have the full support from senior level management. Support must take the form of resources which are made available such as the capital needed to provide quality training and development programs. The investment should also be significant enough to provide quality trainers who can present the latest material in an environment conducive to learning. The training program should also be tailored to the specific needs of the work team and consist of a broad range of curriculum.
3. A third conclusions based on the findings from the study also indicate that senior management plays an integral role in the success of self-directed work teams. This was supported by the research respondents as well as numerous authors on work teams to such a degree that the author concludes that a lack of management support can have an adverse impact on the work team.

### Recommendations

Senior management has the potential to make or break the success of self-directed work teams. As a result of this study, it is the recommendation of the author that senior management commit to a comprehensive communication program to support the work

team. Further, it is recommended that management endorse a training program which will provide employees with the skills necessary to perform their day-to-day work tasks..

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## APPENDIXES

**APPENDIX A**

**SURVEY INTERVIEW GUIDE**

Company Name: \_\_\_\_\_

Interviewee: \_\_\_\_\_

Title: \_\_\_\_\_

1. When did (company name) first decide to implement a self-directed work team program?
2. What were the reasons (company name) decided to implement the program?
3. Please briefly describe the program as it exists at (company name).
4. How did you plan on determining or measuring the success of the work team?
5. What actions did senior management take to affect the success of the work team?
6. Please list in order of importance which actions taken by senior management were most effective in contributing to the success of the work team, and why.
7. If you could do it all over again (implement a self-directed work-team program in your company), is there anything you would suggest senior management do differently? If yes, please explain.
8. Has the work-team concept lived up to expectations?

**APPENDIX B**

**INTERVIEW #1**



Q: When did Norris O'Bannon first decide to implement a self-directed work team?

A: We had a change of management back in September of last year. Norris Sucker Rods and Norris O'Bannon are sister companies, and with the change in management they decided to do it sort of out of necessity. Our business is very competitive, it's oil patch, so basically out of necessity we started in the quality program first and then the self-directed avenue came a little bit later. We first really got into it about October of 1991.

Q: So, it's been in place for probably six months or so.

A: Approximately six months of some planning up-front, probably a month or two of initial planning, and then we started to initiate the teams and identify them basically by work function.

Q: In just a few minutes I want to get into the background of the way your program is structured here and how it works. Before I do that, let me ask you, what were the reasons for moving in this direction as far as trying this particular type of structure?

A: The overall reason was the competitiveness of the market, to try to find a better way to do things, and to improve the quality of our products. We're a non-union shop and we had a typical setup of so many people working in an area and a supervisor or foreman being in charge of them and then it followed on up the line and had a plant superintendent, vice president of manufacturing, etc. We felt it was probably not a very cost effective way and started looking at the value-added methods in the shop to see what was value adding and what wasn't, and we found that probably the vehicle to it was to go to the team approach.

Q: Tell me a little bit about your program in terms of how it's structured, some of the objectives of the program, and that type of thing.

A: What we initially did was identify and gear more toward the manufacturing area. We are a manufacturer, that is our number one consumer of cost dollars, so that was our first area of concentration. We have been developing cells, as far as work processes, for approximately ten years, taking two or three machines that do a common job or do all parts of a job, put them altogether in one area, and have one operator responsible for that particular product. We started some of that process some time ago. We had been through some just-in-time, we'd been exposed to that. Our work-in-process numbers we had driven way down, and we're starting to understand what we could do with the process. It was kind of an easy switch to go to the team method, to just start putting these isolated cells together to form a product. It was fairly easy to go from there, and we've pretty much made them responsible for a product area. For instance, valve assembly is one area. It was real easy to put valve assembly responsible for all the functions that go on back there, including the

stocking of the shelves and how much stock is on the shelves, to what gets shipped out that day. It just flows all the way through the place like that. We have a tubing line that's pretty much on the pump side. We have butterfly valves, we have downhole pumps. So a lot of it, like the tubing, was fairly easy, it's anywhere from 2 ft. to 30 ft. long. The process itself was you have to be set up to handle from 2 to 30 ft. pieces of material. Again, that was a pretty easy flow to just go ahead and roll that into a group where they have complete responsibility from the front door to the back.

Q: The program is in place primarily in the production area?

A: Right.

Q: It doesn't go into the office area?

A: We have started it. After six months we are still crawling. In the last two to three weeks we have initiated two teams in the office based on product line. The pump product line in one area and the valve product line in the other area.

Q: Something I probably should have asked you when we first started, what does Norris O'Bannon manufacture?

A: They manufacture downhole pumps, the reciprocating type downhole pump that goes on the end of the pumping jack that you see all over the place here. We make some fittings that go along with that, assorted fittings. You might hear me refer to general products. It's the bull plugs and swedges, it's not a full line but it goes along with the post-production after it gets out of the hole. We don't sell pipe, we sell some pup joints and stuff, but we don't sell pipe or anything like that. The third thing we do is butterfly valves.

Q: The majority of your production staff is skilled labor?

A: Yes, I'd say the majority is skilled.

Q: Machinists, welders, etc.?

A: Right. Mainly machinists, hone operators, we have our own chrome plant facility here, platers. A lot of the people have been here a number of years. I'd say probably the average duration in the shop is 15 years. We have some new people, but we have people who have been here 40 years.

Q: Define or describe a team. You call them a "team" as opposed to "cell"?

A: It's whatever you call it. We even call them satellite cell team, whatever you want to call them. Business units.

**Q:** Describe the typical team in terms of numbers in a team, the skill level of the team members, the type of positions. Take one of your teams for example.

**A:** Let's take the "barrel team". We actually have two teams down the barrel line, one is concerned with making barrels that have no chrome plating in them. Then we have the other end of the line where the barrels are chrome plated. Typically, we are running two main shifts in that area, so we have some lapping of time. We have people who bring the material in, cut it to length, we have people who straighten it, people who hone, people who thread. So, basically, that's the four operations on a barrel. We have material at a vendor, it's just-in-time where we have a partnership with a local vendor. The one who is sawing recognizes the demand one day on the sheet; he'll put it all together and collate it and he'll order the material that day and the next day he has it. When it gets in here he knows what it's supposed to be, he cuts it to length, stencils it, and sends it down the line. They've modified that slightly and they are now keeping some stock here, a small quantity, but a normal day or two quantity of common sizes. If they see the demand today, they can start working on it today. The initial purchasing of it was done by a purchasing agent, but after it was set up the vendor takes it from there, that's the level he knows he's supposed to keep, the price has already been negotiated. It's understood that we get 24-hour turnaround. By the same token, after it's put in and brought down the line, the same people are responsible for getting it painted and getting it staged. We stage material, we have our own truck delivery in ten of our branches, which goes down through Oklahoma, Texas, New Mexico, and Kansas, that makes a round each week, and they are responsible for getting it to the right staging area. They have complete control of the process from start to finish.

**Q:** Is there a supervisor over the team?

**A:** There is what we call a "facilitator". We've gotten away from the word "supervisor". The facilitator has several teams working for him. He may have six teams he is responsible for. Basically, he's there to support. He still does some of the old supervising because we haven't gotten totally into the team as far as the human resources part of it.

**Q:** Compensation?

**A:** Yes, we haven't developed that yet. There is some of that necessary. He is there to support. If they need some tooling and it's special and they need approval, they will talk to him about it. If it is everyday tooling, they order it.

**Q:** They make decisions as a team?

**A:** You bet. We have a phone at their location. They can receive direct field complaints if need be. They have direct field contact if necessary.

**Q:** What is the average size of a team?

A: Usually eight to twelve people. Maybe fifteen on a larger team, but usually on a per shift basis it's probably five or six per shift. It's really easily managed when you have that small of a group.

Q: Each team member pretty much can do all skills?

A: That's right. That's part of what we call the team certification. When they finally are certified as a team a lot of factors come into play, they have to be cross trained as much as they can be. They have to be keeping track of their costs, they have to be keeping track of their quality related costs, rejects, what their goals are, they set their goals. They have the facilitator to help them do that. They also have a sponsor who is part of our QIT and is a part of management. Each team has a sponsor so they have direct access from the QIT down and, through them, up. The Steering Committee is exactly that. If one team has an isolated problem, handle it in the team. If two or three teams start having the same problems, then they usually come in and work through it with their input and come up with a direction or procedure.

Q: Moving on from the structure of it, how were you planning on determining or judging the success of the team?

A: Most of the teams have pretty much picked out three factors. One is the quality, and right now we're measuring, in dollar form mainly, what the old reject rate was out of the area compared to the new reject rate. We're tracking delivery performance, their on-time deliveries, and, we're tracking costs. Fairly straightforward, fairly simple.

Q: Something you can measure pretty tangibly?

A: Exactly.

Q: Getting into the role of senior management, what do you think they did here at Norris O'Bannon that has had an impact on the success of the work teams?

A: I think two things. They've supported it all the way. They've been the pusher behind this. There have been some things that people have said, "That will never work", and instead of contemplating it and trying to beat it to death with pros and cons, we just went ahead and did it. We have been in a very competitive business for a long time and it's really part of our nature to be a little bit aggressive, in the field and in here, in our actions. So, the upper management was willing to go in there and just do it. The other thing I've been impressed with upper management is the fact they have opened up on the information side of it and communicated some of the things that normally a guy on the floor is not privy to, as far as what our costs are based on, how we figure those costs. Having input from the floor, saying if something was reported that wasn't correct, that the shop people have the opportunity to say, "Hey, I didn't do that". The feedback both ways has been really tremendous. It seems like upper

management recognized the competitiveness of the business and there hasn't been anybody hold back. It's been one unified effort to get this thing going.

Q: Were there other actions they took other than just their verbal support and communication? Was there anything else they may have done, any programs they implemented, anything they did that had any impact on the success of the teams?

A: I mentioned that the communication was a big part of it in letting people know where everything really stood. It was decisions that were based on some fact of what our decision was in the market, what we had to do, what our costs were. But our bottom line was to present it to the shop on a whole. The communication was the key. We've done other things. We've moved quite a bit of the shop around to facilitate the process flows. People have been able to do certain things they needed to do that they knew were right since they started working here but couldn't get it done. I think probably one of the things, and this is a pro and a con, is that the supervisors on the floor, basically the middle managers (you've heard before what happens to them with the team), we've basically rolled them into the teams. It seems like that was one thing upper management had to do was to roll those people into the teams. That was a good thing because it knocked down barriers, it was a bad thing because there are some people who had worked for a number of years for that position and now that position goes away. But, to make the team work, they had to do that.

Q: I would think communication would be a big part. I don't mean to put words in your mouth or thoughts in your head, but did they communicate the objective, why you were doing this and what the goals were.

A: It was totally open communication. The reality of it was, this may sound kind of raw, "This is the way we're going, and if that's not in your plans then you need to seek other opportunities because this is the way we're going". Everyone understood that. There hasn't been any deviation from that. There haven't been any exceptions to the fact that we'll do it in these nine places but over there in this one place we'll do it the old way. It hasn't been like that. It's been chaotic, it's been exciting, it's been all those things. Everything is new, everything you did yesterday may not apply today. One of the other things management has done, and we're in the process of doing it still, is we've done quite a bit of education. I don't know if that was on your list or not, but that has been another place where they've bitten the bullet. They paid the money for the education. I'm basically a one-man show, so I've gone outside and solicited help from other people. They've had to bite the bullet on the money and they've had to bite the bullet on the time because we're talking about production people taken away from their machines, they're not producing anything. That's kind of a hard pill to swallow from the manufacturing side. But, again, that was considered a necessity to get through it.

Q: To retrain, to educate?

A: We've been doing things like team building, quality awareness, and SPC training, the basics of that. It's kind of what I call basic training. As we get through that then we've got the finer details to work out, the more specialized fields.

Q: It also sounds as if there was a commitment made by management to allocate the appropriate resources, whether it was capital moving things around or expenses in terms of money for training or time for training, etc.

A: They've backed their words with actions. Like I said, it has hurt in a lot of ways. I'm sure it's hurt the bottom line, I'm sure it has hurt our production figures, but it's been considered that this is an investment up-front that will yield some long-term benefits. I believe that it will.

Q: Of the things you've mentioned, just to recap, you mentioned there was support, communication, education, training, commitment to resources and time. If there is one item that you could focus on that you would say, "Don, when TDW does this, make sure your senior management does such and such if you're going to have a successful working program", what would that be?

A: Total commitment and don't deviate. Make the commitment and go for it. The resources and everything have to follow, but the commitment has to be that you're going to do this and it's going to hurt. They will say it won't be that bad. Well, it will hurt. It will take a lot of hours and take a lot of hours from your upper management people because it goes across the whole company. It does not take exception. That commitment has to be there. You can't waiver from it. It can't be that you have a bad month and the dollars don't look good and you decide this month to lay off it. It's not an on-off deal.

Q: It sounds like a change in culture and philosophy.

A: It's a whole culture change. Upper management has to set it. They have to see it in action. They have to see the managers here at 7 a.m., 6:30 a.m., meeting with team people. The sponsors have to be there. They may have to be here at 6:30 p.m. The commitment has to be there. It's going to cost up front.

Q: If you could do it all over again, in terms of implementing the self-directed work team program, is there anything you would suggest that senior management do differently?

A: No, I don't think so. I'm not that experienced in it. I've worked for this company 12 years and this is the first time we've been in a team involvement. I wouldn't do anything different because I don't know to do anything different. I think we're learning as we go on what is needed. I think a lot of it is common sense. It still takes the people, or champions if you want to call them that, of the team process to be behind it, to give support, give the money, give the time to be behind the whole process. I would like to see a blueprint for a team building process and to be able to

follow it, but everything that you do now will be different when you get into the team process. A good example was this morning. We had a meeting with the purchasing agents, and they were responsible for all the outside processes. We send out things for heat treat, epoxy coatings, and that kind of stuff, we don't do our own in-house heat treating. The teams are now doing that. It's part of the process. They make up their own, what we call, local purchase order. They have a process that they do; it goes out to receiving and comes back in through receiving and goes back to the team. Really, the only time the purchasing agents are involved in it is after the receiver gets back in-house and it's received and it comes to them. They just review cost and it goes to accounting. From the purchasing side, they didn't need to be really in the loop except after things were done. This morning, the first thing people say is they have a clerical job then they don't want to turn loose of it. Well, we worked it out this morning, that's the way the teams are functioning. We're going to put a process procedure in place and the form will come in after the part's been made, it's been heat treated; more than likely it's already back at the team going through the final operations before the purchasing guy even sees the receiver. It's giving them more control. But, the purchasing agent is saying that it's a clerical job but not giving up the control. It's a two-way street. We're trying to make the teams more responsible for what they have control of in their process. We're having to take some of that control away from somebody that's been comfortable with doing it for years and years and that's the way they were taught. You can have four, six, eight years of education and tomorrow that may not be any good.

**Q:** I realize you've only had the process in place since October. Has it been up to expectations though as far as the success? Is it meeting the expectations?

**A:** I think it's exceeding it in a lot of areas. We've kind of gradually initiated it and ended up with 12 or 14 teams. Three out of the four teams have made presentations to the Steering Committee. This presentation was just with a little bit of help from their facilitator and their sponsor, the team put the presentation on, talking directly with the president of the company, the treasurer, and the rest of the Steering Committee. When you go to one of those meetings, you see the results. The people have come up with their own solutions. They're trying to get better at things. They're not sitting on their hands. They're working on improvements every day. They want to do better. When they ask for help, they want to get that help. When you go to one of those meetings, it really shows the payoff. Plus the fact that you can see on the shop floor that there is very little work in process. There is very little problem. For instance, on the plain barrel team, they're doing stuff now with 24-hour turnaround. They're seeing daily demand. What we sold yesterday, they're seeing it today and they're working on it today. Before, we had a typical backlog in that area of 700 to 900 barrels, which was a comfortable four to six weeks worth of work. They always had. You had to keep that much more inventory in stock on the shelves at your stocking locations and everything else. Now, the benefits are there. They haven't been totally measured yet, but they are there. We've had some outside people say the same thing. I think we've surprised them. We've got an outside consulting group, the Thomas Group out of Dallas, and they come in and specialize in reducing

cycle times. That to me is just process improvement. They have their own buzz words for it. They were present at one of the presentations. I think they were absolutely blown away by the fact that here's a team of four people and some of them are educated and some of them are not. We've got the whole gamut. These teams are not picked by education or anything else but by the process. Everybody contributes in those teams. I think we absolutely amazed even the outside people in how much progress we've made.

Q: Do you feel like there has been any impact on morale?

A: Oh yes. You bet.

Q: So, success may be measured in terms of things such as delivery performance, cost, rejection rate, etc. But success can also be seen in things such as improved morale.

A: Improved morale, control of their own destiny, getting some action for the first time since they've worked here. Not having to go through layers and layers to get something done. Like on tooling, we've come in and talked with six vendors on our tooling. We decided on one, and he's in here every day. He goes around to each team and sees what they need. The team knows that this is charged to the team account number, 5266. They know it's charged to them when they buy it, so they know, "These are my costs. If it's high, I did that. Why is it high? Why is it low? Why did it go down? Are you doing things you should or shouldn't?" I think the pride shows. They've been recognized. Not monetarily, but verbally recognized in front of whole groups. It makes them really proud and the fun is back in their job.

Q: So, recognition is a part of the whole program?

A: You bet.

Q: You say there was no change apparently in compensation?

A: No, not yet. We're looking at it. I've heard some of the Steering Committee already talking about developing some kind of compensation based on knowledge, based on the skill level within a team, based on the team being certified or not. The other thing I've heard is to get everybody on salary with an overtime compensation. But not have the two levels of hourly and salaried compensation plan. Doing away with time clocks and that kind of stuff.

Q: But you have different rates of pay within a team?

A: Yes.

Q: You've got different people doing different things. It's kind of a pay for performance setup?



A: If there are ten different skills in this team that have to be mastered and you have five, then your pay is basically here. If you can do any of the operations within a team and you know all ten of them, then of course your pay should be higher. It's only fair.

Q: So the more skills you have mastered, the higher your pay will be?

A: That's correct. That's not worked out in detail yet, but basically that's the plan.

Q: That's basically it as far as the questions I had. Is there anything else you would add to this as far as, again, senior management's role in the whole process?

A: No. I think we've covered it pretty much. Probably, for senior management, a suggestion would be to do some scouting around, see if there is anybody local, anybody that you can benchmark against to see if you can get some examples. There is not any true way. If you're a manufacturer, go see a manufacturer. It's probably pretty exasperating to try to find a blueprint or plan for the team building method. I imagine the best thing to do is go around and see if you can find some people that are on your same level or have been through it a year longer than you have or two years. There is some reference material out there. There are some things that have been done. For instance, the Florida Power and Light story is a good one. The other one that is good for senior management to at least get an idea of what happens was with Harley Davidson. They are another good success story who have gone to the team concept.

**APPENDIX C**

**INTERVIEW #2**

Q: Chris, when did Kimberly-Clark first decide to implement the program?

A: Well, the answer to that question probably goes back better than 20 years. A lot of people ask similar questions, and I tell them that self-directed or high-involvement management teams have been in place at one degree or another for a great many years in Kimberly-Clark. It's been more an evolutionary rather than a revolutionary process. The facility I first started with in Connecticut has been in the process of change now for close to 30 years from when they had begun to get people involved in things that theretofore people hadn't been involved in through Bar Beach Island, South Carolina, facility. Those facilities have been evolving into more self-directed work team type organizations. Then we opened up a facility about eight years ago in Lexington, North Carolina, which, being a Greenfield operation, gave us the opportunity to go in and do some new things right from the start at that location. We started up that facility with a more advanced organizational design in terms of employee involvement. We made some mistakes there and learned from those mistakes so that the next opportunity we had for another Greenfield operation we were able to improve on that a little bit more too. I'm kind of answering your question in a backwards way that if you look at the whole continuum of where somebody could be along this continuum of self-directed work teams, we've been at it for a long time, but we're not alone in that. We built the facility in Lexington with the purpose of having a high-involvement organization. If I were to point to one major step that we took, besides all the small steps of evolution, I'd say that maybe building that Lexington facility was a major stride.

Q: I don't know if you have this information or not, since this has been, as you say, a process that's spanned probably two decades or so. Do you know what the rationale or the reasons were in terms of implementing a program of this nature? Especially 20 years ago, I'm sure it was somewhat revolutionary. Do you know what the motive was by management?

A: I'd like to tell you that it was all well planned out and thought out and made as a part of some corporate philosophy, but it's really just been a good management practice that some folks have put in place and other managers see that this person is achieving better safety, quality, and productivity than they are and ask how they're doing that. Over time, it just became pretty self-evident to people and was part of the operating philosophy because of the success. What you need to do is get people who have the best information involved in the decision making process. I wish I could tell you that somebody read some book and the light went on and somebody said, "Gee, we've got to adopt this philosophy." But, it's really been inherent, to some extent, to some of the philosophy that's always been in the corporation. It became more and more solid, I'd say, beginning about 20 years ago and has been very much revolutionary rather than an evolutionary process. I really can't point to one event or one individual or one happening and say that was it, that's what made them change.

Q: Nor do you know of any particular hidden reason? For example, to improve quality or to improve morale.

A: Of course, the goal all along has been improved profitability. The belief has been that you do that through increased quality and productivity. But it really wasn't an outgrowth of a program or a single quest for one goal area. It's just been a general business philosophy of providing a return on equity.

Q: Briefly describe how the program works here. I think, from what I've picked up and I may be pretty narrowly focused here, from what I have gathered it seems like self-directed work team programs differ from company to company. There is a lot of tailoring to fit a specific company's needs. Can you briefly describe how it works here at Kimberly-Clark?

A: I think the successful organizations that you look at will be very much that the programs are drastically different. That is because the businesses are completely different. Not only the history of the organization, but the markets that they are in. The skills and talent they are able to recruit. The pay structure that are driven to, not just because of the market they're in, but because of the competition that they have. We had that discussion in our last meeting where we were talking to some people from First Brands. In our organization, everyone here is an associate of the organization. Everybody is a salaried individual. Of course, all the barriers that we can have been taken down between our people in the manufacturing environment who are making the product and the people who are in the offices, including the fact that a lot of people from the operating floor spend quite a bit of their time in the office and the people in the office spend a lot of their time on the operating floor. We try to make sure that everybody understands that we're all one team working toward the same goals. Those types of things are common in self-directed work teams. The extent to which you can do that is different from one organization to another. For example, First Brands has an hourly work group and a salaried work group. For their hourly folks, if they don't show up to work, they don't get paid for that day of work. In our organization, if someone doesn't show up for work they are still paid their regular salary, just as anybody else in a salaried position would be paid. Neither one of those approaches is right or wrong. That's just different philosophies. It's the right approach for them in their organization. Our approach is slightly different. One of the keys to the success of our organization, I think, again, is something you will find common throughout self-directed work teams, is the selection process. That a significant amount of time and significant resources are placed against finding individuals who not only have outstanding technical abilities, but also have the skills that it's going to take to work in a high-involvement work setting. Things like good analytical skills and good communication skills, decision making, high levels of integrity, a lot of things you really need to have if you are going to rely on those people to be the decision makers in an organization. I'm certain that you will see that common thread, if you haven't already, in all the organizations you talk to. Taking a lot of time making sure they get the right folks. Once they're in, spending a lot of time on orientation. It isn't, "Here's the bathroom,

there's the locker room, there's where you eat lunch. Good luck, we hope you have a happy career." It's spending a lot of time with people to bring them up to speed, to let them know what's expected of them, to set the standards and let people know the standard is excellence. Let them know what they are empowered to do and that they are not only empowered but they are accountable for the decisions they are making in the operating area. Likewise, we spend a lot of time on that. Am I tracking on the types of things you are looking for?

Q: You are. Specifically, to add another question there, as far as the structure is concerned, do you have a specific individual over a team? Is there a supervisor over the team?

A: Each team has a team leader. Everybody in any organization has to have a "boss", someone you can go to and someone who is there to help as a coach and support person. The role of that supervisor, as we call them, team leader, in our organization is to be a coach to the team. To be there to help remove barriers if there are things that are getting in the way of success for that organization. That role of the team leader has changed significantly from when we first opened the facility, and it's going to continue to evolve as the teams come up to speed. As we first started up the facility, people had never seen a piece of manufacturing equipment like ours before. Along with learning how to work within a social structure like ours, they also had to learn the complexity of the manufacturing equipment. The team leaders had been involved very much in a day-to-day operation early on in the operation. Now the team leaders are involved in the week-to-week operation of the business and coaching the teams. Over time their involvement in the operation of the business can be a bit more removed all the time, so they are less focused on what's happening today and can be more focusing on what the future needs of the business are going to be. The team leaders are, for our operation, working Monday through Friday, five days a week. The teams they are the team leader for are working a 12-hour schedule. About three-quarters of the time they are scheduled to work the team leader is not also scheduled to be here at the same time. The teams are really on their own, operating on a day-to-day basis without a supervisor there with them, but they know they've always got a resource available to them if they need to call on that team leader as a resource.

Q: Do you have teams throughout this facility, production as well as office staff, or is it just production?

A: The question of what is a team is a good question, and we literally have a couple of hundred teams in the facility. We have one big team which is the facility team. Then we have shift teams. We have basically five shift teams, there are four that are on rotating shifts. At any one point in time, one of those four teams is in here. We operate 24 hours a day, seven days a week. In addition to that, we have a stationary team, people who are scheduled to work Monday through Friday. If you look at teams that way, you would say that we have five teams, the four rotating teams plus the stationary team. But you can cut the pie many different ways. In our process we

have a tissue machine which takes pulp and makes large rolls, which you've seen. Another team would be the tissue machine team which would have the people who know how to run that tissue machine who are on the four rotating teams. Rather than saying here are the four rotating teams, you can say here are all the people who work on that tissue machine. They don't all work together, meaning at the same time, but they're all running the same piece of equipment and they have the technical knowledge of how to run that piece of equipment. There are going to be issues that decisions need to be made that affect that asset. The right people to make those decisions aren't the shift team, it's the asset team, the group of people who run that piece of equipment. There are various other subteams too. Attendance teams, teams that deal with charitable contributions for the facility, teams that manage the yard maintenance, planting trees and cutting the lawn and all that sort of thing. What is a team in our facility depends on what the issue is.

Q: It could be a work team, it could be a cross-functional team, what some companies consider committees?

A: Yes. What we really need to do when we're talking about a team is say, "What is the issue at hand?" and then say, "Which team has the license to deal with that issue?" No matter what issue you pull out, there is a team, a group of people who have been given the responsibility for dealing with whatever that issue is. If something isn't done and someone says, "That wasn't accomplished. Where did we fail?", everybody knows what team it was that was supposed to have addressed that, and they know they are truly accountable for those results.

Q: For your teams in the production area or, for that matter, anywhere, but the more traditional teams as you know it as opposed to, say, committees, how do you measure success?

A: We have an objective system where the teams themselves get together with their team leader and set some objectives for the year. Some of those are pretty traditional measures around safety, quality, productivity, and then they will set some other goals for what they hope to accomplish that year also for that individual team's effectiveness. The team I've just taken responsibility for now has set for one of their objectives for this coming year to have 75 percent of the people spend one day in one of the parts of the manufacturing process that is either their supplier or that they are a supplier for to better understand what they do in their home cell, the area they work. What affect that has on people, either upstream in the process or downstream in the process. They feel they will be more effective as a result of that. I agree wholeheartedly with it. Each of the teams will have some fairly traditional goals. Each month the teams have a meeting and, at that meeting, they review how they are doing against the objectives they have set for that year. Again, they are the ones who were involved in establishing those objectives. It's also critical that they hold themselves accountable for that, so they do their own tracking and reporting back to the group. If they're behind schedule, if they said, "Here's where we're going to be in the area of safety", and they're not there, then the expectation is that not only do they

say, "Too bad", but they will also sit down and develop a plan for getting back on track so that by year's end they have met the objective they had set at the beginning of the year.

Q: What actions has senior management taken to try to impact the success of the work team? For the purpose of this, let's somewhat limit it to this facility as far as your involvement and what you have seen firsthand that senior management has done to try to maximize the effectiveness.

A: If we look at that as being a location specific issue, I would say that the important piece is concentration or focus on the vision for the facility. That, through the decision making process, as we come up to difficult issues that we have to deal with, one of the questions is continually do we have the right people involved in making this decision; if not, who do we have to pull in. What is the long-term effect of whatever decision we're making on the organization? Maybe its, for example, to have somebody specialize in a particular skill that's critical to the success of our operation and, as a result, it would eliminate the variability you see by having a whole bunch of people training in that position at the same time. That would be a poor decision long-term. What we may need to do is eat some inefficiency short-term in order to develop a number of people who all have sufficient skills in that particular area. It's keeping an eye on the vision for the operation, keeping a long-term perspective and saying, "Here's a vision for a successful organization six years from now, let's not muck it up by making some short-term decisions that will help our efficiency during the next twelve months at the expense of what we're trying to accomplish over the next six years."

Q: Is that a philosophy or is that something that management has done through various means to convey that to the employees?

A: Well, it becomes obvious to the people in the operating area by having the actions convey the message as opposed to sitting people down and saying, "Here's what we believe in." If, for example, it comes to the beginning of the year and we're trying to decide what the holiday schedule is going to be for the coming year and we have to designate those holidays, six of them are already decided, they're pretty traditional (Fourth of July, Thanksgiving, Christmas), then we chose four other holidays, days that fit in well with the schedule to make some long weekends. I could sit down myself as facility manager and pick these four days and say that's the way it will be, but to reinforce what we're trying to do in the operation of the business, we go back to the teams and say, "Pick somebody from your team to meet with me next Monday and come in with some ideas on where you'd like those four floating holidays to be designated for this company." That's kind of a trivial example, but it's just one that came to mind of the type thing where your actions really deliver the message of what you're trying to do. Another example, just the example I was talking about, lubrication is critical to high-speed equipment like we have. We just received a proposal from one of the people in the operating area that we create a special assignment of lubrication specialist and chose one person and have that person take

care of lubrication so that we don't run into any problems of lubrication on pieces of equipment being neglected because people are busy trying to get the quality and productivity on the equipment so they're dealing with the day-to-day things and possibly could forget to take care of the lubrication cycles and result in fairly substantial losses of productivity due to bearing failure. That was a suggestion that came from the operating floor, in fact, very nice three-page proposal that this person put together. Now we could accept that proposal and say that's something that came from the operating floor and therefore people who have a lot to gain are providing that feedback, but, in this case, we'll sit back and look at it. Although we need to completely evaluate it as a group and get back and discuss it some more, my feeling is that's not what we want to do. What we're doing by doing that is saying people don't understand the importance of lubrication to the business, therefore they're letting that slide and we could have failure. As a result, we either say we can't trust people to take care of that and put it in one person's hands and have an expert or we can develop the understanding and expertise in a lot of people and recognize that we take some risk in doing that short-term but long-term we're going to have a lot of people who understand the importance of lubrication. Again, it's an example of where we can sit people down in a room and talk to them about the vision and the idea of how the facility if supposed to be run. But, that's not going to get us half as far as walking the talk and making sure that our actions and the way we talk to people about proposals like that or how we make decisions really does involve the right people and support the general vision we have for the facility.

Q: Not to put words in your mouth, but what I hear you saying almost is action speaks louder than words.

A: Without a doubt.

Q: I wrote down communication here on my notes. It's communication, but it's the right type of communication. It's not just talking to, it's listening. It's a two-way type of communication.

A: We could put up all the motivational posters and use all the rhetoric we want, but when the tough times come and tough decisions have to be made, if those decisions aren't consistent with what your operating philosophy is, you may as well forget the posters and the meetings and all the other things you tried to do.

Q: You mentioned that's probably the most important. Are there other things that management has done to impact or affect the success of the teams?

A: Some of the things that we've spoken about I think are the most critical. Selecting the right people in the first place, conveying the right vision early on, helping people to understand what it is you're looking for, modeling or demonstrating that in your actions, and maintaining high standards. I've seen one other facility that selected the right people, told them what the vision was early on, but didn't hold people accountable. Accountability is critical to the success of the operation. If the team



allows housekeeping, for example, to deteriorate, the expectation of what is acceptable begins to slide and a group can become I don't want to say lazy, but the standards can become this is acceptable so the yardstick the group uses to measure themselves against gets smaller and smaller. It's important that early on the teams be allowed to be self-managed. The teams need to be self-managed, but self-managed doesn't mean not accountable. That's something that teams very early on usually struggle with. Organizations that fail in this area do so, I think, often in that area. They'll say to the teams, "We can't jump in and make decisions for the teams. If they're struggling with something we need them to decide, if they come up with the wrong decision, well, we've got to live with that." That's not the way it needs to be. The team has to be allowed to struggle with some decisions, but if they're coming out with too low a standard or coming out with the wrong decision, then the team leader, whoever is the coach and mentor for that team, needs to jump aboard and say, "No, you're wrong. We need to get back to the basics and talk about what's important and make sure that our calibration is right." People need to be self-managed but they need to be accountable also. Many times people lose that focus that they've got that self-management means no management or an abdication of responsibility from results. Often that's where organizations fail. A self-managed team has to be held accountable in exactly the same way that a first-level supervisor needs to be held accountable. The middle-level management people do not say to the first-level supervisor, "You make the decision and we'll live with whatever decision you made. You make the decision but I'll not hold you accountable for the results. If your housekeeping, your safety, your quality, your productivity are not where they need to be, we're going to come back and talk about it again." That's true of self-directed work teams also.

**Q:** What role does education and training play in self-directed work teams?

**A:** I guess the best way for me to talk about that is that everybody needs to enter the organization with some basic technical skills, some reading and writing, understanding of mechanics and mechanical aptitude. They also have to have some of the things we talked about through the selection process, needing to have some good communication skills, good analytical and decision making skills. That's the base that we have to build on, but once people are in the organization we have to continue to build on that. We spend a tremendous amount of time developing the skills that we identify as critical when we're going through the selection process. Let me show you what I'm talking about in this book. Here are the things that we said are critical to the success of anybody coming into an organization like ours. They have to have initiative, flexibility, integrity, functional technical skills, analyzing skills, tenacity, personal sensitivity, oral communication, decision making, controlling. If somebody has those ten skills in our organization they're going to be successful. But, again, as we were saying, most things aren't either you've got it or you don't. It isn't yes or no, someone will have initiative but there's a wide continuum of complete absence of initiative and high levels of initiative. Our goal, once we have people in the organization, is to use this as a key for training. We're of course going to teach people functional technical skills. We're going to teach them

how to run equipment; we're going to teach them how to run many different pieces of equipment. We're going to teach them how the business works, what are the economics of the business world. What are the economics of our particular product, how much of the cost of our product is made up of labor expense, how much is raw material. What is the efficiency of the various pieces of equipment and where are we losing efficiency. If they have that information, they've got the ability to use the analytical skills and decision making skills that they've got. Our focus, once we've got people in, there's a lot of training and understanding the business, and a lot of enhancements of these skills that we talked about earlier. More training and good decision making processes, good feedback skills for personal sensitivity, oral communication skills, presenting materials, leading meetings, those types of training.

Q: These ten factors probably would be in place if you didn't have self-directed work teams. Do these play an integral part in the self-directed work team program? I guess I'm still going back to the issue of does training or education play an integral part in the program. If we as a company, TDW, did not have a training program in place, if senior management did not support that, would that have any bearing on the success?

A: I think it would. You're right, these ten skills are helpful regardless of what organization you're in. But how critical they are depends on how much the skills are used. If people aren't given the license to make important decisions, it's helpful that they have decision making skills but it's not critical. I guess that's the difference. A question of whether they are important or critical. These ten would be important regardless of what type of organizational society you've got. They become even more important in a self-directed work team. If someone hasn't got good decision making skills and they are, for example, an accounting clerk, in most organizations that's not going to matter because their job is very routine. If they have a question, they're not really paid to make decisions anyway, all they need to do is go to their supervisor, explain what the problem is and they will make the decision for them. In our organization, that's not going to be the case. I guess a way of looking at it is, in many organizations the person who is an outstanding accounting clerk is rated outstanding by his or her boss because they are using this skill at a higher level than anybody else. In our organization, the person who uses that skill to the point in one of our more traditionally run organizations would be seen as an outstanding performer, that person would be seen as doing what is expected of them in our organization. Because of that, we can run with much leaner staff and that is a part of the idea behind this too.

Q: You do most of your training and education in-house?

A: The vast majority of it, yes. Although we use quite a few resources from Vo-Tech also. Vo-Tech assists us in some of the canned programs. The working program is one that we use because it does focus on communications, personal sensitivities, some of the things that are important for success. We use some canned programs like that, but many of the things that we do here in training are self-developed.

Q: If you had one word of advise you could offer TDW as we are getting started and you could offer this actually to the president of the company, what would it be?

A: For organizations that are not Greenfield operations like you're talking about, my word of advise is don't try to make this a program, for a couple of reasons. One is that people resist the revolutionary process of saying, "Forget what we've been doing. Now we're going to do this." Also, in most organizations, people have seen some things come and go, some other programs that some new leader has come in and said, "This is important to business now, so this is going to be what we do." If it's approached as a revolutionary process, you'll have resistance because of resistance to change and you'll also have skepticism by people saying, "That's great. That's this year's program, but this will come and go. Other things have." I would approach it more from an evolutionary process. Not talk in terms of self-directed work teams, not talk about high-involvement work teams, or use any other verbiage like that. Instead, I'd spend a lot of time training the managers about the basic principles of involving people in decision making processes. Getting the right people involved in the right things. Picking out some of the informal leaders in the work groups that already exist in the organization and getting them more involved in decision making that's going on in the process and have them start to pull other people in. I'd identify the resources that you have currently in your operation and talk about how to evolve to this rather than trying to do a program where you say, "As of March 1, 1992, the world is going to have changed, and this is what we're going to do from now on." All too often people try to, and its been done with quality too, they've instituted new quality programs and have done it with bells and whistles and flashing lights and promotion, and when done that way it has a much lesser chance of success than if the management of the organization begins to buy into some general concepts, the basic operating philosophy that the organization is going to have, and then they start to model that and demonstrate it and pick out both the formal and informal leaders of the organization and slide into it as opposed to doing it as a revolutionary process.

Q: The record probably speaks for itself on this one, but has the team concept been successful?

A: In our operation here in Jenks, it's been very successful. If you say what does that mean, there are some things that we can quantify. We can say that our process is more productive than any startup operation of a consumer tissue paper machine operation has ever been. That's not just more successful than any Kimberly-Clark, but that its more productive than any startup by any company in the industry as shown by metric-ton production of paper being produced by one machine. It is more productive not by a little bit, it's a quantum step above any other startup that's ever taken place. I'm not going to say that is solely because of self-directed work teams, there were a lot of other things that helped with that success, the approach and construction of the pieces of equipment that we have. We approached the startup of this operation very differently, not just the startup but the design of the equipment, the layout, the foundation for the equipment itself, the way it was set up. Our

involvement in that whole process versus relying on contractors to take care of it. All those types of things we did very differently. But, there's no doubt in my mind that the high-involvement work team approach that we used plays a large part in it. Our operation is more successful than our other consumer tissue operations if we look at a cost per ton produced. Those things really begin to be very difficult to measure because the technology is different, the product is different. Those measures are very difficult. Some of the things I'd like to point to that are other indicators of success of our operation are things like when it comes time for the board of directors meetings, the board of directors end up here in Jenks rather than in the other operations. When it came time to bring Wall Street analysts on a visit to the Kimberly-Clark operation to show them what world class manufacturing looks like, in order to convince them that they need to continue to add Kimberly-Clark stock to their portfolios, there was no question where they would come. We brought a hundred and some odd portfolio analysts and stock analysts into this facility to show them what a world class operation looks like. We are the showplace for Kimberly-Clark because of the efficiency and effectiveness of the operation and because of the other things that demonstrate world class performance, the housekeeping and the appearance, the attitude of interaction with our operators. We had people who run the equipment on the operating floor giving the tours for the stock analysts, and the stock analysts were asking them questions initially about the process, but by the end of the tour they were asking them about the industry because our people on the operating floor know how our stock compares currently to Scott Paper Company in Jenks, they know what the competitors' products are and what our marketing strategy is and what the marketing strategy has been for competitor's products. They know as much about the business that we're in as most middle-managers do for other operations.

**APPENDIX D**

**INTERVIEW #3**

Q: When did Armstrong first decide to implement a self-directed team program?

A: We kind of grew into it by evolution. I'm the original plant manager here. When this plant was designed, it was designed from a technical standpoint before I was on board. That part of the sociotechnical system was designed ahead of time. That was in 1986. They did envision having multi-functional workers here. That's as far as they went around identifying any formal organization structure. We've kind of grown into the self-directed thing. I had a combination of nonunion and union plant experience and I had spent the last nine years in a unionized facility. I knew what I didn't want.

Q: Is this union?

A: No, it's nonunion. Nothing against the union per se, but it was that adversarial relationship, that constantly bucking heads, that treating people as a pair of hands, an extension of a piece of equipment, rather than somebody that can help you run the business. So, there were a lot of things like that we wanted to put in here and allow people to participate in the business. We didn't grow into the term self-directed teams until about three years ago. We were into the mission maybe a year and a half or so before we started using that term. There hasn't been a lot of corporate pressure to do that sort of stuff, it's been more what we felt locally we were interested in doing around that. So, corporately this plant is probably about as far along with the whole self-directed work team concept as any in our organization. We've got a number of tests going on in different size plants, union, nonunion, whole salaried, some hourly. In terms of the breadth of activity, this plant has probably done as much as any of them. Therefore, it's sort of an experiment.

Q: You may have answered this second question. What were the reasons, what prompted you to decide to go to a work team concept?

A: In my opinion, there are very, very strong financial reasons for doing it, let alone anything that you might be personally inclined to do. I think you can operate an organization with your people, you can operate it with less layers of management, you can get more buy-in and ownership of the process with a team of people who have responsibility for running an operation. I don't know your business or your process, but here our teams are built around production lines. We make resilient flooring here, vinyl flooring, and it's basically a three-step process, three separate production lines add value to the material until it's a finished product. We have set up a distribution center and a maintenance group. Those are the teams that are operative in our plant. They basically have responsibility for running that entire operation. We have sister plants elsewhere that are organized traditionally and we're already producing as well or better than some of the other plants. From a cost standpoint, it's a distinct advantage.

Q: As far as the structure or the basic concept of your work team program, I have found that it means something different to different companies. Briefly describe your program here. You mentioned three different teams, give me an idea of the structure and how it's formed.

A: We're an all-salaried plant. We use a skill based pay system. To be differentiated from a pay for performance type of system, ours is a pay for skill system. There's a learn, do, and teach element to every job. Our wage plan is structured such that people on a production line have responsibility for learning every job on that line. As they master all those jobs, their pay is increased to a maximum level. Within that operation, they have responsibility for managing the production of it, the quality of the product we are making, they manage the rotation of people throughout the team, they manage the vacations, attendance, training, they help interview new employees, they run the probationary program on employees, they help us with training programs, teaching the courses, they participate in and have leadership responsibilities in a number of plant-wide committees where one representative from each team in the plant would come and serve on a safety committee or an issues committee or activities committee. The core of our plan is the team, which is built around a production operation, so there's a discreet set of skills that have to be learned by a team. We have an office team, incidentally, here too. Our office technicians have the same kind of skills.

Q: You mentioned earlier that there are reduced layers in the organization. Is a team totally self-directed in terms of the team members making the decisions as a group or is there some type of supervisor.

A: Yes. We use the term "coordinator" for a first-level supervisor. I think the concept of self-directed teams in its purest form is nirvana. I'd be interested in knowing what you think about this. In the five years I've been involved with this I've tried to find models from life that would serve as teaching tools to show people a vision of where we're headed. The closest I can come are only two. One, the representative democracy that we have in this country is a fairly good model. It breaks down in some ways, but at least is good in the sense that we as Americans are self-directed, hopefully, as individuals. Our local bodies, be they townships or cities or whatever, are locally controlled. Our states are controlled and then, of course, our government. But, we don't have the right to go usurp someone else's rights. We don't necessarily sit in on every decision that's made in our town council or city council. The same way here in this organization. You have a right to self-govern yourself, provided you do that responsibly. Your team has a right to self-govern itself, as long as it does it responsibly. You are members of larger committees and you send representatives to it. You don't get to control what they do necessarily. You have a say in it, but you don't control it. That's one of them. The other analogy that fits somewhat is like some of the communes that have sprung up around the country. I'm thinking more of the Amanna Society up in Iowa, where someone subjugates their own personal interest for that of the group and purposely sets aside some personal rights in order to effect a stronger union with the society. There's definitely some of that we find

people have to do on these teams. There's no "I" in team. To try and reach consensus around some decision the team has to make, people have to set aside their own individual attitude about something in order to find some compromise, some solution, that's good for the team. Therefore, the commune analogy, I think, fits that. I can't just say, "If you do this, you'll do it right."

Q: I'm not sure there really is any true formula in the sense that you can use. I think both examples you gave are pretty good illustrations of what you're trying to convey to the employees. That would be difficult to do because it is a new concept.

A: Especially four years ago. Today the business magazines are replete with articles about teams. There are all kinds of seminars and stuff. When I went into this five years ago there was very little going on. I count myself lucky to only have done it five years ago because I knew two of the four fellows who started up the Topeka plant for General Foods in Topeka, Kansas, which is now 22 years and running. Those guys really had it tough. Back then there was nothing.

Q: I've found, in doing my literature review for my thesis, that there are a lot of articles just over the last couple of years on self-directed work teams. But I've also found they talk about different components of self-directed teams, almost like it's tailor-made for each company and no two companies are exactly alike. There's no one formula that applies to all companies across the board.

A: I would absolutely concur with that. These things are site specific, not even company specific. That's as much a function of the personality of your leader as anything.

Q: Just a side question, it's not on my list. The culture of the organization when you implemented it five years ago, what was that like? Was it one that was receptive to change?

A: It was a Greenfield site. What's interesting on that is you read the literature and they'll tell you that doing Greenfields are easier than retros. I believe that's true, but what many of those articles fail to deal with on the Greenfields, you're taking people from whatever job they've been at before and, in fact, here nobody had worked in a self-directed team culture before they worked here. So you're buying all that garbage from all those other companies. But it is a little easier to effect the kind of change we wanted here than it would have been in a retro fit someplace else.

Q: I think that's going to be one of our difficulties. We are a relatively old company, about 75 years old, still family-owned and operated to this day. There is a very strong culture within the company that is somewhat resistant to change of any significant potential. It's going to be difficult. One of the things I am doing, Dave, I am speaking with companies that, from what I understand, have successfully implemented self-directed work teams. How do you measure the success? How do you determine the success of these teams?



A: I think you can do that on several planes. You can do it on a pure productivity basis. You will read articles that say team cultures can be as much as 15 to 20 percent more productive than similar industry that is organized traditionally. We can't claim anywhere near that kind of advantage, but we're at least producing as effectively cost wise, production wise, volume wise, as any of our traditionally organized plants that have been around for a long time and have had a chance to go way up their learning curve. When measured on other kinds of less specific things, absenteeism, grievances, attitude surveys, if you go out here and ask these people how many of them would want to go back to a traditional culture, I think you'd get a resounding no from all of them. Maybe one or two percent would say it's too tough an atmosphere to work in. It's a love-hate kind of a thing. We use a phrase, "Once you've taught the bear to dance, you'd better be willing to dance until he's tired." When you get people going in this kind of a thing, it's insatiable. They want more involvement and stuff. When you make some decision that pulls back or is perceived to pull back on their right to be involved, they'll squeal real quick. At the same time there will be some who will say this is too difficult an environment to work in. They want to work someplace where they just have a job to come in to every day. I don't think they really mean that. If they had that it would drive them nuts. But, there's that sense that having to participate, where you have to seek consensus and where the team has to struggle with stuff, is hard. If they have to make a decision to let somebody go, they agonize on that every bit as much as I do, but they never saw me agonize, they never saw the sleep I lost. But, now they're getting a taste of that same stuff. Those are some of the things I would use to measure. Have you seen the movie "Field of Dreams"?

Q: Yes.

A: There's a line in that movie that says, "If you build it, they will come." He didn't know ahead of time that it was going to be cost effective. Too many managers, too many owners of companies today want to see that bottom line, "Show me how it's going to be better than what I've got right now. Why should I do this?" To an extent there's a leap of faith that I'm not sure a lot of folks are willing to buy into. Our company was sick of the adversarial kind of thing they had seen way, way too much of and were willing to take a flyer. My experience with the company largely has been in nonunion plants, and I knew some stuff that I wanted to do and started up a Greenfield thing around that.

Q: The focus of my paper, and something that's going to be critical to what we do at T.D. Williamson, is the role of senior management in this process. I have been told that for the process to be successful you really need the support of senior management. What was it that senior management did here that helped contribute to the success of the process?

A: Help me understand what you mean by senior management. Do you mean on-site management or corporate management and their support for what I was doing here?

- Q:** Both. Corporate and on-site. Anybody that would have some influence on the success of the work team. Whether it's a decision they make to do something or whatever.
- A:** The most critical thing I think is the on-site management and their ability to walk their talk around what they espouse. That's another reason why I think this thing essentially is a site-specific event. I made some mistakes in our pre-employment training with our people in that I said we wanted to have a participative environment here, but I didn't explain what I meant by that. I just said we wanted to have them help us manage this business. To some of them that meant being on a committee. To others it meant running the place in six months. When a year rolled around and they weren't doing many of those things, a lot of them said, "Hey, you aren't walking your talk. You said we were going to participate and we're not doing that." I said, "Wait a second. Yes, you are." Then I found out what I had done wrong. I hadn't given them enough insight. I hadn't put the fences around what I meant by participation. So, we had to go back and rework a lot of that stuff. They measure senior management around its willingness to let them get involved in the business and make mistakes and not yank stuff back from them. To what extent do we keep them informed about what's going on. To what extent do we take risks in allowing them to do stuff. Walking that talk is the key thing. For instance, if you've got a senior management in your company that doesn't buy into this themselves but wants it because they think it's good for the organization, forget it. People will quickly see whether or not you're sincere about what you're doing.
- Q:** What I heard you say then as far as walking the talk, in other words commitment to the process, and more than just verbalizing, actually doing it as well.
- A:** How often do you ask somebody for their opinion about something? How often do we say, "Here's what is important to me, the overall direction of the business and these parameters. Within those fences you're free to operate as you want to."
- Q:** It sounds as if communication is important as well. Both ways.
- A:** Yes. There are some things I've done in that regard from the beginning that I've found helpful. They call them the "Dave meetings". I sought three or four times a year to meet with every team. I would go into these sessions with a blank sheet of paper and say, "What do you want to talk about?" They were free to talk about whatever they wanted to talk about, any questions, any fears they had. I got everything from "Why are the Cokes only half full in the lunchroom?" to "The men's room exhaust doesn't work right". But, over time, doing that enough times with them, I broke down the fears to say, "Dave, I don't see how this is really working", or, "I don't think my supervisor is really living out what your vision of this place is", or, "I can't seem to get along with so and so. Can you help us work together as a team to get more effective?" Building that trust relationship is an active process. It's not just a passive one.

- Q: Are there other things that you could advise me that you may have done here at Armstrong that would help me in knowing how to program or encourage my senior corporate executive-level management?
- A: There's some stuff I suggest you do there. Of all the experiences we had, all the courses we went to, all the seminars, those pale by comparison with a trip to a place that has got this stuff going. Especially if you can go someplace where you can almost at random select eight or ten people off the floor and take them into a room and grill them on those eight questions or have your CEO grill them about what they are doing different here than they did at some place before and get those kind of people to define what the benefits are. Let your CEO see that and get a feel for what people are doing in this kind of environment vis-a-vie a traditional one around saving the company money, coming up with suggestions for improvement. For us personally, there were two visits we made that were pivotal in my being able to really say yes, this is the direction we want to head. Those can be very different for everybody, but there were a couple of those visits that, for our organization, we still talk about. Peabody Tec-Tank in Parsons, Kansas, was one of them. They were written up in the *Harvard Business Review*. In 1972 they had their backs against the wall, they had a union election, almost lost it. The CEO there said, "I want to make a change. I want to be different. I want to do what's right for this organization. I'm going to shut up and I'm going to listen." What he came up with was self-directed teams, teams that are doing virtually everything, and he's got a very successful organization. I can remember sitting in a room with six guys off the floor there, and when I heard what they were doing and saw one guy from the floor had been promoted to supervisor, got too cocky in the role, they demoted him, the team did, one of the guys again and he cleaned up his act and they promoted back up again. I'd never seen that in my whole career. Just some of the decisions they were doing, things they were doing that historically we had always had management people doing. I thought that was really neat.
- Q: I've already taken several of our management group over to Kimberly-Clark and toured the facility there. We're also scheduled to go over to Norris O'Bannon in Tulsa, I don't know whether you're familiar with it or not. They have had the self-directed work team process only about nine months or so, it's not been very long, but it is in place, it is working. There are a lot of success stories there. It's possible we may travel over to the First Brand Corporation in Rogers, Arkansas.
- A: The problem with those places is they are all Greenfields. I think you'd do better to go to some places that have had redesigns and been successful with them.
- Q: What is the name of the company in Parsons that you mentioned?
- A: Peabody Tec-Tank. I don't know that any of the players are still there who were there when we went, but the phone number is 316-421-0200. There was a fellow there by the name of Jim Lawson who was the plant manager.

- Q: One of the things I'm trying to focus on are manufacturing facilities, which is one reason I may not contact Bama. I am looking at manufacturing companies, production. Just to try to stay in the same industry as we are.
- A: I hear what you're saying. There are some valuable lessons to be learned from some other folks in other industries doing this stuff. What happens there is you don't take anything for granted. You go in cold. You don't know anything about what they're doing or how they're doing it and your mind is like a dry sponge picking up stuff. Whereas if it's a manufacturing facility, you have paradigms around how stuff ought to be done and you tend to gloss over stuff that otherwise would be really interesting to you. I agree with you in terms of concentrating on manufacturing.
- Q: I may give Mr. Lawson a call.
- A: What's nice about it, his change came as a result of having his back to the wall. The lessons they've learned and the way they've gone about learning it. The place was dirty and there was a lot of heavy work. There were no women working there, which was negative as far as our people were concerned. Another negative in that organization was that because they had entrusted so much to the teams, they had no one looking at longer range stuff. No forward thinking, strategic thinking people. They didn't see a need for them. As a result, they hadn't modernized their equipment. We asked them, for instance, what would happen if a Japanese company moved in down the street with the latest technology to make the same kind of tanks, what would they do. Their only answer was kind of pathetic. They said, "We'd out-produce them." That's all they had, all they had was their own energy. It was kind of an interesting twist.
- Q: Going back to the issue of encouraging senior management.
- A: Take them out and show them some stuff.
- Q: Then in terms of what they could actually do themselves of helping to contribute to that success, other than seeing or witnessing. They come back into TDW, what is the one most important thing that they can do to help contribute to the success of the process?
- A: In any of your courses have you ever done anything with the Pygmalion concept? There's a film, "Productivity and Self-Fulfilling Prophecy". I've taken that thing after people have seen it three or four times and gone through the examples in there. There are many others you can get from industry and just have your people understand that, whether they like it or not, they're influencing productivity of other people by the way they are. If they're completely happy with that and that's the way they want to stay the rest of their lives, fine. If they're not, they ought to dig in to some of the why's behind that, and you can see it in these places where you entrust people with responsibility and then turn them loose to do and you believe in them. If you don't, you go nuts in this kind of work. If you believe in them, magic happens.

The outside world will look to the leadership and say, "It's your leadership that did it." When you're in the middle of this you know it's something else. It's the God-given talent these people have, somehow we've just allowed it to blossom. We ought not to take credit for that.

**Q:** If you had it to do all over again, would you do anything differently?

**A:** Yes. I wouldn't say so much up-front around specifically what we were doing, what milestones. It's all right to talk milestones, just don't talk time on it. Talk about doing it when we're ready to do it, when they're comfortable with it. I would somehow use a pan scale to show them that increased involvement and empowerment has a responsibility associated with it. If you can help manage this business, you get the good and the bad. There's a lot of good stuff in management, there's a lot of junky stuff in management, and you've got to taste both of them. I'd work with some of that. I would have done more front-end philosophy training with our employees. I don't know as we did enough of that. Kimberly's done a better job of that, I think, than we did. They're in the process of modifying their program, shortening it actually.

**Q:** What do you mean by front-end philosophy training?

**A:** They have "Jenks University", they call it, that was an eight-week program, now cut to about three weeks. There's something to be said for taking the folks away somehow off-site or at least where the phone is not ringing constantly and getting them to become teams, to talk about the vision, what do we want to be. The effective part of this team stuff is when people can say, "This is what I want to be, what we want to be." Not, "Here's Dave's vision for the plant, now let's go execute." It's getting that buy-in and that ownership that's so critical. It goes back to walking your talk. How much is it their vision versus just my vision.

**Q:** So it's communicating that philosophy with the employees. Making sure everybody has a common understanding as to what the objective is and the reasons behind what we're doing.

**A:** I just think of myriad examples of walking your talk. Historically, management people are the ones who go to these seminars, go on these trips to other places. We found that we got much more mileage out of sending some people from the floor to some of these places instead of management people. It means that I don't get the benefit of visiting some of these places, but some other folks do and that's better for us. It's that stuff over and over and over again that underscores their value. We brag about employees being our greatest assets. How much do we invest in those assets? Do you invest the equivalent of what your depreciation is on your equipment? Probably not. If you don't, that's something you could ask your higher management about walking your talk. Start by taking those human assets and doing at least as much with them as you do with your capital assets. We look at a balance sheet today and our people costs, our expenses, are treated as expenses, we call them period

expenses, overhead, whatever, and when a manager looks at expenses, he's trying to minimize those. When a manager looks at assets, he's trying to lengthen them, increase them, grow them. Have you seen Joel Barker's film?

Q: Yes.

A: Have you used it?

Q: We show it at quality meetings, it's available, we have several copies of it. I guess almost all of our employees have seen it. We have corrective action teams that we use as part of our quality process and we use the paradigm for the CAT. We also have triads that market products, members of Manufacturing, Engineering and Marketing that sit down and watch it.

A: The key for that is to say, "What are my paradigms?", and force me to list them on the wall in front of my own staff. That was where that was a very valuable lesson for me.

Q: Has the self-directed team concept met your original expectations?

A: Yes. That's where it becomes personal I guess. I don't think I would ever want to work in anything but this kind of a culture again. I've watched a number of people, we're 200 people here now, so there's been about 35 or 36 of them that started here and have gone on to bigger and better things, and I'll talk with them by phone about what they're doing in their new places and how they're trying to effect change and some of the things they learned here that have been a basic change in their life. That is extremely rewarding. It's helped among our employees, it's helped a lot of their personal relationships at home. It's a macho culture we have here in Oklahoma and women tend to be treated as second-class citizens. We have 27 percent female here and many of those women, for the first time in their lives, felt like they were doing something worthwhile. They told us that. In fact, in some marriages it causes strain because hubby is pumping gas or jerking sodas or something, "meaningless" kind of work, folks even have a name for that, "brain dead" jobs. We don't want any "brain dead" jobs here.

Q: It's empowerment of the employees. I think anytime you empower the employees, they take an ownership in what's going on and that affects quality and productivity and all those areas.

A: We just tend to make it far too complicated. I don't know whether it's the Phd's on the university campuses or whoever is doing it, but we try and make a program out of this whole thing that can be studied and analyzed and pinned down, if you follow these things or go to this seminar, you'll be able to do all this stuff. It's a whole lot more simple and yet a whole lot more complex as a result of that.

- Q: I think if there's one thing that I have picked up in my discussion with different people on this is that you do almost have to tailor a program based upon your individual situation. No one else has a culture like TDW's. No one else has its history, no one else has the makeup of employees. You have to take the principles that you pick up from other companies, the advice from other companies, and mold that into what can best suit your needs at the time for your own company.
- A: Right. We're our worst enemy in that because all the hubris that we've developed all our lives argues against sharing authority, power, all that stuff. Our mission statement is there on the wall. The department managers and myself developed that mission four years ago. The value of a mission statement is not in the product, it's in the process you go through to get it. Naively, we assumed that once we developed that thing we were going to bless that and take it out to the organization, make sure everybody knew what our mission was. Nothing. They have to go through the same process. In every level in your organization you have to end up getting that process, that buy-in, that ownership. It can tie back in to our plant mission but they have to do their own.
- Q: But you don't mandate that? They have to buy-in to that. You have to set the example. You have to walk the walk. You have to lay the process out before them but they have to buy into it and take ownership of it. Until they do, the process probably isn't a success.
- A: Actually be proactive and encouraging to the effort. We can write a mission statement for the plant but they need to write a mission for their team. What it's about, how they'll work together and handle problems. How they'll reach consensus, how they will assign responsibility, who will make the tough decisions around issues.
- Q: If you had one word of advice for TDW, what would it be considering this thing called self-directed work teams?
- A: Know why you're doing it. You mentioned at the outset of this that you'd done the total quality thing and your higher management thought this was the next logical piece. Why do they think that? The whole nation has gotten on the quality thing. There is a second industrial revolution going on in this country today around this team thing. It has a life of its own and it will pass and something else will come and take its place. In my opinion, if someone in their heart of hearts isn't committed to sharing authority, to truly empower people, if they're not way, way inside committed, then don't do it. It's a waste of time. In fact, the dangers are higher that you'll end up with a mess on your hands if people aren't really committed. What you do is get people all excited around it and then if they see that you're really not buying into that, then they feel manipulated and then they'll start doing self-destructive stuff. If you're non-union, you may end up with a union. If you're already unionized, it could end up with a much more adversarial relationship.

**APPENDIX E**

**INTERVIEW #4**



Q: When did Halliburton first decide to implement a self-directed work team program?

A: It was probably in the fall of 1988.

Q: What were the reasons they decided to implement it?

A: We thought it would be a perfect outgrowth of the quality circles program that we had at the time, but we thought it would be more meaningful than just a simple quality circle. Now you're going to give those people the entire scope of the job and say, "Go ahead and fix all the problems." The benefits to the company were going to be that, obviously, we were going to save some money, we were going to improve the efficiency within the group, and we also thought the communication would help us solve a lot of quality problems. Just help us do things a lot better in terms of what we present to the customer with the end product. I think that was probably the main thing. What the customer was going to get out of this. It was going to give him a lot better image of the company because he was going to get a lot better product. There would be nothing left out since it was all done within one work group, so to speak.

Q: Was this concept put into place as kind of a last-ditch effort type of thing or was it just to improve?

A: It was basically a pilot. It wasn't a last-ditch effort, it was more or less just another, what we thought, step in the progression toward more world class manufacturing, if I can use that term real loosely. We just thought it was a natural progression in the chain of quality circle going to a self-directed work force, going to more of a manufacturing cell concept, or a factory within a factory. To actually drive down costs and improve quality.

Q: One thing that I have found in researching the whole concept of self-directed work teams and in talking with companies is that the whole idea of self-directed work teams can be tailored to the needs of the organization and can be even structured differently from one organization to another. Tell me briefly how it was structured at Halliburton. Tell me a little bit about how the self-directed work team concept was utilized there.

A: I'm not sure I understand the question.

Q: Give me an example of the size of a team, the responsibilities of the team. Was there a supervisor in place or just somebody to oversee it?

A: First of all it was done in just one section of our machine shop. Even though we maintained a traditional manufacturing shop, it was done in a lathe section. There were about, I'll say, seven to nine employees in this little work team that we had. It was initially structured without a supervisor but with a leadman, so there was somebody that actually broke ties, whatever. In other words, we really thought there

was going to be a problem, there were eight or nine guys divvying up the work load and there were two people who said, "No, it was my turn to run this machine or do this process," who's going to make the decision? We had it initially with a leadman, that's not a proper description of the guy but that's what he did, he was a tie breaker, final decision maker.

Q: Did they make all their own decisions?

A: As many as they could. I think at the beginning that was probably the biggest problem we had was that they had no information. There were no performance measures that were fed back to them on any kind of a timely basis. Scheduling information was still pretty rudimentary and not well thought out. To me, the information was one of the biggest problems we had there and their ability to function as a team.

Q: What about the skills of the team? Were they all pretty much the same or were there multiple skill levels?

A: They were pretty much the same. There were maybe a couple of people whose skill levels were higher than everybody else, but for the most part they all had enough confidence to do the jobs and tasks they were asked to do.

Q: The size of the team?

A: As I said, seven to nine people.

Q: How were you going to determine or measure the success of the team? What was your intention as far as knowing whether the team was successful or not?

A: That was vague too. Ultimately what we thought and where we got the idea was in the customer complaints. What we were hoping was that we would cut down on the number of customer complaints that we had because of omissions in the overall product's travel from beginning to end. That was really what we hoped. I think that if we could have solved all those customer complaint things with the self-directed work team that we would have deemed it successful. We also wanted them to learn to solve their own problems. I think that was another thing we hoped to get out of it. Will these people actually become middle managers for the organization. In other words, not only do they do the production, they will do the preventative maintenance on their equipment, they are going to do the production on it, and then they are going to do the problem solving, without really any extra resources. Maybe they could call on the industrial engineering department for example to get some ideas, but as far as solving their own problems and performing what we traditionally look at as middle management functions, that was the idea. Let those guys do the blue-collar and the white-collar work because they know more about it than the white-collar guys did anyway. If we could have gotten those two things to happen, get rid of the customer complaints and then get the self-directed work team doing more white collar middle

management tasks, then we would be successful. We didn't have any measurements on those, it was going to be more or less a subjective thing.

Q: You felt like it did pretty much meet your original objectives?

A: As far as performing the middle management tasks, yes. As far as really functioning as a team, I'm not so sure.

Q: What actions did senior management take to help promote the success of the work team?

A: They talked it up a lot. They gave a lot of attention to this one team because they really thought that was what we needed to do. They always were talking to us about moving decision making down and here was a pilot that was planned to do exactly that. So, they took a real active interest in it. For probably the first six months, they held weekly meetings or they sat in on the weekly meetings of this team. This team was able to take one hour per week to sit down and have a meeting. They set their own ground rules and they would talk about what they needed to do better and what they needed, so to speak. The top level managers and the top middle management levels used to sit down with them and discuss those items so they could see where the problems were and they could kind of run interference. I think the term was they could throw all the rocks out of the road ahead of the team so it would be better sailing for the team. I think, in retrospect, that was an essential part of the team. If they hadn't felt as though everybody was behind them, I don't think they would ever have gotten out of the blocks. I don't think we would have had the success that we did.

Q: Did management ever sit down and explain the goals or the objectives to the employees up-front?

A: Oh yes. There were a lot of meetings. There was a lot of screening trying to figure who the people were who would be on the first team. There were a lot of meetings beforehand and we established somewhat of a steering committee. Essentially, all the ground rules and all the expectations were laid down, albeit informally. When you have a manufacturing manager who will sit down and lay all those things out then, yes, that's what happened at the first. They explained what they hoped to gain out of the thing, and basically said, "You guys will be the ones who we're going to experiment with and try to do these things. We're going to help you, but we want you to try to struggle with it on your own to accomplish the task."

Q: So, communication is a primary element variable in support of the work team from senior management.

A: Yes. To me there was a psychological contract. I don't know how to get around those words. I think that we could have stood up there and communicated and remained aloof and if they had perceived that we were going to stay aloof, if top

management had just come in and said, "This is what we want you to do, go sic 'em", I think we would have never gotten out of the blocks. But, I think that because they committed their time to it and spent time going back and working with the group that the group was willing to share where the real pitfalls were in open communication back. I think that had they just told them to go solve the problems and then not listened to the problems coming back that we would have shut the whole thing down in the infancy of the thing. I think that there is a psychological contract. Once they see a manager spending his time, not just communicating but spending time, then they say, "OK. He's really in this with us and it's worth it for us to feed him back information, especially if he's not going to retaliate when we give him negative information." I think that was essential, at least at my company. That was an essential part because the relationship between the workers and the management at that time was really pretty poor.

Q: What about other factors? Communication is obviously first and foremost. Were there other things that management did to help promote the success of the work team?

A: Yes. We put them through a lot of training, probably eight weeks, four hours a week when we just took them and taught them problem solving skills, SPC, then we also broke it down into fundamental things like setup time reduction. We tried to tailor some things that we thought would help them accomplish what we were trying to see as the overall goal for the team. Not only did we give them general stuff, but then we hit some real fundamental issues about how to improve the quality of the product. Some might say, "Why do we do things this way? Before we didn't see all this occurring in the shop because we only had one small part of it. Now we have all of it, what can we do, now that we see how this whole thing works, to make the product perform better and yet also make the cost of it go down?" We taught them simplification type things.

Q: Any team building or decision making?

A: Team building, no. No work dynamics or team building. We had "lost on the moon" type things where you can see the benefit of general decision making, but nothing I don't think that really brought it home to them.

Q: Was training a pretty important variable?

A: In my opinion, yes. I think it was probably the next most important variable after knowing that there is management commitment and knowing really, at least somewhat, why you're there. Then training became the thing that enabled the team to do that. Without that, I think the change would have come and the improvements would have come, but they would have been a lot slower.

- Q: So, prioritize those three issues, training, management commitment and communication. If you had to prioritize those, which would you say would be most important, second and the least?
- A: To me, you can't even begin without the management commitment. Then I would rate communication and training in that order, although almost equally. I feel as though the communication occurred because of the management commitment and yet I know that there can be management commitment without enough communication. So, if I had to rank them, I would say first of all you've got to have open, honest, communicated commitment to the project from management. That's what sets everybody free to say, "You're willing to listen to me when I tell you there's a problem." The second one in order of importance, I'd say, would be communication, and third would be training.
- Q: To kind of build from that, a lot of times senior management can confess or acknowledge that they are committed to a particular project or process, but somehow employees have to see that in order to believe it. It sounds as if at Halliburton the commitment was manifested in their communication to the employees, their support and encouragement, general communication as well as the training.
- A: I think the main thing is that everybody on the team viewed this as another phase they were going through. They constantly checked, constantly. They are still constantly checking for management commitment. If it goes away, that team is going to go away, although they know they've been able to accomplish things, which gives them some sort of a status to continue, not many people want to stop them because they have been able to accomplish things. They keep probing to see if that commitment is there. They will do it in subtle ways. They will make a calculated risk and see if they get supported. If they don't then a lot of them will start to back off. It just depends on whether you want to continue the pace and the rate of change that a team is able to accomplish, because you can back that rate off by backing off your commitment. They'll sense it and they will back off.
- Q: If you had to do it all over again, is there anything you would recommend senior management do any differently?
- A: I don't think so. I think they did everything within what they knew and what we still know now to really demonstrate that they were in it with them. I don't see anything that would make me want to suggest that they do something different. I think what they did worked.
- Q: That really answers my last question in terms of has the team concept lived up to its expectations.
- A: It hasn't, but I still think it's on the right road. I think the team will gradually fulfill this but I think it's going to take more feedback to the group and more timely feedback. Right now they're just not getting information on how well they're doing

until two weeks after the fact when the accounting guys can put together the information telling them how they did, and that's too late. I think not only is communication up front important, but that follow-up communication back to the group has got to be there for the team to really get feedback and take actions to improve. It's great to know after the fact that things could have been done better, but it's even better to know that things could be done better and to go see it and have that explained while you could still put your hands on the product. I think that's the thing that will really make a difference in how well the teams operate.

**APPENDIX F**

**INTERVIEW #5**

**Q:** When did First Brands first decide to implement a self-directed work team?

**A:** Our origins with the teams developed back in late 1987 and early 1988. There were plans being developed at that point to build an additional First Brand's facility somewhere in the United States, central United States preferably. We did the normal survey kind of situation where we looked at a number of different sites, but as we were researching and determining what kind of manufacturing operation it was going to be, that was the time where there was just a lot of reading material available on how the Japanese were beating our socks off and how the American labor force had grown fat and lazy and all this sort of thing. One of our executive vice presidents in charge of manufacturing at Hartford said, "We just can't let this kind of thing happen, we need to be on the cutting edge. Let's do some things different. How can we consider a team or self-directed type or modified self-directed approach for this new facility?" There were about three of us that were chartered at that time, I was in Hartford as part of the corporate human resource group, to do some legwork and research on self-directed teams. At that time, back in 1987 and 1988, there really wasn't a lot that you'd tap into that had any proven success. There were companies that were experimenting, but it was a little scary in that half you talked to were just having terrible problems. They had gone into it with the wrong approach, they had gone into it with the idea that, "Hey, this is pretty neat. All we'll do is just get rid of our supervisory and middle management staff and turn the plant over to the troops. Look at all the savings we've got in salary dollars and whatever. We'll just make this thing flat. Look what I can tell my boss. Things are going to be great." There are some absolutely horrendous stories we were getting from companies saying they wouldn't touch it with a ten-foot pole, they had tried it and it had almost ruined them. On the other hand we did talk to some companies that were approaching it, we thought, in a methodical, logical manner and recognizing that it was not a short-term panacea for all their business troubles but it was a long-term approach to developing people and getting people more involved in operations, not only in the short-term but in really longer term, have a significant payback to the business. We took a lot of advice and then obviously you have to develop what's appropriate for your own internal organization. We then made the decision that we would build this facility in Arkansas. As you may or may not have seen, it is what's known as Rogers North, it is the facility that as you came into our parking lot you could see on the north side, that facility was built in 1988 and opened in March 1989. At that point, we developed a training program that would be coordinated by the Arkansas Industry Training group and we would look for certain skills in our screening and recruitment process, the key of which, there would really be two keys, but the one that probably was going to be the biggest stumbling block for people is that we were going to screen through people who we did not feel could work satisfactorily within a team environment. We looked for fits, we looked for people that were going to be able to work together yet work independent of the supervisor and be self-directed. We also looked, obviously, for the technical skills and mechanical, electrical things because the facility also would



embark upon a challenge of having a one-job classification program where everybody does all the work. These were called technical placement operators and they would be ultimately trained to do not only all the production, running all the production equipment, to also do all their own quality. They conduct their own meetings, they set their own agendas, and they also do their own mechanical and electrical repair. They do everything, they start from scratch. We recognized it would be a significant training effort to make all this happen, and we have felt, here it is three years later, there is no doubt that the key to the whole thing is training, training, and then when you think you're finished training start doing some more training. That's where you're redirecting your focus is now on letting people do more in the workplace, have more flexibility in their daily tasks. But for some it's a big transition and they need to understand how they can get to that particular point and where we need to be comfortable with them being at that particular point. So, here we are three years later with Rogers North, we've used the Zinger Miller training through the University of Arkansas. We've taken a lot of that in-house, it's rather expensive to go through Zinger Miller to train everybody so we've developed our own trainers with Zinger Miller. We've been so close with them they have permitted us to do that, so we have an in-house trainer now. We buy the materials from them but we don't have to use the University of Arkansas, we don't have to use Zinger Miller trainers, we do all of that internal at this particular point.

**Q:** Let me ask a couple of preliminary questions just for my own benefit. First Brands is a manufacturer of what?

**A:** Plastic products, I should have started with that. We have produced the Glad line of polyethylene plastic products, trash bags, food storage, wraps, sandwich bags, Glad-Lock bags, there are 72 different products that are on the shelves under the Glad trade name. This main facility was built 20 years ago and subsequently the north plant was started in 1989. This plant was built and designed to be just what it is, a Glad producing facility. We are thought of very much, I think, as one of the top tier employers in all of northwest Arkansas. Wages have never been an issue with employees, benefits have not been an issue here with employees, working conditions and safety have not been an issue. It's a nonunion facility. Very strong program for human resources and first-name basis with employees. That's very difficult to do when you've got 1,000 plus people. We're in excess of 1,000 people between the two locations.

**Q:** Running two shifts or three?

**A:** Seventeen shifts. That will blow your mind. We have seventeen different work schedules in the facility. Normally people think in terms of a day shift or an evening shift or night shift. We have all those, but we also have what we call "D1" which would be people who work 12-hour days Monday through Wednesday, "D2" which would be people working Thursday through Saturday, that gives us six-day coverage per week. We have "N1" which is Sunday night to Wednesday morning, and we have "N2" which is Wednesday night to Saturday morning. We have a 2-2-3, two

on, two off, two on, two off, three on, two off, seven-day rotating cycle. We have a three on and three off rotating cycle. There are so many different shifts here that it's scary. All have been developed over the years to develop business needs, obviously, and fit particular departments and fit either five-day production demands, six-day production demands, seven-day production demands with the greatest amount of flexibility. When you talk in terms of how many shifts we have, seventeen.

Q: That probably is a misnomer. It sounds more like schedules.

A: Seventeen different work schedules. That's exactly what they are.

Q: One thousand plus employees here. When you first implemented the self-directed work team in 1988 you did so in your new facility, so the individuals who were participating in it were new employees?

A: New employees.

Q: You did not set it up in an existing work area.

A: Let me kind of expand that if I may. When we started the facility in the north end, we recognized that we may have some people from the main facility who might want to go over just because it's a new building and it looks like it will be new equipment and interesting and whatever. We did not want to deplete the resources at this main facility. We did not want to take all the mechanical skills and good operative skills and just put them in Rogers North. We also knew this was going to be a rather significant departure from our existing way of operating and that people would need to make a long-term commitment in order to make this work. So there had to be an element of risk for anyone who might want to go over. We just could not make it a free ride that, "Gee, I'll leave my job I've had for 15 years. I'll go over and try Rogers North and if it doesn't work out I'll come back and bump somebody out and take over here." No. "If you want to go to Rogers North, we'll give you all the information, you consider it thoroughly and then if you want to hold up your hand, we'll put you through the interviewing process just like anyone else. We will give everybody in the facility a one-time shot in which to go to Rogers North. If you are one of those people chosen to go to Rogers North and you are interested, if you are offered a position, you must recognize that there is no coming back. You are now going to Rogers North and you will treat that plant as if it were in Minneapolis, Minnesota, totally separate from here. There will be no 'Gee, this job's not working out. I'll go over and bump the guy out of my old job.' We will not accept that. The burden of risk is on you. You must perform, you must be able to go through the extensive training that will be ongoing and whatever." It ended up there were about 14 people that came out of this main facility that went over and have gone through the program and are doing quite well. There were a number, probably twice that many, 28 to 30, who held up their hand and at some point while they were getting information and realizing what all was going to be involved or whether it was the fear of teams and self-direction or whatever, probably 28 to 30

people just backed out and just stayed where they were. We did take a few and that's how we did it. Since 1989, since the start of the Rogers North facility, we have been embarking on a tougher challenge here in this main complex. That is, we use the word "retrofitting", because that's what we're doing. We are now going to an existing work-place, an existing work force that has been here, in some cases 20 years, and we are now taking those people through the slow, tender process of being capable to operate on their own and without supervision and within work cells. That's a tougher challenge. Much easier to take a person and interview and place purely for that environment. They know on the front-end that this is how it's going to work and that sort of thing. This is a bigger challenge to take the person who has done a specific job under the direct supervision of a supervisor, maybe done that for 20 years, and now indicate to that individual that the ball game has changed.

Lee Rosser who works in training came in.

A: We've talked a little bit about Rogers North and now I was just sharing with Don that we're in the process of retrofitting the main facility. Lee's role is he's kind of the in-house guy that we find vital to us. Lee's the guy that has gotten all the Zinger Miller training, he's our training and management development man, if you would, and very active both in Rogers North as well as this main plant here. Much more so than I am or the plant manager. Lee's the guy who goes out with the troops and is the facilitator of where we are.

LR: Who are you with, Don?

Q: I'm with T.D. Williamson in Tulsa. We're a manufacturer of pipeline service equipment, much smaller than First Brand. We do somewhere around \$70 to \$80 million a year and have approximately 350 employees. We're Tulsa based and privately held. That's one reason I was interested in your comments about putting the program in, or retrofitting into this facility. We would be, if we decide to do this, implementing this in an existing culture where we are privately owned. We are a nonunion facility, but there is a culture there and it has been for a number of years. One of my questions is how will something of this caliber, in a sense, which is pretty dramatically different than what we've been used to, how will it be received by the employees? Will that have any impact on the success of the program?

LR: How long have you been with them?

Q: The company is about 60 years old. The facility that we're going to put this in is our largest facility, it's about 125,000 square feet. There are probably 125 employees there. It's been in operation for about 13 years. But, most of the employees are long-term employees. It's going to be a pretty dramatic change.

LR: We had a similar situation in our Glad-Lock operation. It was a department, although it was relatively new, it had long-term employees that had moved into that environment. They liked that type of operation. It was dramatic. It still is dramatic.

They were there from the time we began that department, which was probably seven or eight years ago, some haven't been there that long, then all of a sudden, because they were long-term and they were very good employees, we started dropping out supervision in that area, which ultimately led to the self-direction which ultimately led to, "Hey, we don't have the supervisors to begin with, now we even expect more out of you, in the area of administration. As you are on your own we need to also depend on you to be able to solve your own problems, interpersonal skills, and so on."

**Q:** Briefly describe how you're set up. How a work team or cell is set up. One thing I've learned, and I'm doing interviews with a number of different companies, is that each one is different. You tailor it pretty much to what you need, so I'm not looking necessarily for a textbook definition, but kind of give me a brief overview of how a work team is structured, what the responsibility is.

**LR:** The way that department is set up it's got a natural divide in it whereby a group of people are responsible from the point the resin comes in the facility, from the time it is made into a bag, from the time it's packaged, the whole gamut. It's divided to where one cell group of people have control over that one entire process, so that's where we made our divide. We divided the department into eight working teams. There are four individual rotating shifts out there and each shift was divided into two teams. As I said, each team had responsibility for an entire given process. It was a natural separation, a natural working separation for us. So that ultimately we have eight teams. In the teams we have three different pay levels, grades if you will, of working operators. We have a maintenance level, the primary process operator and then the packaging people. So we have three different levels in each of our teams. Each of the eight teams have that kind of makeup. Approximately ten people in each team. We have a variety of assignments, job assignments, in each of those teams. We have people that are responsible beyond their normal jobs, beyond their maintenance or their operations job, we have people that have team responsibilities and those team responsibilities are broken down. To mention the largest would be the safety coordinator, the quality coordinator, the production coordinator. The reason I bring those three up to begin with, in each team those three have a role in every meeting. They have a role to play in each meeting. There are other team members that have roles as well that reflect the team and the operations and it may be overtime and picking up parts and scheduling vacations, and other roles, but these people I mention because they do play a role in each meeting. The person who controls the meeting is the safety coordinator. We felt that was the primary role, the most important role, the role that we deem in this plant as the most important, so he or she is the person who calls the meeting to order, they go first, they discuss safety, they discuss any changes in the safety policy or a near-miss injury or a recordable injury. They may talk about safety production of each team member through the Stop program. They play a major role. They have overheads, they are given information ahead of time and they will have prepared overheads. Their time is probably five minutes. Then they call on the production person who then comes before the team and presents production numbers for the

previous week, production numbers for the month and where they stand with the other shifts, they know what the other teams are doing. Then quality comes on board and they stand up and talk about any quality upsets, consumer complaints, anything of that nature. Then on a pretty regular basis we try to schedule a guest speaker. The last week its been our plant manager. He's compared our plant with another facility. We have a brand new facility starting up in Amhurst, Virginia. It's starting up in a team concept. This week and last week he's covered with all the teams their costs and how they're going to compete with us, and they're going to be extremely competitive with us. They're starting up in the team concept which will be tough for us because we've been the only group in the company and we've seen the benefits. Now the corporation is seeing that we're taking off with it and making some real improvements and others are grabbing hold, which they should. Prior to Dave, Sarge has joined us.

- A: We covered a lot of things. We talked about wages and benefits. Benefit programs you don't get a lot of accolades and a few years ago there was some concern in a couple of areas in benefits and I just wanted to kind of expose the people. Again, what we're doing with all of these teams, as you would well recognize with your background, Don, is that we're developing people. We're giving more and more information. What is happening is that their perspective is changing. They're not just the little operator that puts the cases on the horn and years ago they thought they were just a little peon and not important. That is not the case. They are terribly important to this organization. We are sharing pieces that we think they need to know and as time goes by we will continue to share more and more. So you're developing people and as they become more knowledgeable about this Amhurst facility in Virginia and costs they're going to incur making a product versus what we're going to incur in making the same product, that has a correlation. It sets a mind-set that we have to be competitive, not just with Mobil and the other companies outside of First Brands that are producing bags, but we've got to be internally competitive or those guys are going to get the work.
- Q: Is that the primary reason that you decided, and you may have mentioned this earlier, to go to this concept is to be more competitive? What was the primary reason to do this?
- A: We backed into this thing. If anybody ever sat down and said to you that, "Boy, you guys had a wonderful game plan, and you called all the shots", they are full of it. We backed into this thing under business pressures. It started, as I said, with an executive vice president in Hartford who does a lot of reading and has a strong ego and felt that if we were going to build a new plant he wanted it to be able to produce. But totally insensitive and totally unaware as to what it was going to take to get us to where he wanted us to be. All he needed to know was that he wanted to send letters around to the chairman of our corporation saying that we were starting this new facility and it was self-directed and look what the costs will be. In the meantime our business was like some companies, we weren't doing outlandishly well, we were doing good. But our staffing levels were very mean and lean. Often-

times we would find ourselves in a situation where we, say we transferred a young engineer from here to Hartford or somebody retired or somebody quit us and moved on to somebody else. The normal chain of events would be to replace that individual. We were just reaching the point with our senior management that every time someone would retire or leave they said no, don't replace them. How were we going to operate? They said we couldn't have any more head count. We had numbers of meetings trying to figure how we were going to do this. We were innovative enough that we didn't throw up our hands. We were somewhat forced into it. Part of it from a standpoint of not recognizing, on the part of our corporate management, what was involved, part of it forcing the plants into it. Again, a very blind approach. But with a good management group here in Rogers that was innovative enough to make this thing happen. I'm talking the main plant primarily. The north plant, again when we did the research, kind of the same situation. No real understanding on the part of the corporation what it was going to take to get us there. They just wanted to be able to say that they had a self-directed work plant. These Japanese don't have anything on us. If we were critical of ourselves and going into it a second time we would certainly say that it would make life a lot easier on all parties if the top management has support and understanding of what it would take to get there. If they had that closer knowledge it would certainly have made life easier for all of us.

**Q:** That brings up a question I was going to ask. Lee, for your benefit I'm interviewing you in a sense that it's part of what we're doing at T.D. Williamson because we are considering going to self-directed, but I'm also working on a graduate paper and this is the theme of my thesis. A lot of what I'm focusing on is senior management or top management's role in this whole process. Kind of building from what you just said, what would you say are the most important things senior management can do to help contribute to that success?

**A:** Understand that you don't get there today. That it is a long-term commitment and change of management style that we're embarking on. They need to understand that. It's going to be just as hard on the managers of the facility, if not harder. We've been doing that for twenty years and now its giving up some of those things that we've had in our hip pocket as managers, we're now sharing more openly and allowing others to do. Number one is understanding that it is a long-term commitment, it's not something that is done overnight. Number two, that training is critical and that training is not free. Training is not something that you may wave a magic wand and they are trained. It takes time and it takes dollars. It takes commitment of resources to get people trained to where they are capable of performing comfortably within these new roles.

**LR:** In other words, they just cannot jerk supervisors and without any dollars, without any training, without any effort to get the people prepared, say they are self-directed. You're cutting your throat.

- Q: I had one of the individuals I was talking to in relation to this issue of training and its role in the whole process, say that its much like fleas in a jar. You put fleas in a jar and put the lid on it, the fleas learn to jump up as high as where the lid is. You can take the lid off and they continue to just jump as high as where the lid was. So you have to almost go back in and reprogram, retrain, the employees to help them realize that now they have more freedom, more authority.
- A: We've had a similar statement that we've used over the years and it's a part of an old DuPont safety training program called Stop. It basically says that people perform to your minimum expectations. If you expect minimally from your people, that's where your people will perform. But if you open the lid on those fleas and expect more from them, you're going to have to retrain them to get them to jump higher, but they will be able to jump higher. The same thing applies in the work force. If you train people but expect more from them, they will be able to achieve that. Not without difficulty, not without some mistakes.
- Q: As you mentioned earlier, it's not an easy process and you're taking people who have learned to do things one way for all their careers, fifteen or twenty years, now you are asking them to do it a different way. It is an issue of reprogramming, teaching them how to make decisions, how to solve their own problems.
- A: It is not for everybody. We have had people here who have worked under supervision for years then the idea of self-direction is exposed to them. It sounds good, it sounds interesting, and they move over to an open bidding procedure and get into those positions and decide it is not what they want. They go back into a traditionally supervised department, and we're fortunate to be able to offer both here because of our size. So, it's not for everybody. It's not for the individual that minimally performs his work. As Lee will be the first to attest, the thing that is most interesting to me is that years ago those of us who were managers when we filled out appraisals we wanted to step on the shoes without messing up the shine. Oftentimes we sugar-coat things, we don't get right to the brass tacks. None of us are excellent disciplinarians, you should see some of the pure evaluations that come through now. They all annually evaluate their peers. They have been provided training in this and that feedback is provided back to these operators through facilitators like Lee and department managers. But these folks cover all the gamuts, they cover the good, they cover the indifferent and they cover the ugly.
- LR: The best evaluations I've ever seen. Extremely thorough.
- Q: We have considered doing something like that. Of course completely separate from what we're trying to do with self-directed.
- LR: I think once you get into self-directed it takes a little while to get to that point where you take people to peer evaluation. You don't do that initially. I wouldn't recommend doing it. There are too many other things they need to learn and become acquainted with, administrative duties they've got to become happy and

secure with. Peer evaluation is a tough one. They are not as comfortable with it as quickly. It takes a while. We've been doing it now for a year, a year and a half in one department, and there are people that still struggle with it. They are still extremely good evaluations.

Q: Probably much better than a lot of your supervisors and managers.

A: Absolutely.

LR: Far better than any supervisor. The supervisor is not there when they come back late from a break. The supervisor is not standing there when they are negative all the time. The supervisor is not there who knows them inside and out and knows what they are good at and what they are poor at. I tell you, those employees are right there beside them and they tell all.

A: In Rogers North we've actually responded through peer evaluations to putting people on what is called a PIP (performance improvement program) based upon the recommendation of the peers. We've actually had people terminated based upon the evaluations of the team. The team has asked to sit in on the termination, they didn't want to duck the issue, they did not want the words to be said in the terminations that management was out to get somebody. They wanted to be a part of it. They had taken it all the way to that point and as many as two or three team members would sit in on the termination. Being an old, stuffy, conservative First Brands manager, if you had asked me four years ago if we would ever have gotten to that point, you would have blown my fuse. I would have said it couldn't happen, not within our company. I'm in awe of some of the things that I see. I'm in awe of how some of the people are coming along in their development. I think the training that Lee has provided has just been downright excellent for them, not only for the job, but we're all just pieces of chemistry that are placed here on earth that are victims of our upbringing and our surroundings, including our work. The point I would get to quickly is that the training Lee has given people in human relations and conflict resolution and things of this nature within the working program, so many people have come back and said, "I'm just a better person because of this. I now can go home and argue with my wife. We don't argue like we used to. We used to throw things, we used to get mad and she would get the gun out and I'd say put it away or I'll knock your jaw loose. We don't do that anymore. Now we can talk to our teenage son. Now we have an approach, we have a way of going about resolving our problems. We are better for it. We are happier away from the job for it." Thereby, they are happier on the job because of it. That sugar-coating everything, does that mean that is the answer to everything? No. My point is that what we are embarking on here is a general upgrading and uplifting of our work force. We can't help but be better in the long run.

Q: Lee, tell me a little bit about your training program.

LR: We enlist the services of Zinger Miller. Are you familiar with Zinger Miller?



Q: Yes. I've attended one of their program.

LR: We use the Working for our teams. As a matter of fact, we've expanded it beyond our teams now we were so impressed with it. We just started our second department in January. Last summer we took that entire department through Working, not through every unit of Working, but probably through five or six units. We worked through the basic principles and resolving issues which we feel is real important. Listening clearly, getting your point across was another we used. Several key units we felt more important than maybe the others in the team environment. We told them during the training that this was necessary because there would be no supervision. They would be held accountable for resolving their issues. They would be held accountable for taking care and getting along with one another. There was not a supervisor they could run to resolve issues and take care of their problems. Ultimately we do have a department head if there is anything major. But, on that shift there was not. Then we reemphasize through meetings. There are times when we further enhance that program and we've posted all the units they've had in their break room so they can see them and they are evident. It's almost an ongoing training enhancement program.

Q: Do you do any team building for the team?

LR: What we do as far as team building is primarily in the team meetings themselves. It's just through, I guess, one person watching another through his role in a coordinator area. As far as an on-site, no we don't.

Q: What about any problem solving or decision making?

LR: We did have some problem solving, but we have a problem solving which is really more evolved around mechanical problem solving. We would like to take it more to a personal problem solving.

Q: What about skills training? Do you get involved in training as far as specific skills within a particular cell or work group?

LR: Skills regarding the job itself?

Q: Yes.

LR: No, I do not. I understand their jobs. I've been here long enough that I know their jobs, but we have trainers in those departments, by the way who we also train in teams and also take through Zinger Miller, that work with them through the skill training in a particular job.

Q: When an individual comes into a work team, let's say a team of ten people, first of all is everybody trained to handle other jobs?

LR: No, they are not.

Q: You have different levels?

LR: We have different levels and different jobs. That's not the case in Rogers North, which was started up in the team concept. They all have the same, very similar type job that they rotate through. Over here, retrofitting is a different story. We have separated jobs, separated classifications, and they don't cross over. They may rotate within the role of a particular job, but if you are a process person you are not a packaging person. So it's a little different situation here.

A: We had the multilayer job classification system here, probably 30 jobs here in the plant that we filled through open bidding over the years. We're just not in the position where we all of a sudden said we were now down to one job classification. Plus, we weren't sure that by the nature of the work we had available that we should do that anyway. So we left the job classification system as it is. We have people, as Lee says, that are on the packaging end, people that run the equipment here, and the mechanical people that are still part of the same team but working within different jobs.

Q: That is the way we are structured. Of course, as I said, we would be putting this in place with existing levels. My concern is if we create a team that has three or four different levels, how do you prevent the natural leadership gravitating to those individuals who are higher up in the grades? I'm concerned, for example, that the master machinists in the machining group are going to end up making the decisions and automatically assuming the role of leader and decision maker.

LR: Don, I don't think you can ever totally eliminate that situation. I think there will always be natural leaders and those people that will be approached first for help in solving a problem. That's not all bad. We don't designate a team leader but you know there are leaders out there and that's not all bad.

A: Lee fed off that very thing when we were setting the teams up. It's important when you start the teams that they be successful. Who do you call on? Do you call on your weak links that you would identify to kick these things off or do you try to identify your safety coordinators and production coordinators and quality coordinators?

Q: Who may not necessarily be in the higher grade position?

A: Exactly. I didn't catch all the meetings, but I would sit in with Lee and some of the people in the departments before the teams were designated and they were going through some real gut-wrenching decisions as to who was going to be the safety coordinator. We fed off that and said let's don't run from the fact that there are people out there that are capable of doing these kinds of things, let's take advantage

of it and make them some of the initial proponents of where we are going and put them to the test early.

LR: We do know there are natural leaders out there. Even beyond the meetings, even beyond the running of the team at that level, out in the workplace, there are those people that one will go to. They may not have a role at that time as a coordinator, but they are still a natural leader.

Q: I agree with that. I think my concern was why encourage that by having the levels. We have the levels and we're going to have to do that. That was one of my concerns. How do you create a team where everybody is equal in a sense and they look at others as being more important because they are in a higher position?

LR: What Sarge was talking about, we have three levels, actually I guess you could say four, we have two levels of mechanical on each shift so there are actually four levels of people within a team in the Glad-Lock department. The lowest level is packaging and they were some of our first coordinators, as well as some of our mechanics. We did not want all high level to be the coordinators. There are leaders in each of those levels. We have leaders at all levels and they are all critically placed.

A: I think it would have been a critical mistake for us on the front-end if we had made the top mechanics the coordinators. I think it would have sent a signal very early about the teams, that these are the guys now being called to run the show, they are just an extension of the supervisors. By going to the people in packaging right on the get-go, I think it sent a signal to all the teams that we all have a role to play here.

Q: I think by identifying those individuals as your quality leader, your safety leader, whatever, you are assigning some responsibility or authority to individuals who may not be at the higher level within that team. I will have cells or teams that are comprised of a wide spectrum of skill levels. I will have code welders and master machinists working right along with light assembly people. It's not practical for me to teach this light assembly person to become a code welder overnight, or for that matter a master machinist to be a code welder. So I cannot have a team where everybody is pretty much equal in skill level. That is one of the things I've found in a lot of these other companies I've talked to, their teams pretty much are all equal. They are cross functional, they can do everything.

LR: That is what the books say to do. Yet, in the real world, that's not cost effective either. We're doing it at one plant and we're already into that a little bit. Whereby we don't need the level of skill and training in a packaging person that we need at the other end. We can pay less. So why develop everybody to this level, I'm being very honest and frank here, when we can pay less at this level and maintain it?

Q: That's good business.

LR: That would be great, but in reality that's not great because we can't do that.

Q: Well, I think it depends upon the nature of your business. I interviewed the people at Kimberly-Clark, and a lot of their teams are cross functional, you bring them in and everybody knows everybody else's job.

LR: That was a great aspiration and if you could achieve that cost effectively that would be great. But we have since backed off. We are starting a new plant in Amhurst, Virginia. We learn as we go because there are no blueprints out there. In Virginia we've got four or five pay grades in a department that is starting up in a team concept.

Q: The three positions, you said safety, quality, and what was the third?

LR: Production.

Q: Just a few minutes ago you mentioned something about success. How are you measuring success with these teams?

A: In the purest of fashions. You want to look and gauge at point one before we went to teams with no other changes or no other givens, what was our productivity and establish a benchmark and where we are today. That's the way to do it. See if you are getting the dividend on your investment. We can say this. We are not that formalized in doing it, but we can see the productivity change. Where we are, I don't know. Whether it's 15, 20, 30 percent increase. Maybe the plant manager could tell you more closely than Lee or I could tell you. The gauge that we have is that we have other Glad-Lock operations around our corporation and we know what those departments were doing and they were not self-directed. After we went through the initial learning curve of self-direction, we've blown the socks off those. It's nothing to sit and listen to a department head in a staff meeting go through reporting and say we are 124 percent of standard last week. The same reports from Connecticut, they were 101 percent of standard or 98 percent. So, while the other departments tend to be just getting by and meeting their commitment to the corporation, we are far in excess of that here in Rogers. My gut feel is that it will continue to build somewhat with diminishing returns, because I think we've captured a great deal of our improvement now, but I think we've probably seen somewhere in the neighborhood of 15 to 20 percent real productivity within the Glad-Lock department. Is that a fair assessment, Lee? You are closer to that than I am.

LR: That's very good. I think that's why all of a sudden the corporation is saying maybe there is something to this. It was nice to be able to tout it in the beginning as being new and innovative, but we didn't know we'd do better.

Q: Other benefits from this then in addition to productivity?

LR: I think people love it. I don't think people would go back. There are some people, and everybody has those people that are more comfortable being supervised.

Fortunately, in this facility many of them have left because we still have supervised areas where they can bid to. Maybe because of the job some have stayed. For the most part, those that are there enjoy the way they're operating. They like having control of their destiny, so to speak. They like for you to increase the role of doing paperwork and running the meetings and setting up the schedules and getting their own parts, not having to ask to do everything. They like that freedom. They would not go back.

- A: In addition to that, it forces management to communicate in a different way to these people. A way that, had we not made this change, we would probably still be talking in some type of group meeting fashion. Get the shift together and talk through the problem, the supervisor and department head will decide what the answer is and then we'll just tell them if we can solve the problem or we can't solve the problem. Now we communicate in a whole different fashion. They solve a lot of their problems. One of the facilitators sit in while they solve the problem. They solve the low-level problems. They talk it through and resolve it or come up with a recommendation that is appropriate for them. The other key piece to it is the fact that communication has improved with the folks.

APPENDIX G

INSTITUTIONAL REVIEW BOARD



Oklahoma State University

OFFICE OF UNIVERSITY RESEARCH SERVICES

STILLWATER, OKLAHOMA 74078  
LIFE SCIENCES EAST 001  
(405) 744-9991

May 15, 1992

Dr. John Baird  
5302 Country Club Drive  
Stillwater, OK 74074

Dear Dr. Baird:

Enclosed please find the approval form for the research project "Self - Directed Work Teams: A Limited Case Study on Management's Impact on Their Success." As you will note, official approval was not granted by the board, as the research has already been completed. However, a statement that indicates approval would have been granted if submitted at the initiation of the project is provided. This should fulfill the requirements of the graduate college. If Mr. Thompson has any problems, please have him contact me.

Thank you.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Elizabeth M. McTernan'.

Elizabeth M. McTernan

Enclosure



Celebrating the Past . . . Preparing for the Future

**OKLAHOMA STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD  
FOR HUMAN SUBJECTS RESEARCH**

Proposal Title: SELF-DIRECTED WORK TEAMS: A LIMITED CASE STUDY ON MANAGEMENT'S  
IMPACT ON THEIR SUCCESS

Principal Investigator: Dr. John Baird & Don Thompson

Date: May 1, 1992 IRB # ED-92-052

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This application has been reviewed by the IRB and

Processed as: Exempt  Expedite  Full Board Review   
Renewal or Continuation

Approval Status Recommended by Reviewer(s):

Approved  Deferred for Revision   
Approved with Provision  Disapproved   
NO APPROVAL STATUS ( SEE COMMENTS)

Approval status subject to review by full Institutional Review Board at  
next meeting, 2nd and 4th Thursday of each month.

-----  
Comments, Modifications/Conditions for Approval or Reason for Deferral or  
Disapproval:

The OSU Institutional Review Board has a policy that we cannot approve  
research that has already been initiated. Review of the research reveals  
no conflict with human subject research rules and regulations. Therefore,  
this project would have been approved if submitted at the appropriate time.

Signature: *Maria L. Tilly* Date: MAY 15, 1992  
Chair of Institutional Review Board



VITA

Don R. Thompson

Candidate for the Degree of

Master of Science

Thesis: SELF-DIRECTED WORK TEAMS: A LIMITED CASE STUDY ON  
MANAGEMENT'S IMPACT ON THEIR SUCCESS

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Tulsa, Oklahoma, June 19, 1951, the son of Gorman  
and Voncille Thompson.

Education: Graduated from Memorial High School, Tulsa, Oklahoma in  
May, 1969; received Bachelor of Science in Advertising/Public  
Relations in May, 1973; completed requirements for the Master of  
Science degree at Oklahoma State University in December, 1992.

Professional Experience: Personnel Manager at T.D. Williamson, Inc.,  
Tulsa, Oklahoma, from February 1982 to present.

Professional Organizations: Member of Tulsa Personnel Association,  
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