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A STUDY OF ONE FIRM'S  
INSTALLATION AND UTILIZATION  
OF  
A 4-DAY WORKWEEK

by

THOMAS J. SWIERCZEWSKI

A dissertation submitted to the  
Graduate Faculty in Business in  
partial fulfillment of the re-  
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This manuscript has been read and accepted for the  
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## CHAPTER I

### INTRODUCTION

The topic under consideration in this study is the 4-day workweek. Throughout the study, the term 4-day workweek is used with direct reference to the 4-day, 40-hour workweek movement. The study will not be concerned with the union movement for a 4-day, 32-hour workweek. It is interesting to note that while the term "4 days, 40 hours"<sup>1</sup> is essentially associated with 40 hours of work in 4 days, it also comprehends an underlying philosophy of deviating from the traditional 5-day workweek. An implicit assumption of the 4-day movement is viewing the length of the workweek as variable rather than a rigid element in scheduling.

Schedules such as 4 days--38 hours, 4 and 2 (work 4 days, off 2 days) staggered work force scheduling, overlapping 10-hour shifts, 3 and 2 (work 3 days, off 2 days), and 7-day weeks--are also associated with the movement. Thus,

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<sup>1</sup>Riva Poor, ed., 4 days, 40 hours: Reporting a Revolution in Work and Leisure (Cambridge, Mass.: Bursk and Poor Publishing, 1970).

the 4-day workweek movement stresses a change in work hours to better meet the needs of the business and the employees. Since business and employees benefit, both win. Thus labor-management relations may be changing from a win-lose to a win-win psychology.<sup>2</sup>

#### Material to Be Presented in This Chapter

Subsequent discussions in this chapter will be related to such topics as a brief history of the workweek and legislation related to hours of work; the importance of the 4-day movement; the purpose of this study; measures of the dependent variable; methodology; a general statement of the hypothesis to be investigated; and the scope and limitations of the study.

#### History of the Workweek and Wage and Hour Legislation in the United States<sup>3</sup>

Agriculture provided the basis for the length of the workday in non-agricultural enterprises. By 1800, the standard workday in industry was "sunup to sundown," 6 days a week. However, during the period 1800-1808, the labor movement initiated demands for a 10-hour workday, 6 days a week.

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<sup>2</sup>Riva Poor, Poor's Workweek Letter, October-November, 1971, pp. 7-8.

<sup>3</sup>Harry A. Millis and Royal E. Montgomery, Labor Progress and Some Basic Labor Problems (New York: McGraw-Hill Book Company, 1938), pp. 463-537.

In 1822, journeymen, millwrights and machinists in Philadelphia campaigned for a 10-hour workday and carpenters in Boston went on strike for a 10-hour workday (1825). In 1840, President Van Buren attempted to establish a 10-hour workday for all government workers, but due to lack of enforcement, effective utilization was not forthcoming.

The 10-hour day, 6-day movement gained momentum until the Civil War. During the first half of the 1800's, various states adopted 10-hour day laws while others initiated maximum 10-hour days for women and children.

A parallel shorter workday movement began prior to 1860, demanding an 8-hour workday. In fact, in 1842, the Navy Yard in Charleston, Massachusetts had already adopted an 8-hour day for certain labor classifications.

After the Civil War, various states and cities began adopting 8-hour days for their employees. Congress, in 1865, passed an 8-hour law affecting government employees. Again, lack of enforcement prevented actual utilization.

In the late 1890's and early 1900's, state laws were passed which contained provisions for 8-hour days, 5 days per week which were applicable to women, children, and certain hazardous occupations. For the first time, such laws were upheld by the Supreme Court. The influence of the 8-hour day, 5 days per week movement is reflected in the average

hours worked. In 1900, average daily hours for a 6-day work-week was 57.3. By 1929, the comparable figure was 44.2 hours per week.<sup>4</sup>

#### Wage-Hour Legislation

As the depression deepened, legislation was introduced to eliminate substandard wages and excessive hours of work without premium pay. A major reason for the premium pay provision was to penalize employers for using labor for excessive hours of work. Such a penalty encouraged the hiring of more workers and spread the available work more equitably. To implement these policies the following laws were passed: the Davis-Bacon Act (1931), the Walsh-Healey Act (1936), and the Fair Labor Standards Act (1938).

The Davis-Bacon Act established a minimum wage for construction workers employed for construction, alteration, or repairs of Federal projects.<sup>5</sup>

The National Industrial Recovery Act, passed in 1933, attempted to set maximum hours of labor and minimum rates of pay. It was generally understood that a 5-day, 40-hour work-week was implied but was not actually stated by the Act.<sup>6</sup>

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<sup>4</sup>Herbert R. Northrup and Herbert R. Brinberg, Economics of the Work Week (New York: The Conference Board, Studies in Business Economics, No. 24, 1950), pp. 7-8.

<sup>5</sup>Davis-Bacon Act, U.S. Code, Vol. XL, secs. 276a-276a-5 (1931).

<sup>6</sup>National Industrial Recovery Act, U.S. Code, Vol. XV, secs. 701-712 (1933).

When the National Industrial Recovery Act was declared unconstitutional in 1935, Congress continued its efforts to influence hours of work. In 1936, the Walsh-Healey Public Contracts Act was passed which established standards for overtime pay and minimum wages for all Federal supply contracts in excess of \$10,000.<sup>7</sup> While the Davis-Bacon Act requires employers with Federal construction contracts to pay prevailing community rates to their workers, the Walsh-Healey Act established similar requirements for the manufacture or furnishing of supplies to the Government. However, employees are limited to an 8-hour day and a 40-hour week, unless paid overtime.

In 1938, the Fair Labor Standards Act (Wage and Hour Law) was passed.<sup>8</sup> Essentially, the Act covers employees engaged in interstate commerce. Actually, maximum hours of work are not set; however, an employer is required to pay premium rates for all hours worked in excess of 40 hours per week.

With the passage of the above Acts, the Federal Government clearly established by law the policy of eliminating substandard minimum wages and excessive hours of work without

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<sup>7</sup>Walsh-Healey Public Contracts Act, U.S. Code, Vol. XLI, secs. 35-45 (1936).

<sup>8</sup>Fair Labor Standards Act, U.S. Code, Vol. XXIX, secs. 201-219 (1938).

premium pay. It should be pointed out that the Wage and Hour Law has been amended several times since its original passage to raise minimum wage rates and broaden the coverage of workers. However, since the passage of the above mentioned Acts, the basic workweek has essentially remained unchanged, that is, 5 days, 40 hours per week.

One of the most interesting developments in labor relations during the past few decades has been the significant increases in payments to employees for time not worked. These payments are occurring in the form of vacations and holidays. Peter Henle reports that: "A review of the changes in paid leisure between 1940 and 1960, shows that there was no major shift in the standard workweek. Perhaps the most significant development was that more than half the total gain in paid leisure resulted from increased vacation and holiday time, rather than a reduction in working hours."<sup>9</sup>

#### Importance of the 4-Day Movement

Society is experiencing change. While change is and has always been with people, one must realize that at the basis of change lies innovation. The 4-day workweek movement is a social innovation because it results in a restructuring of utilization of time.

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<sup>9</sup>Peter Henle, "Recent Growth of Paid Leisure for U.S. Workers," Monthly Labor Review, LXXXV (March, 1962), 257.

### Time Utilization

Tables 1 and 2 on pages 8 and 9 respectively, present a possible classification of time utilization on the basis of a 5-day and a 4-day, 40-hour workweek. All calculations assume a United States life span of 70 years based on all races and both sexes.<sup>10</sup> A year consisting of 364 days or 52 weeks is assumed.

The concept of a 5-day workweek began in the late 1890's.<sup>11</sup> Today the 5-day workweek is strongly entrenched as a tradition in business. The 4-day, 40-hour workweek movement is the latest innovation, and challenges not only the 5-day workweek but also, on a broader scale, the utilization of time over people's life span. The 4-day, 40-hour workweek movement is attempting to initiate social change by regrouping the use of leisure time, that is, providing leisure time in blocks and minimizing the use of "commuting time." Of course, the minimizing of "commuting time" will provide more leisure time.

These changes are quantified in Table 2 on page 9. It should be noted that weekly commuting time is decreased by 2

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<sup>10</sup>U.S. Department of Health, Education and Welfare, Public Health Service, National Center for Health Statistics, The Facts of Life and Death (Washington, D.C.: U.S. Government Printing Office, 1965), p. 21.

<sup>11</sup>National Industrial Conference Board, The Five Day Week in Manufacturing Industries (New York: National Industrial Conference Board, 1929), p. 5.

TABLE 1  
POSSIBLE CLASSIFICATION OF TIME  
BASED ON A 5-DAY WORKWEEK

Time Use	HOURS							Per Week	Life Span Total	Percent of Total
	M	T	W	TH	F	S	S			
Work <sup>a</sup>	8	8	8	8	8	--	--	40	98,000	16
Commuting <sup>b</sup>	2	2	2	2	2	--	--	10	24,500	4
Subsistence <sup>c</sup>	11	11	11	11	11	11	11	77	280,280	46
Leisure <sup>d</sup>	3	3	3	3	3	13	13	41	208,740	34
Total	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>168</u>	<u>611,520</u>	<u>100</u>

<sup>a</sup>Hours of human labor used in the production of goods and services and remunerated monetarily. The calculation assumes a 5-day, 40-hour workweek for 50 weeks a year for 49 years and 2 weeks of nonwork each year. A person is assumed to be "fully employed" from age 16 to 65.

<sup>b</sup>Hours utilized in getting from home to the job and back again. Calculated at 2 hours per work day.

<sup>c</sup>Hours used for sleeping, preparing and eating meals, and performing necessary biological functions. Calculated at 11 hours per day for 70 years.

<sup>d</sup>Hours remaining after considering time for work, commuting, and subsistence.

Source: Prepared by the author.

TABLE 2  
 POSSIBLE CLASSIFICATION OF TIME  
 BASED ON A 4-DAY WORKWEEK

Time Use	HOURS							Per Week	Life Span Total	Percent of Total
	M	T	W	TH	F	S	S			
Work	10	10	10	10	--	--	--	40	98,000	16
Commuting	2	2	2	2	--	--	--	8	19,600	3
Subsistence	11	11	11	11	11	11	11	77	280,280	46
Leisure	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>43</u>	<u>213,640</u>	<u>35</u>
Total	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>168</u>	<u>611,520</u>	<u>100</u>

Source: Prepared by the author.

hours. Also, leisure time occurs in a huge hour block on a Friday rather than the normal daily 3-hour block during weekdays.

It should be pointed out that the term "leisure" can be discussed in various ways. Leisure can be defined as the time utilized to culturally improve oneself.<sup>12</sup> Today, as a result of the factory system, the time away from work is viewed as free time. Levenstein believes that free time is used to recuperate from the demands imposed by work, and to engage in activities that are mandated.<sup>13</sup> Mandated activities could be mowing the lawn and making necessary repairs at home. In summary, leisure time gave way to free time.

However, free time is imposed upon to such an extent that very little of the time away from work is actually "free." Linder reaches the same conclusion in his socio-economic approach to the analysis of time. He finds that there is an increase in the scarcity of free time and a leisurely life because, "As economic development has continued, attractive alternative ways of using time have emerged."<sup>14</sup>

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<sup>12</sup>Richard Eells and Clarence Walton, Conceptual Foundations of Business (Homewood, Ill.: Richard D. Irwin, Inc., Revised Edition, 1969), p. 288.

<sup>13</sup>Aaron Levenstein, "Technological Change, Work, and Human Values," Social Science, XLII (April, 1967), 67-69.

<sup>14</sup>Staffan Burenstam Linder, The Harried Leisure Class (New York: Columbia University Press, 1970), p. 10.

This study will use the term leisure to mean the time away from work and no distinction will be made between improving oneself and the mandated demands made upon the time away from work.

Restructuring of time utilization can be interpreted as a move to alter the operations of business institutions and improve the "quality of life." There is no question that the business system can produce material things. Perhaps the 4-day workweek movement will help establish a business system where leisure and not work is the desirable and socially acceptable goal of men. With this in mind, it appears to be desirable to stress another aspect of the 4-day workweek movement, that is, the "3-day leisure movement." Of course, the 3 leisure days (Friday, Saturday, and Sunday) when coupled with the Federal Government's new national holiday calendar (5 Monday holidays, namely, Washington's Birthday, Memorial Day, Labor Day, Columbus Day, and Veteran's Day) make a 4-consecutive day leisure time period a reality (Friday, Saturday, Sunday, and Monday).<sup>15</sup>

#### Media Coverage

The importance of the 4-day workweek movement is reflected by the coverage given to the movement by various

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<sup>15</sup>Holidays - Observance on Mondays, U.S. Code, Vol. V, sec. 6103a (1968).

types of media. Table 3 on page 13 summarizes media coverage from 1967 to September, 1971.

The data presented in Table 3 are not representative of the true coverage because many newspapers are not included (such indexes are not available). However, it is estimated that from November, 1970, until September, 1971, more than 1,500 articles have been written on the 4-day workweek concept.<sup>16</sup> Besides the media already mentioned, numerous radio and television news programs have highlighted the 4-day movement.<sup>17</sup> Also, cartoons, as well as buttons have reflected the innovation. A "Thank God It's Thursday" (TGIT) button is popular, inexpensive, and an effective device used to communicate the concept. It is also interesting to note that industrial advertisements have been emphasizing tooling that will withstand the requirements of extended daily usage.<sup>18</sup>

The book "4 days, 40 hours" is to be published in Japanese and Dutch and will be shortly introduced in Great Britain. World recognition was given to the movement when Nikkei Business named Mrs. Poor "World VIP." Also, the

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<sup>16</sup>Riva Poor, Poor's Workweek Letter, September, 1971, p. 1.

<sup>17</sup>Some examples of news commentaries are: CBS Morning News, Walter Cronkite Evening News, and David Brinkley (Emphasis).

<sup>18</sup>Advertisement by Dexco Corporation of Detroit, Michigan, Iron Age, July 15, 1971, p. 66.

TABLE 3  
MEDIA COVERAGE OF 4-DAY WORKWEEK

<u>Year</u>	<u>Types of Media and Number of Articles</u>			<u>Total</u>
	<u>Newspapers</u> <sup>a</sup>	<u>Periodicals</u> <sup>b</sup>	<u>Books</u> <sup>c</sup>	
1967	2	2	--	4
1968	2	1	--	3
1969	6	7	--	13
1970	10	7	1	18
to September 1971	<u>26</u>	<u>39</u>	--	<u>65</u>
<b>Total</b>	<u><u>46</u></u>	<u><u>56</u></u>	<u><u>1</u></u>	<u><u>103</u></u>

<sup>a</sup>Major newspapers include The Wall Street Journal, The New York Times, and The Christian Science Monitor.

<sup>b</sup>Major periodicals include Industry Week, Business Management, Business Week, Iron Age, Chemical Week, Administrative Management, Dun's Review, Time, Life, Newsweek, U.S. News and World Report, and Monthly Labor Review.

<sup>c</sup>Riva Poor, ed., 4 days, 40 hours: Reporting a Revolution in Work and Leisure (Cambridge, Mass.: Bursk and Poor Publishing, 1970).

Source: Prepared by the author.

Russian news agency TASS has ordered a copy of the book.<sup>19</sup> Man-in-the-street interviews have indicated that the term "4 days, 40 hours" is now a household phrase.<sup>20</sup> In fact, the movement is so well known that the Gallup Organization conducted an opinion poll about it.<sup>21</sup> (Some aspects of the poll will be discussed in Chapter II.) Finally, the significance of the movement based on the media criterion can be judged by the television coverage, other than news commentaries, given the subject--for example, in To Tell the Truth, McLean and Company, and Today.

Also, the importance of the movement can be determined by the number of words written on the topic; where the article was located in a publication; and the number of feature stories, syndicated columns, and editorials. Perusal of Mrs. Poor's publicity file and clipping service data indicates that the trend was from middle- or back-page mention with meager lineage, to front-page coverage with feature stories by syndicated columnists and editorials.

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<sup>19</sup>Poor, Workweek Letter, September, 1971, p. 2.

<sup>20</sup>The Inquiring Photographer, The New York Daily News, March 5, 1967, p. 3.

<sup>21</sup>"Many Americans Ready for 4-Day, 40-Hour Workweek," The Gallup Poll (Princeton, N.J.: American Institute of Public Opinion, March, 1971), p. 1.

### Government Interest

Interest at the Government level can be considered critical to the future of the 4-day movement. In fact, Federal interest at such an early stage reflects a recognition of the movement's probable significance.

Various bills relating to hours of work have been introduced in the First Session of the 92nd Congress. Senator Marlow Cook (Rep., Kentucky) introduced Senate Bill 2463 which would exempt 4-day companies from the overtime provisions of the Walsh-Healey Act. Representative William A. Steiger (Rep., Wisconsin) has introduced a similar bill in the House of Representatives (H.R. 11437). However, Senator Harrison Williams (Dem., New Jersey), Chairman of the Senate Labor Sub-Committee, has introduced Senate Bill 1861 which proposes to amend the Fair Labor Standards Act by requiring daily overtime pay after 8 hours of work in any 4-day week.<sup>22</sup>

However, Unions which made statements at a Walsh-Healey hearing on September 7-9, 1971 generally argued that the movement is not sufficiently widespread to warrant changes in the Act. Milton Meyer, Jr., Secretary and General Counsel for C. A. Norgren Company, replied that such a position is not logical since the restrictive provisions of the Act

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<sup>22</sup>Eileen B. Hoffman, "The Four-Day Week Raises New Problems," The Record, IX (February, 1972), p. 22.

hinder implementation of a 4-day workweek.<sup>23</sup> Other restrictions appear in the rulings of the Office of Emergency Preparedness. For example, 4-day experiments by John Hancock Life Insurance Company, and by United Services Automobile Association of San Antonio, Texas have not been permitted by the Wage Board because their proposals would have resulted in hourly rate increases as a result of a decrease in working hours and no corresponding decrease in total gross pay.<sup>24</sup>

#### Implications for Efficiency

Internal plant efficiency resulting from the 4-day workweek is generally related to increased productivity. Based on a study of 12 firms that converted to a 4-day workweek, Wheeler and Bogdonoff indicate that productivity increased, absenteeism was reduced, and turnover declined, which in turn stabilized the work force and increased the effectiveness of supervision.<sup>25</sup> Mrs. Poor replicated these

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<sup>23</sup>U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Proposed Adoption of a Four-Day, Forty-Hour Workweek, Without Payment of Time and One-Half Overtime Compensation for Work Days Exceeding Eight Hours, Hearings, (Washington, D.C.: Wage and Hour Publication No. 1357, September, 1971), pp. 94-129, and pp. 178-192.

<sup>24</sup>Poor, Workweek Letter, October-November, 1971, pp. 2-3.

<sup>25</sup>Kenneth E. Wheeler and Philip D. Bogdonoff, "How to Handle a 4-Day Conversion," in 4 days, 40 hours, ed. by Riva Poor, p. 95.

results with data from the 27 firms described in her book.<sup>26</sup> In addition, it was found that overtime costs decreased in some of the original 27 companies. Two companies indicated that overtime cost was one of the reasons for conversion to the 4-day workweek. However, 4 of 6 companies reported reduced overtime cost as benefits resulting from conversion even though it was not a reason for conversion.

President Nixon's speech of August 15, 1971, called on the country to improve productivity. The reports on 4-day firms indicate that productivity increases do result. Thus, the 4-day movement is one alternative which is working toward achieving the national goal of increased productivity.

#### Implications for Worker Motivation

One possible explanation of the increased productivity resulting from conversion to 4-40 can be associated with the regrouping of leisure time. Also, individual productivity, among other things, is a function of the motivation to produce. Motivation depends upon the individual's goal and his perception of how his productivity behavior can be used as an instrument (path) for the attainment of the goal.<sup>27</sup> Thus, it

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<sup>26</sup>Ibid., pp. 27-32.

<sup>27</sup>Basil Georgopoulos, Gerald Mahoney, and Nyle Jones, Jr., "A Path-Goal Approach to Productivity," Journal of Applied Psychology, XLI (December, 1957), 345-353.

appears that employees view leisure as desirable and increase productivity in order to achieve the goal. Supportive evidence related to path-goal motivation is provided by worker reactions to the 4-day workweek; for example, some workers state: "People just seem to enjoy their work more knowing that they're going to be off a day sooner."<sup>28</sup> A more detailed discussion of the motivational implications will be presented in Chapter III.

### Leisure Time Activities

Results of leisure time use by employees indicate that all activities increase when a 4-day workweek is utilized.<sup>29</sup>

The largest increases are associated with the following:

1. Rest and relaxation.
2. Creative activities (hobbies, reading, returning to school).
3. Spending time with family.
4. Visiting relatives.
5. Participant activities (hunting, fishing, boating, and swimming).

It appears that people generally utilize their leisure time on unorganized or relaxing activities and devote less

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<sup>28</sup>Poor, 4 days, 40 hours, p. 51.

<sup>29</sup>Ibid., p. 116.

time to organized or disciplined ones.<sup>30</sup> The implications of the preceding results indicate the following possibilities:

1. Increased purchase of mobile homes.
2. Purchases of second homes as well as more types of private transportation.
3. Increased expenditures for recreation and education.
4. New vacation communities.
5. New recreation facilities.
6. Mini-service centers to service a mobile population.
7. A more closely knit family unit.

Related to these emerging needs are business opportunities, and some provocative social questions.

Will family bonds be strengthened? If the 4-day work-week becomes universal, how will our school system adjust? Children in school on the parents' days off will present a major problem if trips are desirable.

How will school schedules adjust to meet the needs of adults desiring further education?

Dr. John Wittman of Texas Tech University raises the following question: "Will workers who commute long distances

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<sup>30</sup>Ibid., p. 118.

want dormitory lodging near their work?" Dr. Wittman refers to some computer staffs that work 3, 12-hour days.<sup>31</sup>

A more detailed presentation of the social implications of the conversion will be presented in Chapter II.

### Purpose of Study

The purpose of this study is to investigate the influence of a restructured workweek (the independent variable) on one firm, the Swirk Company.<sup>32</sup> The effect of the independent variable will be measured by reviewing organizational effectiveness before and after utilization of the restructured workweek. A schematic of the variables is presented on page 21.

Also, an investigation will be made of the managerial activities related to the Swirk Company's installation and utilization of a restructured workweek. Managerial activities associated with the conversion will be described--such as planning and the decision-making process, delegation of authority, communications, control, the motivational implications of conversion, and leadership.

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<sup>31</sup>John Wittman, "Second Thoughts on 4-Day Week," Reading Eagle, Reading, Pa., March 5, 1971, p. 38.

<sup>32</sup>The designation is fictitious. The actual name of the company has been made known to the Chairman of the Dissertation Committee.

In essence, the study is descriptive in nature and is intended to serve as a basis for formulating new hypotheses.

Variables

Dependent Variable

Moderating Variables

Independent Variable

Organizational Effectiveness

1. Age
2. Length of Service
3. Sex of Employee
4. Marital and Family Status
5. Climatic Conditions
6. Benefits Derived From Block Leisure Time
7. Experience With Program
8. Cultural Background of Employee
9. Employee Skills
10. Motivational Programs
11. Leadership Style

4-Day Workweek
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Measures of Dependent Variable

The dependent variable, that is, organizational effectiveness, will be measured by the following items:

1. Productivity, page 116.

2. Employee satisfaction.
  - a. Absenteeism, page 126.
  - b. Turnover, page 126.
  - c. Tardiness, page 129.
  - d. Attitudes, page 129.
3. Profits, page 144.
4. Return-on-investment, page 144.

The measurements were made before and after conversion to a restructured workweek.

### Methodology

Various methods were utilized in conducting the study. A description of each is presented.

Interviews. A discussion of the interviews follows.

1. A pilot study of a cross-section of all managers was conducted. Thirteen managers were interviewed for approximately 45 minutes each. These interviews served as a basis for formulating the general hypothesis concerning the 4-day workweek and for obtaining insights into the primary activities engaged in by the managers during the conversion. (See Appendix A, beginning on page 203 for the content of the structured interview.)

2. Twenty-eight workers in one department were interviewed for approximately 20 minutes before utilization of the

4-day workweek. (See Appendix B, beginning on page 207 for the interview form.)

3. Interviews were conducted in the department mentioned above after conversion to the 4-day workweek. Twenty-six of the original 28 employees were interviewed. One employee retired and another quit--the 4-day week was not the reason for quitting. Three new employees were interviewed but they were not included in the analysis. As a result, the before and after measures relate to the same workers. (See Appendix C, beginning on page 212 for the interview form.)

4. The writer sat in as an observer for approximately 75 percent of the interviews with the 30 employees who voted "no" on the continued use of the 4-day workweek. A vote to continue utilization of the rearranged workweek was taken in some departments after a 1-month trial period.

Questionnaires. The questionnaires used to gather data are discussed below.

1. The questionnaire utilized to determine the attitudes of employees on the 4-day workweek covered essentially the same content as interviews conducted in number 3 above. (See Appendix C, beginning on page 212.)

2. Appendix D, on page 219 presents the questionnaire that was used to test the hypothesis related to climatic conditions.

Observation. The writer observed company operations during the summer of 1971, and periodically during the fall and winter of 1971. Meetings were attended, reports scrutinized, and informal relationships established. The latter provided many insights into the firm's operations that could not be obtained by other methods.

Administration of Questionnaires and Interviews. Employee questionnaires were given to each worker. A period of 3 days was allowed for responding. This was necessary because of the language barrier that existed with employees who could not understand English. Such employees were encouraged to seek help at home or from a fellow employee.

A total of 260 employee questionnaires were distributed. Of these, 73 percent or 190 were returned. Usable employee questionnaires amounted to 147 or 57 percent of the total distributed.

The questionnaire related to the climatic conditions was administered during January, 1972. At this time, additional departments in the production area were utilizing the rearranged workweek (specifically feeder departments). A total of 351 questionnaires were distributed, and 343 were returned and were usable. The return rate was approximately 98 percent.

Generally, the interviews of employees and managers were conducted in the area of their respective work stations.

Experimenter's Input. It should be noted that the author was granted permission to perform this study by management. Even though the researcher attempted to create a climate of independence, results of the study may be contaminated because of the initial association with management. Also, the author made every effort to remain neutral in his attitude toward the restructured workweek during interviews, administration of questionnaires and other informal contacts with employees. However, it was generally known that the researcher was enthusiastic about investigating the ramifications of the restructured workweek. Such enthusiasm may confound the results.

### Hypothesis

The general hypothesis investigated in this research is presented below.

Attitudes toward the 4-day workweek will be affected by age, length of service with the company, sex of the worker, marital and family status, climatic conditions, benefits derived from increased block leisure time, and the length of time the program has been in effect.

Each element of the hypothesis was investigated and the conclusions are presented in Chapter V.

### Scope and Limitations of the Study

The study is primarily concerned with the 4-day work-week movement in the United States. Also, because of the relative short duration of the movement no long-term results are available. Perhaps it is a novelty that will have no significant long-term influence. It should also be noted that no generalizations can be drawn as a result of the study of one firm.

The primary limitation of this study is the lack of a quantified direct measure of cause and effect relationships. It is true that the primary change in the firm was a restructured workweek. However, since controlled field conditions were not possible, other variables could have been significant in producing the results. Furthermore, it is recognized that the cultural background of individuals who do not understand English may confound the results relating to attitudes.

The research is based primarily on first and second levels of scientific rigor.<sup>33</sup> The methods of managerial research associated with these levels are authoritative opinion, case studies, narrative history (first level), and uncontrolled experimentation and survey research (secondary level). The significance of such research should not be

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<sup>33</sup>Alan C. Filley and Robert J. House, Managerial Process and Organizational Behavior (Glenview, Ill.: Scott, Foresman and Company, 1969), pp. 41-47.

undervalued since it serves as a basis for future sophisticated research. Filley and House state:

There is danger that we might undervalue the importance of the techniques in the first two levels of research rigor. The direction of search is a prerequisite for correlational and experimental designs which isolate and verify meaningful variables and findings. The generation of hypotheses to be listed and the construction of theory are aided substantially by a qualitative and sometimes even an intuitive understanding of the variables to be investigated. Such understanding can come about only through extensive observation of real-life situations and by extensive reading of others describing their experiences in observing the same variables.<sup>34</sup>

#### Contents of Subsequent Chapters

Chapter II, "Description of the 4-Day Workweek Movement," will contain a history of the restructured workweek. The chapter will also present various characteristics of the movement, union viewpoints, and the managerial and social implications.

A case history of one firm will be presented in Chapter III, "A Firm's Implementation of the 4-Day Workweek." Relevant managerial activities associated with installation and utilization of a rearranged workweek will be discussed, as well as the history of the industry and firm.

Chapter IV, "Measures of Organizational Effectiveness," will discuss changes in productivity, profits, return-on-investment, and employee satisfaction for comparable periods

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<sup>34</sup>Ibid., p. 52.

of time. The latter item will be based on before and after measures in 1 department.

Chapter V, "Employee Attitudes and Satisfaction," will investigate each element of the hypothesis. The attitudes are based on after measures of employees who have utilized the 4-day workweek for a period of time ranging from 2 to 8 months.

Finally, Chapter VI, "Summary and Conclusions," will present a summary of all relevant aspects of the study. The conclusion section of this chapter will dispose of some myths associated with the movement, and present a check list that can be utilized by managers contemplating conversion to the 4-day week.

## CHAPTER II

### DESCRIPTION OF THE 4-DAY WORKWEEK MOVEMENT

A description of the 4-day workweek movement in the United States will be presented in this chapter. Various aspects of the movement will be discussed, such as the history and characteristics of the movement, union viewpoints, and managerial and social implications. It should be noted that the data analyzed were essentially gathered by Mrs. Riva Poor and made available to the author. In many instances the data have been reclassified and summarized, and implications have been drawn in conjunction with recent information.

#### Origins of the Movement

Historically, the truck drivers of firms involved in analytic process industries, such as Gulf Oil and Mobil, worked a 4-day workweek. Around 1940, oil and gasoline companies began 4-day workweeks for drivers. However, it appears that because of climatic conditions and demand requirements, different workweek schedules exist among oil companies

and also within a given company. As stated in Chapter I, the philosophy of the current movement is to utilize a workweek that best meets the needs of the company and employees. It appears that the oil companies have been and still are practicing such a philosophy.

Various reasons, such as those listed below, have been given by the oil companies for a 4-day workweek:

1. Hazards caused by inoperative trucks are decreased because 2, 10-hour shifts per day allows for 2 hours of maintenance between shifts or 4 hours of maintenance per day.
2. Scheduling maintenance within a workday increases the probability of providing service to customers because fewer breakdowns and accidents occur.
3. Major maintenance on trucks can be scheduled during hours when trucks are not utilized.
4. When peak demands occur in the winter, the trucks, because of better maintenance, can withstand the rigorous conditions and extended utilization resulting from overtime.
5. The drivers like the 3 consecutive days off.

The remote location of some oil company operations requires personnel to be away from home for long periods of time. Thus, manpower working schedules at drilling sites have

utilized 2, 12-hour shifts, 7 days a week for 4 to 6 weeks, with 2 to 3 weeks off. Again, the workweek was changed to meet the requirements of the situation. It is interesting to note that management initiated the schedule changes. Also, various schedules were tried before the 4-day workweek was selected for drivers and unions were involved.

Further Developments of the 4-Day  
Workweek Movement  
(1960-1968)

Sporadic reports of enterprises initiating the 4-day workweek appeared in the period 1960-1968. Table 4 on page 31 lists some pertinent characteristics of the firms that initiated the 4-day workweek during 1960-1968. Employees of the first 5 firms were not represented by a union. The sixth citation in the Table refers to some members of the Retail, Wholesale, and Department Store Union who set up window displays for shops in New York City. An interesting facet of a poll taken of the window display workers was that "free lancing" (moonlighting) was taking place during leisure time. Another outstanding feature related to the 1960-1968 period is that conversion to the 4-day workweek was taking place in retailing as well as manufacturing establishments.

TABLE 4

## SELECTED CHARACTERISTICS OF FIRMS UTILIZING A 4-DAY WORKWEEK, 1960-1968

<u>Name</u>	<u>Product or Service</u>	<u>Date of Implementation</u>	<u>Location</u>	<u>Number of Employees</u>	<u>Purpose of Implementation</u>
1. Carbonneau Industries	Loudspeaker	1960	Michigan	250	Better for employees
2. Bridgeford Foods & Packing Company	Frozen Foods	1962	California	240	Better utilization of physical facilities
3. Jules Gillette	Discount Men's Clothing Store	1962	Florida	10	To be different
4. Cromwell Corporation	Machine Shop	1965	Indiana	2	Better utilization of machinery
5. Merrill Engineering Laboratories	Electronic Balancing Devices	1965	Colorado	28	Better for employees
6. Not applicable	Window Displays	1965	New York	40	Unknown

Source: Prepared by the author.

### Firms Discontinuing

Of the 6 firms mentioned in Table 4 on page 31, the first 3 have discontinued utilization of the 4-day workweek.

Carbonneau Industries. Management at Carbonneau Industries believed that failure was due to lack of leadership. However, based on more current information it appears that other variables were significant.<sup>1</sup> The variables are:

1. No union representation. (Nonunion families seemed to resist the 4-day workweek.)
2. Geographical location of firm. (Individuals in the Midwest preferred the 5-day workweek to a greater extent than those of other sections of the country.)

Bridgeford Foods. Bridgeford Foods in California had a built-in scheduling problem in its conversion plan. The firm operated 7 days a week, with 2, 10-hour shifts per day. However, the manpower was scheduled to work 4 days on, 4 days off, with staggered starting days. A manpower schedule is shown on page 33.

Bridgeford Foods used the schedule about a year and a half, and no women were associated with the 4-day workweek. As orders declined, the firm converted to a 5-day workweek.

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<sup>1</sup>"Many Americans Ready for 4-Day, 40 Hour Workweek," The Gallup Poll (Princeton, N.J.: American Institute of Public Opinion, March, 1971), p. 1.

The 4-day staggered workweek schedule was not used because the schedule was too difficult to manage. Supervisors were frustrated when workers who did not like the system were absent, and plant equipment would often fail due to improper maintenance. Coordination problems became more significant and demands on supervisors' time were increased to such an extent that relationships at home were becoming strained.

Staggered Starting Times

	<u>M</u>	<u>T</u>	<u>W</u>	<u>TH</u>	<u>F</u>	<u>S</u>	<u>S</u>
1st week	W <sup>a</sup>	W	W	W	O <sup>b</sup>	O	O
2nd week	O	W	W	W	W	O	O
3rd week	O	O	W	W	W	W	O
4th week	O	O	O	W	W	W	W

<sup>a</sup>Work

<sup>b</sup>Off

Jules Gillette. The retailer, Jules Gillette, discontinued the use of the 4-day workweek after 4 months because of interference with shoppers' convenience. The uncertainty of the result of trying something new in retailing was deemed to be greater than the uncertainty related to an acceptable method; the more conventional method of retailing was therefore adopted.

### Significant Aspects

An important aspect of the movement was that only production departments of manufacturing firms were on the 4-day workweek. Office, shipping, and sales departments were operating under the traditional 5-day workweek. In most cases the new schedule was phased-in, but with minimum discomfort to factors external to the firm. Generally, suppliers were informed of the change so that inputs could be integrated into the new work schedule. No major problems developed with suppliers of inputs.

It may be significant that the firms continuing the 4-day workweek--namely, Merrill Engineering, Cromwell Corporation, and the window display service--scheduled only male production workers.

Summary of Significant Aspects. During 1960-1968, a conversion is generally associated with:

1. Manufacturing firms.
2. Firms that have a small number of employees.
3. Nonunion firms.
4. Production departments, and not the entire firm.
5. Male production workers.
6. Management's concern with employees' interests and with better utilization of facilities.
7. No particular geographical area.

8. The appearance of some negative factors such as moonlighting, improper planning, and poor coordination.

#### Current Status of the Movement

Beginning in 1969, the number of conversions began to increase. As of August, 1971, approximately 658 firms had restructured their workweek. These firms represent approximately 6 percent of the total business entities in the United States.<sup>2</sup> Since it would be impractical to discuss each firm individually, a general discussion of the current status of the movement is given.

#### Rates of Conversion

The rates of conversion to the 4-day workweek, based on selected dates, are:

1. November, 1970, 10 per month.
2. January, 1971, 30 per month.
3. April, 1971, 60 per month.
4. August, 1971, 88 per month.

Estimated conversions, as of October, 1971, appear to be 140 to 150 firms per month. While the percentage of firms (6 percent) is rather small, the rate of conversion is increasing.

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<sup>2</sup>Statistical Abstract of the United States 1971 (Washington, D.C.: U.S. Printing Office), p. 459.

### Number of Employees Involved

The number of employees associated with the 658 firms that have converted is approximately 102,000. These employees represent about .12 percent of the total national work force. Mrs. Poor estimates that, based on the past 16 months, the number of workers employed by converting firms has been doubling every 3 months.

### Size of Firms

The size of firms measured by the number of employees is presented in Table 5 on page 37. The data reveal that 84 percent of the firms for which conversion data are available are small businesses.

### Types of Firms

Table 6 on page 38 presents a classification of such firms by size and by type of activity. Small manufacturing firms represent 62 percent of the total. All of the large firms are related to the service classification. Specifically, the service firms include 3 hospitals, 1 medical laboratory, 1 bank, 1 airline, and 1 publisher. All of the service firms are nonunion except the airline which has both union and nonunion personnel. However, only nonunion airline personnel are involved in the restructured workweek. The unionization factor could be one possible explanation of

TABLE 5  
 SIZE OF FIRMS UTILIZING A  
 RESTRUCTURED WORKWEEK<sup>a</sup>

<u>Size</u>	<u>Number of Employees</u>	<u>Number of Firms</u>	<u>Percent of Total</u>
Small	250 or less	157	84
Intermediate	251 to 1,000	23	12
Large	1,000 or more	<u>7</u>	<u>4</u>
Total Number of Firms		<u>187</u>	<u>100</u>

<sup>a</sup>Based on total number of employees. Most firms do not have all employees on a restructured workweek.

Source: Prepared by the author.

TABLE 6

DISTRIBUTION OF FIRMS UTILIZING A  
RESTRUCTURED WORKWEEK BY  
SIZE AND ACTIVITY

<u>Size</u>	<u>Activity</u>					<u>Total</u>
	<u>Manufacturing</u>	<u>Service</u>	<u>Retailing</u>	<u>Wholesaling</u>	<u>Other</u>	
Small	116	28	6	3	4	157
Intermediate	14	7	2	0	0	23
Large	<u>0</u>	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>7</u>
Total	<u>130</u>	<u>42</u>	<u>8</u>	<u>3</u>	<u>4</u>	<u>187</u>

Source: Prepared by the author.

the absence of manufacturing firms in the large-firm classification.

### Restructured Workweek and Unionization

In general, unions are opposed to the restructured workweek based on 40 hours of work. Unions are interested in a restructured workweek with reduced hours of work, usually 32, with no loss in pay.

President George Meany of the American Federation of Labor-Congress of Industrial Organizations and President I. W. Abel of the United Steel Workers of America are opposed to the 4-day, 40-hour movement and have branded it as "a step backward."<sup>3</sup> However, members of some major unions such as the United Auto Workers, International Association of Machinists, Teamsters, and United Rubber Workers are working longer workdays in conjunction with a restructured workweek. Recently, the Machinists Union conducted a poll of its members and found that 50 percent favored the 4-day, 40-hour workweek.<sup>4</sup>

### Discussions Between United Auto Workers and Chrysler.

In March, 1971, the United Auto Workers and Chrysler established a joint committee to study the feasibility of a 4-day,

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<sup>3</sup>"A Step Back: The 4-Day, 40-Hour Week," Steel Labor, November, 1971, p. 12.

<sup>4</sup>The Machinist, April 29, 1971.

40-hour workweek. In December, 1971, the study ended. A union executive revealed that the union was not only interested in redesigning the current workweek but was concerned with establishing a foothold for shortening the workweek. Chrysler, on the other hand, cited various obstacles which made the conversion impractical--for example: provisions of the Walsh-Healey Act; benefit program problems; substantial investment in storage facilities and material-handling equipment; modification of receiving docks; problems in plant maintenance; and the union demands that work on the fifth day be paid at premium rates, but that if the fifth day is utilized all hours over 8 for the previous 4 days must be at overtime rates.<sup>5</sup>

Further evidence of union attitudes toward a 4-40 workweek is associated with the A.F.L.-C.I.O. Executive Council's request to the Labor Department to reject the concept: "We believe that Federal laws, covering work on government contracts, must continue to protect workers against excessive hours of work per day, as well as excessive working hours per week."<sup>6</sup>

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<sup>5</sup>U.A.W. Solidarity, June, 1971, p. 10.

<sup>6</sup>A.F.L.-C.I.O. News, August 14, 1971, p. 1.

The International Moulders and Allied Workers Union requested that all local unions "Do not agree to over 8 hours without time and one-half."<sup>7</sup>

Union Testimony at Walsh-Healey Hearings. At the Walsh-Healey hearings for exempting 4-day companies from the provisions of the Act David Barro submitted a statement in behalf of more than 200,000 members of the Printers and Allied Trades Union. Barro stated:

The seasonal nature of the construction industry absolutely requires most of our workers to heavily depend upon overtime during lean months of the year for their sustenance . . . The proposal before you eliminates the overtime compensation which the workers would otherwise earn and would, therefore, upset their expectations and their way of life . . . Of equal importance is my objection to the proposal based on safety considerations.<sup>8</sup>

At the same hearings Thomas Hannigan, Director, Research and Education, International Brotherhood of Electrical Workers stated, "We are strongly opposed to the exemption of the overtime requirements . . . We feel such action is premature and totally unwarranted, based on present utilization of the four-day workweek. We also feel that it will be

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<sup>7</sup>NFA - Labor Letter, December 23, 1971, p. 5.

<sup>8</sup>U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Proposed Adoption of a Four-Day, Forty-Hour Workweek Without Payment of Time and One-Half Overtime Compensation For Work Days Exceeding Eight Hours, Hearings, (Washington, D.C.: Wage and Hour Publication No. 1357, September, 1971), pp. 95-96.

harmful to our membership . . . and our entire society."<sup>9</sup> He argued that the number of 4-day firms was small, that the long work day has adverse effects on workers and families by limiting contact with friends, minimizes the workers' ability to participate in community activities, and disrupts family life-style.

Frank Bonadio, President, Building and Construction Trades Department, A.F.L.-C.I.O., testified against the exempting of 4-day companies from the Act:

We believe that Federal laws, covering work on Government contracts, must continue to protect workers against excessive hours of work per day, as well as excessive working hours per week . . . Like other labor standards legislation, the overtime pay requirements . . . must be appreciated for the protection it affords to employees . . . against the unscrupulous practices of certain non-union contractors by not allowing such practices to provide these contractors with a competitive edge in the bidding process.<sup>10</sup>

Jacob Clayman, Administrative Director, Industrial Union Department, A.F.L.-C.I.O., stressed the union movement's desire for a shorter workweek, but urged that in the event the hearing group planned to forward recommendations either to the Labor Department or Congress the following should be included:

1. An eventual reduction in the standard workweek to  
4 days of 8 hours.

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<sup>9</sup>Ibid., pp. 105-106.

<sup>10</sup>Ibid., pp. 126-127.

2. The requirement that no employee shall suffer any loss of earnings in the implementation of such a policy.
3. That all hours in excess of 8 per day or 32 per week be compensated for at time and a half.

Furthermore, Mr. Clayman charged that "Prolonged exposure of workers to hazardous substances . . . would lead to increased fatigue." He also argued that the prolonged work day may also compound physiological and mental problems by reducing the ability of workers to recover from physical and mental fatigue through sleep.<sup>11</sup>

William Ryan, Director, Federal Employees Department, International Association of Machinists, A.F.L.-C.I.O., also presented objections on grounds of safety and the arduous requirements placed upon older workers. He favored moving in the direction of a shorter workweek with increased penalties for overtime work in order to provide additional jobs. He expressed fear of the adverse impact that exemption from the Act might have on union contractors because nonunion contractors would underbid union contractors for products and services by determining labor cost on a 10-hour day without overtime. Union collective bargaining agreements which

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<sup>11</sup>Ibid., pp. 131-149.

provide for premium rates over 8 hours a day would put union contractors in an unfavorable bidding position.<sup>12</sup>

Number of Firms Unionized. Table 7 on page 45 presents the distribution of firms based on size, activity, and number of firms unionized. Unionized firms represent 14 percent of the total number of enterprises for which data are available (187). However, 3 of the unionized firms (a majority of the workers are unionized) permit only nonunion employees to work a restructured workweek. Thus, only 13 percent of the total number of firms allow union workers to be involved in a longer workday and rearranged workweek.

Based on the data available for the 187 firms, union workers represent 13 percent of the total of 20,400 employees on a restructured workweek. Workers on the rearranged workweek represent 56 percent of the total work force associated with the 187 firms.

#### Characteristics of Employees

Office workers, salesmen, shipping and receiving personnel, and top and middle management are not usually involved in the restructured workweek. Supervisors of the production departments generally work the same schedules as their subordinates.

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<sup>12</sup>Ibid., pp. 150-155.

TABLE 7  
 DISTRIBUTION OF FIRMS UTILIZING A  
 RESTRUCTURED WORKWEEK BY SIZE,  
 ACTIVITY AND UNIONIZATION

Number of Unionized Firms

<u>Size</u>	<u>Activity</u>					<u>Total</u>
	<u>Manufacturing</u>	<u>Service</u>	<u>Retailing</u>	<u>Wholesaling</u>	<u>Other</u>	
Small	23	0	0	0	1	24
Intermediate	2	0	0	0	0	2
Large	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
Total	<u>25</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>27</u>

Source: Prepared by the author.

The average age of workers in firms with restructured workweeks is approximately 35 years. Average seniority is about 5 years.

The proportion of female and male personnel is about even. Initially, State laws hindered women from working longer hours. However, a ruling by Assistant Attorney General Timothy Leonard, of the State of Oklahoma, in reference to exemptions for female employees has been used by other states as a precedent. The decision in Oklahoma stated that the State law which regulates the hours of labor for female employees is in conflict with Title VII of the Civil Rights Act of 1964 which makes sex discrimination unlawful.<sup>13</sup>

While states usually exempt female employees from the maximum daily hour restrictions when a firm is utilizing a 4-day workweek, formal application for an exemption is necessary if no challenge has been made in the state to test the supremacy of the Civil Rights Act over State law.

#### Geographic Location of Firms

No one geographical area dominated the movement until approximately 1970. Table 8 on page 47 indicates that at the

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<sup>13</sup>Tim Leonard, "Are Females Free to Work Longer Hours? Legal Opinion," in 4 days, 40 hours: Reporting a Revolution in Work and Leisure, ed. by Riva Poor (Cambridge, Mass.: Bursk and Poor Publishing, 1970), pp. 57-60.

TABLE 8  
 GEOGRAPHICAL LOCATION OF FIRMS ASSOCIATED  
 WITH A RESTRUCTURED  
 WORKWEEK

<u>Location</u>	Number of Firms			
	<u>Initial Study (1970)</u>	<u>Percent of Total</u>	<u>Most Recent Data (1971)</u>	<u>Percent of Total</u>
East Coast	26	70	145	53
Midwest	5	14	65	24
Mountain Region	3	8	14	5
West Coast	<u>3</u>	<u>8</u>	<u>49</u>	<u>18</u>
Total	<u>37</u>	<u>100</u>	<u>273</u>	<u>100</u>

Source: Prepared by the author.

time of Mrs. Poor's study (1970) the major concentration was on the East Coast. However, more recent data reveal significant increases in the Midwest and West Coast.

Types of Restructured Workweeks,  
and Compensation

Restructured or rearranged workweeks may be classified and defined in various ways.

Compressed Workweek. The total number of days decrease but total hours of work remain the same. Longer workdays result. An example would be 4 days, 40 hours.

Reduced Workweek. When the number of workdays and the number of working hours are slightly reduced the workweek may be called a reduced workweek. Some 4-day companies do reduce total weekly hours, and thus are on reduced workweeks. Janice Hedges found that some companies utilize 4.5 days per week with a reduction in weekly hours.<sup>14</sup>

Shorter Workweek. This term shorter workweek refers to the union movement for a decrease in the number of weekly workdays with hours per day and total compensation remaining the same. An example would be the union desire for a 4-day, 32-hour workweek.

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<sup>14</sup>Janice N. Hedges, "A Look at the 4-Day Work Week," Monthly Labor Review, LXXXIV (October, 1971), 33.

Staggered Workweek. A staggered workweek refers to a 5-day or 4-day schedule in a sequence that begins on different days of the week. Many service establishments and shipping and receiving departments of manufacturing firms use the staggered workweek to provide service to customers.

Flexible Workdays. Some companies are on flexible workdays. Such scheduling of workdays allows employees to come to work at any time between certain specified hours. For example, New York State's Department of Motor Vehicles permits employees to start their workday any time between 7:30 and 9:00 A.M.<sup>15</sup>

Table 9 on page 50 presents a distribution of 187 firms by size, activity, and type of restructured workweek. The majority of the firms (180, or 96 percent) utilize the 4-day workweek. Four-day firms work 37 hours per week (weighted average based on data for 37 firms). The workday for 3-day firms is usually 12 or 12.5 hours. Also, while most firms that convert decrease the number of total working hours per week, the total weekly compensation usually remains the same.

Dr. James Wilson of the University of Pittsburgh has provided some preliminary results of a study of firms using

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<sup>15</sup>"Flexible Work-Days for Employees Boost Morale, Cut Tardiness," The Wall Street Journal, February 29, 1972, p. 1.

TABLE 9

## DISTRIBUTION OF FIRMS BY SIZE, ACTIVITY AND TYPE OF RESTRUCTURED WORKWEEK

<u>Size of Firm and Type of Workweek</u>	<u>Activity</u>					<u>Total</u>
	<u>Manu- facturing</u>	<u>Service</u>	<u>Retail- ing</u>	<u>Whole- saling</u>	<u>Other</u>	
<b>Small</b>						
4-Day Workweek	114	26	6	3	4	153
3-Day Workweek	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4</u>
Total	<u>116</u>	<u>28</u>	<u>6</u>	<u>3</u>	<u>4</u>	<u>157</u>
<b>Intermediate</b>						
4-Day Workweek	13	5	2	0	0	20
3-Day Workweek	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
Total	<u>14</u>	<u>7</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>23</u>
<b>Large</b>						
4-Day Workweek	0	7	0	0	0	7
3-Day Workweek	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>0</u>	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>7</u>
<b>Grand Total</b>	<u>130</u>	<u>42</u>	<u>8</u>	<u>3</u>	<u>4</u>	<u>187</u>
<b><u>Type of Workweek</u></b>						
4-Day Workweek	127	38	8	3	4	180
3-Day Workweek	<u>3</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>7</u>
<b>Grand Total</b>	<u>130</u>	<u>42</u>	<u>8</u>	<u>3</u>	<u>4</u>	<u>187</u>

Source: Prepared by the author.

the 4-day workweek. He asked 4-day workers what would be the maximum number of hours they would be willing to work at one time on a regular basis while still working the same number of hours in a month. Mrs. Poor summarizes the results by stating:

Only 2 percent say they would like a less than 8-hour day. Only 14 percent consider 8 to 9 hours optimal. A full 52 percent say they prefer 10 to 11 hours; and 29 percent say they would be willing to work 12 or more--with 4 percent willing to work over 18. About a third of these workers . . . show preference for trading even longer workdays for even longer blocks of leisure time.<sup>16</sup>

Thus the 4-day workweek movement may be the harbinger of a 3-day movement since it appears that workers do desire increases in leisure block time.

#### Employers' Reasons for Conversion

Listed below are the reasons for conversion and the various advantages expected by employers:

1. Publicity related to utilization of a restructured workweek usually attracts more prospective employees. As a result, a selection can be made from a larger cross-section of applicants and thus provides the firm with higher caliber employees.

2. Absenteeism is usually reduced because employees realize that they lose a larger portion of their pay if they do not work.

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<sup>16</sup>Riva Poor, Poor's Workweek Letter, February 15, 1972, pp. 2-3.

3. The incidence of tardiness usually decreases because employees can only possibly be late 4 rather than 5 times a week. It is significant that the total time associated with tardy incidents decreases. Theoretically, even if the total possible number of incidents decreases, total tardy time could remain the same or increase. But the evidence indicates that total tardy time decreases. Some employers pay premium rates for the early morning hours rather than at the end of the day in order to encourage prompt arrival and immediate productive work.

4. Labor turnover (separation rate) is reduced because workers usually have a positive attitude toward the rearranged workweek. Because other firms do not utilize the restructured workweek, the employees tend to remain with the firm that does.

5. On a weekly basis there is a reduction in the incidence of washups and checkouts. Thus, more productive time is possible.

6. The employee spends less total time per week for lunch at work while working essentially the same number of hours. Also, while lunch time is still part of the time component associated with the day off, such time can be more effectively integrated into the leisure block time that results from the rearranged workweek.

7. Generally, productivity increases. Workers appear to use the increases in available total productive time resulting from reduced absenteeism and tardiness in constructive behavior. Another factor which can be associated with increased productivity is motivation to produce. (See Chapter III.)

8. Companies generally report decreases in overtime. The increase in productivity makes this possible. Another reason is that batch processors can possibly schedule another batch to be produced during the extended workday which was not possible when the workday was shorter.

9. Reports from companies indicate that better morale exists as a result of the restructured workweek. Evidence of better morale is reflected in decreases in grievances, absenteeisms, turnover, tardiness, less exploitation of sick-leave system, employees voting against unionization, and increases in the number of applicants for job openings.

10. Usually firms that convert receive publicity because the rearranged workweek is considered an innovation. The community becomes aware of the firm, its products, and the fact that the firm is providing workers with increased blocks of leisure time that the employees want. Chapter III will discuss this area more fully.

11. Some service enterprises not only restructure the workweek but also provide a variety of schedules from which the worker can choose. Information gathered from such enterprises indicates that administrative problems do exist, but the workers believe that flexible schedules relieve the monotony of fixed schedules. Staggered schedules provide a better integration of personal and work goals, which is not possible with a fixed schedule. For example, if a situation develops where it is desirable to be away from work Tuesday, Wednesday, and Thursday, arrangements may be made to work on other days of the week without a loss in pay. Such scheduling is not feasible in firms with fixed scheduling. Service enterprises also report that the staggered scheduling permits them to extend daily and weekly service hours, thus providing more convenient customer service.

12. Companies adopting the restructured workweek report improvements in preventive and long-term maintenance. Maintenance of any type is no longer postponed, which was the tendency under previous schedules.

13. Some companies report that if overtime is needed, regular employees do not want overtime work because the leisure time block on the day off is more satisfying. In such instances, the use of temporary help is necessary.

14. Many companies report a decrease in overhead expenses such as heat, light, and electricity.

15. Salesmen indicate that since the enterprise is operating on extended hours, it is easy to obtain promotional materials during nonsales hours.

16. Some companies report that management development and training programs can be scheduled with minimum interference in work schedules because such programs are scheduled on nonwork days. However, the participants, especially first-line production supervisors, may resent such scheduling of programs because they also like the day off.

#### Disadvantages and Obstacles

While the advantages accruing from conversion exceed the disadvantages, it is important to consider the following items:

1. Generally, unions will not allow the membership to be included in a restructured workweek. Some union locals have participated in conversion programs only to be told by the international to discontinue such involvement.

2. Orientation or communication of the conversion plan presents certain unique problems. Reports indicate that verbal communication through group departmental meetings and informal discussions are best. However, more and more

companies indicate that the use of a booklet is effective. It gives the employee printed information which can be kept.

3. Older employees do complain about a more fatiguing workday. But it is important to realize that even with this complaint, productivity has increased. One possible explanation could be the fact that productivity is related to the entire work period and not only to productivity near the end of the work day.

4. Increased moonlighting does occur. Most moonlighting is on a part-time basis.

5. Evidence indicates that some employees will quit as a result of the conversion. This could present manning problems and should be accounted for in the planning. Special attention should be given to the attitudes of individuals in critical jobs. Also, employees who are moonlighting on the old schedule may not be able to do so with the 4-day schedule, and may quit if their second job is disrupted.

6. Payments for nonwork days such as holidays present problems. Companies generally attempt to keep the total yearly nonwork hour compensation the same. However, there are many exceptions to this method of payment.

7. Suppliers, if not given sufficient lead time to integrate their operations with those of a 4-day enterprise, could present problems. Storage space and material handling

equipment requirements may increase because of the peaking that occurs as a result of the 4-day week.

8. Obtaining temporary workers may increase some costs--for example, scrap rates--and decrease the quality of the product. Such conditions may occur when temporary help has to be obtained for work scheduled on the day off and regular workers do not want to work. Supervisor manning requirements are also increased.

9. Labor cost will increase substantially if the provisions of the Walsh-Healey Act are applicable. Also, companies indicate that the provisions of the Walsh-Healey Act are obstacles hindering conversion.

10. A 3-shift operation may be an obstruction unless overlaps can occur. Police departments use 3, 10-hour shifts with a 2-hour overlap occurring during peak crime hours. Hospitals also use the same schedule with overlaps occurring at peak demand periods. Such overlapping may occur during periods of time when the incidence of treating accident victims increases and during meal periods. Hospitals report better quality care as a result of fewer losses of information between shifts. Also, the ability to handle crisis situations improves, for not only can the crisis be handled but normal activities do not suffer. Manufacturing operations that do not have the physical capacity for overlap,

schedule 2, 10-hour shifts and use part-time help for 4 hours or they schedule maintenance for the remaining 4 hours.

### Implications of Restructured Workweek for Managers

Usually the middle and top management personnel of a firm that has converted continue to work their normal schedules. The primary reason for such action stems from the interface that middle and top managers have with factors external but critical to the firm. Customers, suppliers, and transportation carriers may need constant attention. Lack of coordination with these elements in a firm utilizing a 3- or 4-day schedule can have serious implications for production schedules and attendant costs.

Generally, middle and top managers experience more pressure during the extended workday, but they work in a more favorable climate on the fourth and/or fifth day. In fact, most managers state that their usual Saturday work is no longer necessary, and the result is a 2-day rather than a 1-day weekend.

First-line supervisors in job-lot shops either arrive earlier or stay later than their subordinates in order to properly coordinate activities. Such action is necessary, and as a result, the supervisor's day is lengthened considerably. Coupled with such lengthy days are frequent instances when

the supervisor's presence is necessary on the fifth day for meetings and overtime. Thus, it appears that when conversion takes place, greater time demands are made on supervisors in job-lot shops. Also, considerable disruption occurs in the supervisor's home life.

### Implications for Employees

Some of the advantages and disadvantages associated with employees are presented below.

#### Advantages. Advantages accruing to employees are:

1. Some companies decrease total weekly working hours and gross compensation remains the same. Such action results in rate increases.

2. Commuting time is reduced because the rearranged schedule is usually planned in a manner that permits commuting to the place of employment during off-peak hours.

3. Commuting incidents are decreased by 20 percent assuming a 5-day workweek is reduced to 4 days. Reduced commuting cost also provides tax free savings.

4. The cost of lunches decreases, especially if vending machines and/or restaurants are used considerably. Babysitting costs that occur on the fifth day are also eliminated as a result of the 4-day workweek. But similar cost during the 4 days of work may increase slightly, but there is a net savings.

5. Workers appear to prefer the longer weekend. The leisure block time allows for participation in a broader range of desirable activities.

Disadvantages. There are negative aspects as follows:

1. The most frequently stated disadvantage is the general level of inconvenience. Employees complain about getting up earlier, getting home later, and disruptions to family meals and evening activities.

2. Car pools are disrupted and public transportation may not be available at the desired time.

3. Many employees complain about driving during dark hours and winter driving.

4. Older employees who normally walk to work or use public transportation indicate that the longer workday increases exposure to darkness and heightens fears of violence.

5. A unique reason for being against the restructured workweek was given by an elderly employee of the Swirk Company who wanted the plant to operate more days rather than fewer. Informal contacts with employees and first-line supervisors revealed that the individual was the plant's "bookmaker."

6. Older workers object that the increased leisure hours are wasted in recuperating from fatigue due to the extended hours of work.

7. A unique objection came from a married female who associated a decrease in sexual activities to the extended workday. No comments were made concerning sexual activities during the days off. Mrs. Poor has suggested that the more common desire for the day off may be related to expectations of an extra-lengthy day in bed.

Married female workers report more disadvantages than males because women workers must still perform their role as housewife. Also, even though fatigue is mentioned as a disadvantage, no adverse effects on safety have been reported, and productivity has generally increased.

#### Reasons for Discontinuing the 4-Day Week

Data provided by Mrs. Poor indicate that 19 firms have tried and abandoned the restructured week. This represents approximately 3 percent of the 658 firms utilizing the restructured workweek. It is interesting to note that 5 of the 19 firms are in the process of reintroducing the restructured workweek.

The varied reasons for discontinuing are presented below.

1. One firm discontinued the restructured workweek because the husbands of female employees demonstrated at the firm, charging disruptions of family life.

2. A firm located in a remote area discontinued utilizing the rearranged workweek because of local customs. In this instance, social activities were normally planned to occur during the weekly evening hours. The extended workday interfered with the employees' participation in such activities and the firm restored the old schedule.

3. One firm indicated that employees would not work overtime on the day off and temporary help was not available. Apparently the overtime which originally occurred on a Saturday was shifted to a Friday under the 4-day schedule, and the employees preferred the extra day off rather than the overtime work and premium pay.

4. Five firms reported losses in productivity.

5. Several firms reported that the work load and pressure on first-line supervisors became too great. Furthermore, budget limitations prevented further hiring of first-line supervisors.

6. In some instances, local unions authorized the conversion to a rearranged workweek but were over-ruled by their international.

7. Three firms reported inadequate internal planning as the reason for discontinuing, but all are now in the process of reinstalling the restructured workweek. No specific details related to the new planning process are available.

8. Two firms discontinued the new schedule because exemptions from the provisions of State laws regarding maximum daily hour restrictions for female employees were not obtained. These firms have applied for the exemptions and intend to reintroduce the rearranged workweek.

#### Planning--A Problem Area

One problem area--the necessity for detailed planning--appears to be significant. When planning for conversion, attention must be given to the following factors:

1. Objective criteria should be established that will serve as standards for control purposes. Case histories indicate that, generally, specific objective standards are not established. Thus far, managers have been primarily relying on subjective judgments when evaluating the results of a restructured workweek. Also, if all firms that have converted were to report results on a similar basis, overall valid and reliable interpretations would be possible.

2. Changes in manning requirements may occur. Data indicate that first-line supervisors' manning requirements increase when overtime is continually used on the day off. Changes in the composition of the work force may also occur because some workers will simply not like the rearranged schedule.

3. Some measure of employee attitudes prior to installation should be obtained. Such measures can indicate the individuals likely to quit and proper contingent planning could be done. If quits are likely in conjunction with critical jobs for which no labor supply exists, proper training can be included in the plan.

4. Generally, maintenance programs are not postponed as a result of the 4-day workweek. Firms utilize the day off for preventive and long-term maintenance programs. If the facilities and equipment are not being utilized on an overtime basis, unencumbered time is available for maintenance during the day off. If extensive use is made of overtime on the day off, the maintenance is scheduled for the weekend.

5. Most firms phase-in the use of a restructured workweek. Phasing-in permits learning to take place which minimizes mistakes in further phases of the program.

6. A cost-benefit analysis should be formalized in the plan. So far, it appears that financial analysis has been minimal. Perhaps the companies involved in conversions to a shorter workweek do not have the resources for such analysis; thus, subjective evaluation takes place.

7. Service requirements of customers must be considered. Shipping departments of manufacturing firms either use staggered schedules to provide 5- or 6-day coverage or use temporary help on such days.

8. Communication of the initial plan to employees should be by written material. Verbal communication should follow quickly to provide immediate answers for the many questions that will arise. Communication plans should consider effective understanding of all facets of the tentative conversion by all ethnic groups, especially those who do not understand English.

9. Managers should realize that utilization of the restructured workweek can be used as a strategy to achieve desired changes in other areas. For example, if management wishes to have greater flexibility in assigning workers to jobs during the slack season, a trade-off could be made--flexible seniority rules for a restructured workweek.

10. Consideration should be given to policies on sick pay, disability, retirement, and jury duty. Most firms calculate the above items on a 4-day week. For example, if the previous sick day allowance were 10 days, the allowance after conversion would be based on 8, 10-hour days. Some companies do retain the same total number of sick days.

11. Vacations may present some problems. Most firms base vacation time on length of service, generally measured in weeks. Four-day companies normally require employees to take full weeks of vacation and discourage taking vacation time on a daily basis. If daily usage is permitted, the

usual policy is to relate the weeks to days. Thus, a 4-day company which gives an employee a 1-week vacation should stipulate that the week consists of 4 days and not 5 days.

12. Policy on time off for personal business should be considered. The practices are mixed. Some companies decrease or eliminate such time on the ground that the extra day off should be used for personal business. Others retain the old policy of the same number of days but actively discourage utilization. Some firms do not change the previous policy, and do not discourage utilization. The thinking in this regard is that the utilization of the leisure time associated with the extra day off is the employee's decision which should not be infringed upon by company policy.

13. Holiday planning must consider these items:

- a. Whether daily compensation should be based on the new daily hours (10) or the old (8).
- b. Total yearly cost for holiday compensation.
- c. Total annual number of holidays, keeping in mind the Monday holidays established by Federal law. (See page 11.)
- d. Compensation for holidays falling on a non-working weekday.
- e. Compensation for holidays falling on a weekend.
- f. Compensation for an additional day of work if a holiday falls on a workday and the workweek is therefore extended.

The holiday compensation plans of firms are diverse and are designed to meet the unique needs of each company. However, many firms attempt to maintain the same total number of yearly holiday hours. Other firms pay 10 hours for all holidays falling on a workday and either ignore holidays falling on a weekend or non-workday, or pay for these on an 8-hour basis.

#### Future Implications

The immediate future of the movement is dependent upon the removal of two primary obstacles: Federal law and work-week policies, and the attitude of the unions. Momentum could increase if government workers, at any level, were to be covered by the 4-day concept.

#### Social Implications

As stated in Chapter I, the 4-day workweek movement is an innovation which is challenging the use of time over the life-span of people. While some segments of the economy have reacted negatively to the changes in business schedules, one should realize that schedules have been constantly changing.

Retail establishments are open longer and at different hours than previously. Colleges have changed their school years to quarterly or tri-semester academic years. Even the Roman Catholic Church has changed the schedule for masses,

allowing the Sunday Mass obligation to be met on a Saturday evening; essentially the Church is providing unencumbered leisure time on Sunday. Such changes in schedules are made to serve the individual's needs better.

Proponents of the 4-day movement argue as follows:

1. The Federal Government, which exists for the good of all, should not hamper, but encourage the change by removing the restrictive provisions of laws.

2. Unions should realize that the 4-day movement can benefit both labor and management. Evidence indicates that both productivity and higher wages result. In addition, the restructured workweek movement may well be a transition period which gives employers the opportunity to solve internal product and service problems and move toward a shorter 4-day, 32-hour workweek with no reduction in pay. If the current level of unemployment cannot be reduced, national policy may dictate a shorter workweek in order to share the work. Thus, the 4-day movement can be viewed as a movement to phase-in a shorter workweek on a national level.

Specific Questions. The movement does raise other provocative social and economic questions:

1. What influence will the 4-day workweek have on national employment?

2. Will increases in productivity continue and reduce the number of future jobs?

3. Will jobs increase in the businesses related to leisure time activities?

4. Will workers who travel long distances to their jobs, and who work 3 or 4 days want dormitories at the work site?

5. Will present plans for the national highway system be able to handle an increasingly mobile population?

6. Will tax rates be increased in order to provide recreational areas and highways?

7. Will family ties be strengthened or weakened? Will divorce or separation rates increase as a result of one spouse's working and the other having time off?

8. Will individuals know how to utilize the leisure time or must life-planning services be established?

9. Will the birth rate change in any way as a result of the extra time off?

10. Will sufficient recreational areas be available?

11. How will natural resources be influenced as a result of increased demands made upon them?

12. Will schools change their schedules to permit the children to share the leisure time with their families? Will schools change their schedules in a way that would permit

individuals to utilize educational services during the extended leisure time?

13. Will business be required to furnish child care centers if babysitting becomes a significant problem for working mothers?

14. Will laws be necessary to prevent moonlighting and insure a more equitable distribution of jobs throughout the work force?

15. Will the longer hours decrease the life expectancy of workers?

16. Will the fatigue associated with older workers cause such individuals to drop out of the work force?

17. Will the retirement age be influenced? Will Social Security laws be significantly influenced?

18. Will longer hours of repetitive work affect the mental health of the nation?

19. Will the 4-day movement act as an impetus toward redesigning jobs in order to relieve the monotony associated with repetitive work and an extended workday?

20. Does the movement reflect positive attitudes toward leisure, or negative attitudes toward work, or both?

It should be noted that as more workers are employed in the restructured workweek some of the advantages will be eliminated. For example, commuting congestion will again be

a problem, appointments on nonworking days will be more difficult to obtain, and congestion will increase on highways and at recreational facilities.

It is too early to answer some of these questions because the movement is rather moderate. However, future planning should consider all possible aspects.

#### Chapter Summary

Initially, the primary users of a 4-day workweek were petroleum companies. However, beginning in 1960, the movement spread to other types of industries.

Currently, 658 firms are associated with restructured workweeks. Latest available figures indicate that 150 firms per month are adopting a rearranged workweek schedule. However, such firms represent only 6 percent of total business entities and the employees only .12 percent of the total national work force of approximately 85 million workers.

The enterprises are essentially small manufacturing firms employing 250 employees or less. Most are located on the East Coast and are nonunion.

Many advantages are associated with the 4-day workweek--for example, easier recruitment; reduced absenteeism; reduced tardiness; favorable changes in turnover rates; increased productivity; and better employee morale.

However, various disadvantages and obstacles are also associated with it: unions do not subscribe to the concept; ineffective communication of the plan to workers may impede the conversion program; older workers complain about fatigue; moonlighting increases; some employees quit; and State and Federal laws may raise labor costs for the firm.

Generally, top and middle level managers in such firms are not covered by a 4-day workweek. Usually factors external to the firm demand attention on a conventional workweek basis. First-line supervisors do work on the basis of the shorter workweek schedule, but frequently the time demands made upon them curtail their effective use of leisure.

Employees indicate various factors that they find favorable, such as decreases in commuting cost and time, and effective use of large blocks of leisure time. Some unfavorable aspects are: the need to rearrange home activities; disruption of car pools; getting up early and getting home late; violence in the streets after dark; and fatigue.

It appears that employees are more than satisfied with the benefits associated with the block leisure time. One indication of the success of the movement is that the number of firms that have discontinued use of the restructured workweek is rather small (3 percent or 19 firms) and 5 of these are returning to the shorter workweek after initial failure. The

main reason for failure is improper planning. Firms may not communicate the plan effectively; may run up against Federal and/or State laws; may adopt a flexible schedule which is too difficult to administer; may attempt to utilize the shorter workweek in all phases of operations at once rather than phasing-in gradually; and no controls may be established to evaluate progress and results.

It appears that in order to have widespread adoption of the concept, Federal wage and hour laws will have to be changed and union opposition minimized.

In discussing any implications of the 4-day workweek, various broad social aspects must be examined. The social questions raised in this chapter could have profound effects upon society and should be investigated before the movement expands much further.

## CHAPTER III

### A FIRM'S IMPLEMENTATION OF THE 4-DAY WORKWEEK

This segment of the study will examine a specific firm's installation and utilization of the 4-day, 38-hour workweek. Initially, the general background of the industry and firm will be presented followed by a description of the managerial problems in converting. These include planning and the decision making process, control, delegation of authority, communication and motivation, and leadership implications. A description will be given of relevant production activities prior to and after installation. Also, an appraisal will be made of the managerial methods used in the conversion. Such an appraisal will reveal the strengths and weaknesses of the managerial activities and is intended to serve as a case history for other firms contemplating conversion.

#### General Background of the Firm

The company at which the research was performed is a softgoods manufacturing firm on the Eastern seaboard. The

firm is located near an urban community which has a population of approximately 100,000. The area is a major center for the production of iron and steel, ceramics, and rubber.

The work force in the area numbers 41,400 and represents 33 percent of the state's total work force. The 428 commercial establishments produce goods for local, regional, and world markets. The area has a minor port and airport facility, but depends primarily on truck and railroad transportation. In recent years, research and development establishments have located in the area as a result of the high concentration of colleges.

The firm, designated here as the Swirk Company, has been in existence since the 1920's.<sup>1</sup> Until the 1960's, the company had been privately owned. During the mid-1960's, it was acquired by a diversified manufacturer of softgoods listed on the New York Stock Exchange. Competition from larger manufacturers and imports caused this merger and significant numbers of other mergers throughout the industry. The Swirk Company is one of the main divisions of the parent company. Annual gross sales of the firm range from \$10 million to \$15 million. The company and the industry have been plagued by steadily increasing costs of materials.

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<sup>1</sup>The actual name of the company has been given to the Chairman of the Dissertation Committee.

Products and Workers'  
Skills Involved

Demand for industry products is directly related to changes in personal consumption expenditures, frequency and duration of fashion cycles, and adaptability to style and color coordination with other softgood products.

Until a few years ago, products of the industry required intense handwork by highly skilled workers. Today, as a result of technological advances, the industry has been able to reduce the skill requirements and has dramatically expanded product mix.

Management of Human Resource

Generally, the company is considered to be a leader in the industry because of the pioneering accomplished in introducing new technology and products, and the concern shown for the human resource factor in production.

Over the years, the Swirk Company has provided employees with the highest pay in the industry (\$2.70 per hour versus an industry average of \$2.60). Most production jobs (95 percent) are paid for under an incentive system. The company is earnestly concerned with every employee's need to earn a living and over the past 5 years has laid off only 13 workers. When customer demand weakens, reduced hours, but no mass layoffs, occur. During slack times the company retrains

employees for jobs that are available, and transfers employees to departments that have work. Such decisions have resulted in overstaffing, but are consistent with management's desire to provide workers with steady employment. Adjustments in the work force are generally made through normal attrition.

A further concern for employee welfare is reflected in the president's discussion with this author about his desire to provide a guaranteed annual wage for employees and eliminate the piecework concept. The president sincerely believes that elimination of anxieties concerning money and the ability to work fast to earn more money will promote better attitudes toward the company.

Company fringe benefits for employees are considered the best in the industry. Besides the normal pension plan, the company also has a profit-sharing plan. Initially, this plan was unique in the industry and the only contribution made by the employee is to do his job as efficiently as possible.

#### Participative Management

Generally, employees are encouraged to participate actively in many decision-making activities. For example, employees are represented on the committee that manages the profit-sharing plan. When changes in operations are being considered, employees are asked to submit suggestions, express

opinions informally, and, as was the case with the 4-day work-week, to vote on the matter being considered. It is interesting to note that this open door and free expression policy is actively engaged in by employees. On many occasions employees discuss matters by going to the president's office, or engage the president in conversation on his frequent trips through the plant.

### Family Concept

The company makes a sincere effort to insure that the "family concept" permeates the entire organization. All announcements refer to the "Swirk Family." A special paid holiday is designated as "Swirk Day." On this day, attempts are made to strengthen the "family concept."

Golf tournaments and a special trip to an event, usually in another city, are scheduled. Further evidence of the importance given the "family concept" is the company-sponsored picnic. Rigid control is maintained to insure that only employees and their immediate families attend. The author could not obtain permission to attend. Prizes given to children and adults usually are useful and have high monetary value.

It is interesting to note that no employee cafeteria is provided. However, lunch rooms and vending machines are scattered throughout the physical plant. On the basis of

observation and informal discussions, this author concludes that the cafeteria is perhaps purposely not provided. Dining tables, far removed from designated areas, are permitted, with tablecloths, centerpieces, candles, and even cloth napkins. This is intended to promote the family philosophy that permeates the company.

### Paternalistic Management

Consulting services are provided for personal or financial problems. Since some employees speak Spanish and very little English, the company initiated a conversational Spanish course for appropriate supervisors. This enabled the channels of communication to become more effective.

Observation of many incidents in the personnel office indicate the extent of employee freedom and management concern with employee problems. Typical incidents are:

1. Spouses wanted to see their wives to obtain signatures for installment credit contracts.
2. Individuals needed personal loans, and receive them from the managers or the company or the credit union.
3. Individuals needed help in understanding legal contracts.

Most requests were granted.

The company is closed 4 weeks during the year for vacation. Two of these weeks occur in August during the slack season. However, the other 2 weeks occur during the Christmas and New Year's holiday period. Even though this is considered to be part of the peak period, it is management's specific desire to have employees spend the holidays with their families.

#### Unionization and Composition of the Work Force

Management is encouraged by the results of its personnel philosophy for the plant is nonunion. However, the industry is highly unionized. Unionization attempts by the Amalgamated Clothing Workers of America have failed for 3 consecutive years, by margins of 32, 15, and 85 votes respectively.

The composition of the firm's work force is shown in Table 10 on page 81. A majority of the employees are classified as "production" (74 percent), and most employees are female (63 percent). The average and median age of the entire work force is 43 and 45 respectively. The average length of employment is 20 years and the median is 12 years.

Most top and middle level managers do have college degrees. However, first-line supervisors generally have a high school education. The educational level of the workers is below high school.

TABLE 10  
COMPOSITION OF FIRM'S WORK FORCE

<u>Managers</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Executives	6	0	6
Middle Managers	11	0	11
First-Line Supervisors	<u>13</u>	<u>5</u>	<u>18</u>
Total	<u>30</u>	<u>5</u>	<u>35</u>
 <u>Operatives</u>			
Office and Data Processing	17	53	70
Engineering, Cost, and Production Control	6	11	17
Production	130	279	409
Salesmen	<u>20</u>	<u>0</u>	<u>20</u>
Total	<u>173</u>	<u>343</u>	<u>516</u>
Grand Total	<u>203</u>	<u>348</u>	<u>551</u>

Source: Prepared by the author.

The marital and family status of the entire work force could not be determined because records were incomplete. In fact, response to these items on the questionnaires was minimal. A more detailed discussion regarding low response rates to marital and family status will be discussed in Chapter V.

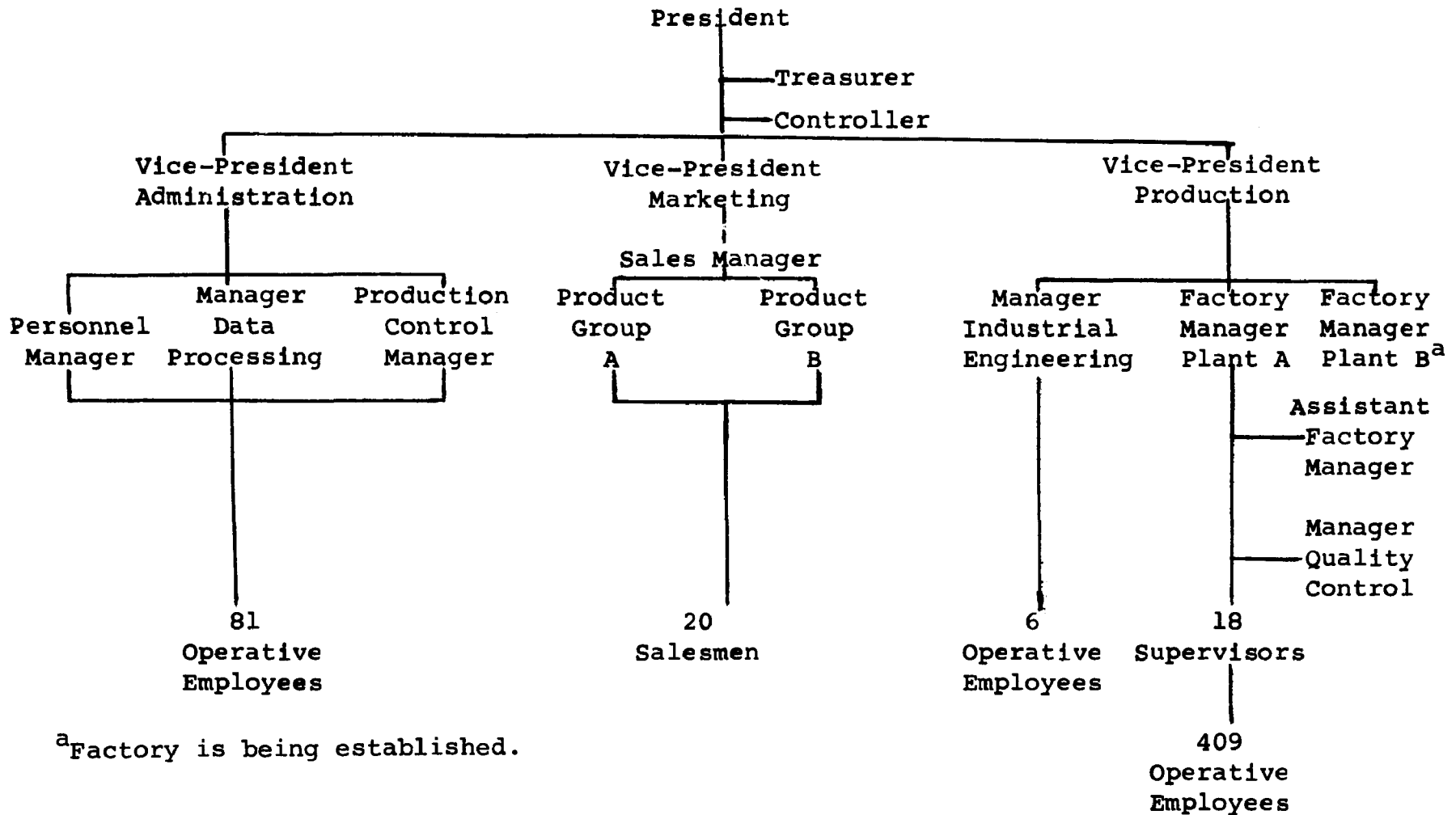
### Organization Chart

Figure 1 on page 83 presents an organization chart of the firm. The chart is used only to show the general authority-responsibility relationships and lines of communication. No formal job descriptions exist. Most management activities are extremely informal. For example, communication is mainly verbal (face-to-face or by telephone), and the number of meetings is minimal. Whenever exceptional coordination problems arise, a meeting is called and all necessary communication takes place in a minimum of time. Agendas, notices, and minutes of meetings, when used, are short and to the point. While written communication is encouraged, verbal communication is used extensively.

Interviews and a review of company records indicate that historically the firm had a president who practiced centralized management. The current president is attempting to change the climate by practicing general supervision, that is, decentralizing authority and decision-making.

FIGURE 1

FIRM'S ORGANIZATION CHART



<sup>a</sup>Factory is being established.

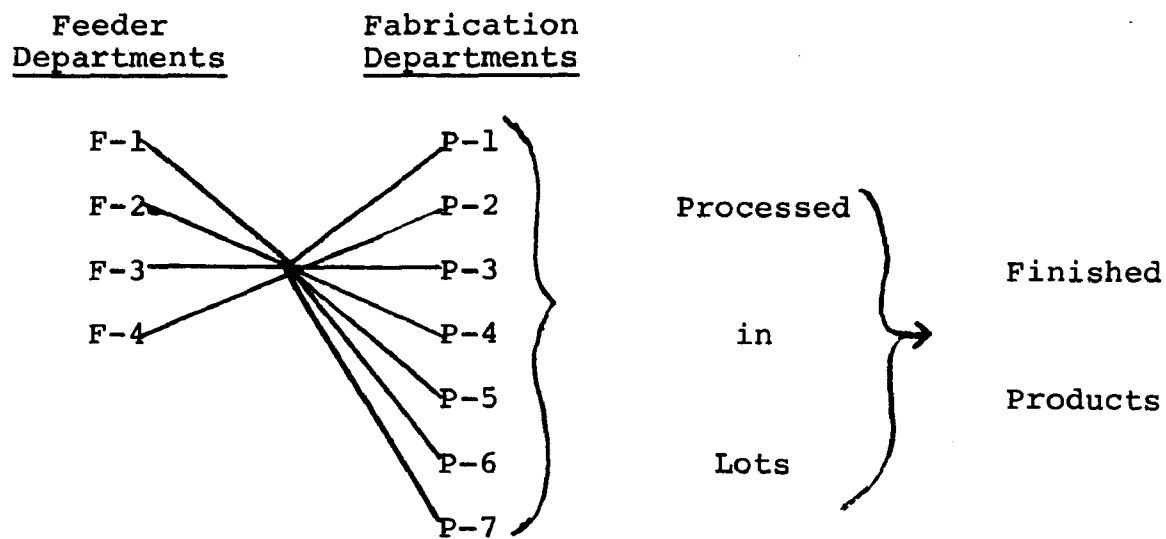
Source: Prepared by the author.

### Production Activities

The company produces 8 basic products with approximately 1,600 variations in 7 fabricating departments. A schematic of the production activities is presented in Figure 2 on page 85. The production cycle begins with materials being provided to fabricating departments by "feeder" departments. Hereafter, the individual feeder departments will be referred to as F-1, F-2, F-3, and F-4. Fabricating departments in the production division will be referred to as P-1, P-2, P-3, P-4, P-5, P-6, and P-7. Work is processed in lots that usually average 50 to 75 units. About 50 percent of the units produced are for orders, the remainder for inventory. Subsequent orders are filled from units in inventory and the unfilled portion (which may be considerable) is placed on back-order. It takes approximately 3 weeks to process a job lot.

Work performed by feeder departments is critical both as to quantity and quality. Failure in either respect means production gaps in the fabrication departments and delays in shipment of orders. Since the industry is highly competitive and the company essentially adopts the marketing concept, considerable pressure is placed on production departments to satisfy customer requests. Thus, production control is critical. A 1-shift production schedule from 7:30 A.M. to 4:00 P.M.,

FIGURE 2  
SCHEMATIC OF FIRM'S PRODUCTION ACTIVITIES



Source: Prepared by the author.

with a half hour for lunch, was utilized prior to installation of the 4-day workweek. Production workers were working 40 hours, 5 days a week, or 8 hours per day. Average weekly gross pay was \$108.

#### Management Role in Converting

The president of the firm initiated action for the 4-day workweek in October, 1970. The reasons stemmed from the basic concern that the president had for the human resource. He had read how employees who were working a 4-day workweek enjoyed the day off. His main source was articles in periodicals.

Besides providing employees with a day off which they would appreciate, especially the female employees, the president saw the move as another innovation in an industry where the company was considered a leader. Also, since the company had not significantly increased the general level of wages for approximately 5 years, the 4-day workweek could be designed to result in a wage increase. With the above purposes in mind, the planning began.

#### Planning for the 4-Day Workweek

Primary authority for planning the conversion was delegated to the vice-president in charge of production. The president set the tentative conversion date for the beginning of November, 1970.

Integrated planning did not take place. Investigation of company records and discussions indicated that the planning was accomplished by the vice-president of production in consultation with the president. No formal written plan was established. Communication among the executives was essentially verbal.

### Variables Considered

The notes of the vice-president of production indicate that consideration was given to the following variables:

1. In order to meet the verbal directive of the president concerning the date of installation, planning had to be accomplished quickly.
2. Since results of the conversion were uncertain, a decision was made to phase-in the 4-day workweek. The most effective fabrication department, P-1, was selected to start.
3. Consideration was given to the problem of employees' attitudes toward the restructured workweek. However, before investigating employee attitudes, hours of work and wage payments had to be determined in order to present the employees with a comprehensive plan.

Various hourly alternatives were considered for the 4-day schedule:

- a. 38 hours per week or 9.5 hours per day.

- b. 36 hours per week or 9 hours per day.
- c. 40 hours per week or 10 hours per day.

It was the president's desire to increase the hourly rate of pay. Thus, if average total weekly pay (\$108) was to remain the same, a 38-hour week would result in an hourly rate of \$2.84. A 36-hour week would result in an hourly rate of \$3.00. If a 40-hour workweek were selected, the rate would remain the same, eliminating this alternative.

Two factors became critical at this point, namely, overall productivity and gross pay. The president considered the possibility of increasing gross pay regardless of the hours worked; thus the 40-hour, 4-day week was still an alternative. However, the president concluded that the resulting 10-hour day would be too demanding on workers and would impair productivity. He also wanted to show that management was concerned about employee welfare. Keeping the total hours the same would probably be interpreted by the workers as exploitation. Again, the 40-hour, 4-day week was eliminated as an alternative.

Productivity and its relationship to decreased hours of work became significant. Since uncertainty existed in regard to this relationship, a minimal decrease was selected, that is, 2 hours. Also, since the restructured workweek was to be phased-in by beginning in the most effective department

(determined by opinion rather than objective data) results could be studied before further decisions had to be made.

To implement the president's desire for an increase in gross pay, a decision was made to pay overtime for all hours over 8 hours per day--that is, 1.5 hours per day were to be paid on an overtime basis. The decision met the provision of Sec. 1(c) of the Walsh-Healey Act which requires overtime payments for all hours worked over 8 hours per day. This was important, since the firm did work on Government contracts.

Thus, the 4-day 38-hour workweek (9.5 hours per day) was chosen, resulting in estimated gross weekly pay of \$110.70. Based on this plan, the hourly rate became \$2.91, which represents an 8 percent hourly increase. In effect, employees worked 38 hours and were paid for 41 hours. The vice-president of production thought that the reduced hours, when combined with a rate increase, would provide sufficient incentive to keep productivity at least at the same level yielded by a 5-day, 40-hour week. The vice-president's notes indicate that savings in overtime were expected. However, if overtime was warranted it could be done on the fifth day. As a result, workers would still have 2 days off rather than working overtime on the sixth day which was the case with a 5-day week.

4. Productivity was expected to be favorably influenced because total weekly break time of 100 minutes would be reduced to 80 minutes (2, 10-minute breaks per day for 4 days).

5. To decrease commuting time and relieve traffic congestion, the working day was scheduled from 7:00 A.M. to 5:00 P.M., with a half hour for lunch.

6. A Monday-Thursday schedule was implemented. It must be pointed out that at this point no alternative weekly schedule was investigated by management.

7. After all the above variables were considered, employees in P-1 were told of the tentative changes. No advantages or disadvantages were communicated to employees. A trial period of 1 month was to be used. Department employees were allowed to vote on utilization of the 4-day workweek as planned, with a majority determining the action to be taken. After the 1-month trial period, another vote was to be taken to decide on continuance of the restructured workweek.

#### Summary of Management Role

Informal discussions and interviews revealed that the president was the key person in initiating the 4-day workweek. All planning was restricted to the president and vice-president of production. No other managers--top, middle, or first-line--participated. Formal documentation of plans was minimal--only notes were used. Initially, all planning and

communication of the plans were verbal. No control measures were established. Criteria to measure success or failure, other than the employee vote, were not included in the verbal plan. The planning time period was approximately 1 month (October, 1970). A favorable vote for the trial period was taken November 2, 1970, and the 1-month trial period began in 1 department (November 15, 1970 to December 16, 1970).

#### Actual Installation of the 4-Day Workweek

The phasing-in summarized in Table 11 on page 92 includes 6 of 7 production departments. The employees covered by the restructured workweek numbered 273, or 67 percent of the total production employees. Those voting represented 99 to 100 percent of the total possible votes for the "to try" and "to continue" situations respectively.

All departments voted "to try" the rearranged workweek. The 3 departments which were asked to vote "to continue" voted favorably. The favorable vote "to try" represented 70 percent of the total number of voters, while the vote "to continue" was 73 percent.

Considerable attention was given to the individuals who voted "no" on continuation. Each such employee--30 in number--was personally interviewed by the factory manager and vice-president of production. This writer sat in as an observer for approximately 75 percent of the interviews. Disruption

TABLE 11  
FIRM'S PHASING-IN OF RESTRUCTURED WORKWEEK

<u>Date Initiated</u>	<u>Department</u>	Number of Votes					
		<u>To Try<sup>a</sup></u>			<u>To Continue<sup>b</sup></u>		
		<u>Yes</u>	<u>No</u>	<u>Total</u>	<u>Yes</u>	<u>No</u>	<u>Total</u>
November, 1970	P-1	38	16	54	42	14	56
February, 1971	P-2	12	9	21	10	4	14
March, 1971	P-3	25	8	33	28	12	40
April, 1971	P-4	41	15	56	--	--	--
April, 1971	P-5	57	18	75	--	--	--
June, 1971	P-6	<u>18</u>	<u>14</u>	<u>32</u>	--	--	--
Total		<u>191</u>	<u>80</u>	<u>271</u>	<u>80</u>	<u>30</u>	<u>110</u>

<sup>a</sup>The vote represents 99 percent of the total of 273 employees. Two employees were "sick" and did not vote.

<sup>b</sup>A vote to continue was only taken in the first 3 departments. Management foresaw the possibility of other departments voting to discontinue which would have created immense coordination and administration problems. Because of this, management decided against further voting on continuance. There were no significant complaints from employees.

Source: Prepared by the author.

of car pools and the absence of public transportation to the work site under the new hours were the main reasons for the "no" vote. Management resolved each problem to the satisfaction of the employee.

#### Holiday Problems

The vice-president of production decided to phase-in the restructured workweek so that the organization could learn and thus minimize possible errors in other departments. After the first department's experience, problems did appear. The most significant was the holiday question. No prior planning was done to determine the basis for holiday compensation, whether 8 hours or 9.5 hours. Also, plans did not include provisions for holidays falling on various days of the week. The holiday question was resolved after introduction of the rearranged workweek. The decision on the holiday problem is presented below:

1. If a holiday falls on a Monday or if it falls on Sunday and is celebrated on Monday, the employees are paid 8 hours at straight time for the holiday but the schedule for the week is changed so that Friday of such a week is a regularly scheduled workday.
2. If a holiday falls on Friday or if it falls on Saturday and is celebrated on Friday, the employees

are paid 8 hours straight time for the holiday but the schedule for such a week is not changed.

3. If a holiday falls on Tuesday, Wednesday, or Thursday, employees are paid 8 hours straight time for the holiday and no change is made in the weekly schedule.

Initial planning failed to consider the 5 Monday holidays designated by the Federal Government.<sup>2</sup> Because too much productive time would have been lost, the decision was made to designate Friday of such a week as a regular workday. The results of the decision are summarized in Table 12 on page 95, based on the 1971 calendar.

Since a Friday is added as a workday when a holiday falls on a Monday, no hours off are indicated. The 2-hour reduction in the workweek is based on a 46-week year (46 x 2 = 92 hours off). While the employee works 38 hours per week, his gross pay, after considering overtime for all hours over 8 hours per day, is equivalent to working 41 straight time hours. Thus, each employee on a restructured workweek is paid for 138 equivalent straight time hours per year without regard to actual time worked.

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<sup>2</sup>Holidays - Observance on Mondays, U.S. Code, Vol. V, sec. 6103a (1968). The 5 holidays are Washington's Birthday, Memorial Day, Labor Day, Columbus Day, and Veteran's Day.

TABLE 12

## THE EFFECT OF HOLIDAYS IN REDUCED WORKWEEKS

	<u>Hours Off</u>	<u>Hours Paid</u>
<u>5-Day, 40-Hour Workweek</u>		
8 Holidays	<u>64</u>	<u>64</u>
<u>4-Day, 38-Hour Workweek</u>		
5 Monday Holidays	--	40
1 Thursday Holiday	9.5	8
2 Friday Holidays	--	16
2 Hour Reduction in Workweek	<u>92</u>	<u>138</u>
Total: 4-Day Workweek	<u>101.5</u>	<u>202</u>
Difference: 5-Day Versus		
4-Day Workweek	<u>37.5</u>	<u>138</u>

Source: Prepared by the author.

Improper planning was reflected in the way "Swirk Day"--a company holiday--was scheduled. The latter was scheduled for a Monday, which meant a Friday had to be added to the workweek. Many employees resented this since, in effect, the time had to be made up.

### Minor Problems

Minor problems also presented themselves. Examples are presented below.

1. Should jury duty pay be determined on a 9.5 or 8-hour day? Daily jury duty pay was treated the same as holiday pay, that is, it was based on an 8-hour day.

2. Feeder departments which were not on the 4-day workweek were pressured at times to provide work for the fabricating departments. Interviews revealed that sufficient lead time was not given to the feeder departments when the restructured workweek was initiated. As other production departments converted, proper lead time was included in the planning. Usually, overtime was scheduled for the feeder departments. Feeder departments were not included in the conversion because the work in these departments requires consistent standing and a considerable amount of exertion. The production vice-president reasoned that additional daily hours would result in fatigue which could seriously hamper the conversion in the fabricating departments.

3. Suppliers were told of the conversion and no significant problems developed. Normal supply problems continued. Warehousing and work in process did not present any space problems. Shipping and receiving departments remained on a 5-day schedule. Customer shipping requirements and "quick order" requests made such a schedule mandatory. However, some discussion was given to converting shipping and receiving to a restructured workweek based on staggered schedules in order to provide 5-day coverage.

4. Machine maintenance personnel were not scheduled for the restructured workweek. A minimal number of machine maintenance employees was available to take care of any problems on an overtime basis. No significant problems developed. Friday was utilized as a day for preventive maintenance and major repairs. The firm's accountants did not anticipate any changes in depreciation rates as a result of the extended utilization of equipment and facilities. Also, the extended workday did not necessitate the need for more durable equipment or tooling.

5. Employees were not given any additional break time, which remained the same, that is, 10 minutes in the morning and in the afternoon. Thus, total weekly available productive time per employee dropped from 2,300 minutes for a 5-day week to 2,200 minutes for a 4-day week.

6. If overtime was needed on the fifth day, premium rates were paid only after the full schedule of 38 hours per week was worked.

### An Appraisal of the Managerial Role

An appraisal of the planning activities will be made based on the steps in planning as discussed by Koontz and O'Donnell.<sup>3</sup> The authors indicate that the logical planning steps are:

1. Being aware of opportunity.
2. Establishing objectives.
3. Establishing premises.
4. Determining alternative courses of action.
5. Evaluating alternative courses of action.
6. Selecting a course of action or the decision.
7. Formulating derivative plans.

### Awareness of Opportunity

The president through his reading of current periodicals became aware of the satisfaction that employees in other firms were deriving from the block leisure time associated with the 4-day workweek. Because of the company's traditional concern for the human resource, the president perceived the

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<sup>3</sup>Harold Koontz and Cyril O'Donnell, Principles of Management (New York: McGraw-Hill Book Company, Fourth Edition, 1968), pp. 94-98.

4-day workweek as a means of providing increased satisfaction for the employees. Since they had not recently received a wage increase, the president wanted to integrate such an increase with the conversion plan. He also realized that the Swirk Company's adoption of a rather unique work schedule would contribute to the firm's reputation as a leader in the industry.

### Objectives

The primary objective was to provide the employees with increased satisfaction by utilizing the 4-day workweek. Other objectives were associated with the plan, namely, the desire to increase the level of compensation and enhance industry leadership.

### Premises

The Swirk Company relied primarily on reports in periodicals as the basis for various assumptions concerning the 4-day workweek. Management assumed that employees would react favorably to a rearranged workweek, and that labor productivity would at least remain the same. It was also assumed that turnover rates, absenteeism, and tardiness would be improved.

Certain variables were assumed to be constant, namely, number of holidays, holiday compensation, jury duty pay, and coordination.

### Determining Alternatives

Various alternatives were considered in regard to the daily schedule of hours. However, no brainstorming or buzz sessions were utilized to generate ideas. In fact, the planning process was limited to the president and vice-president of production. Both were primarily involved in all planning that took place; thus other members of the management team were excluded.

While various alternatives were examined to determine the actual length of the workday, no consideration was given to the possible schedule variations that could occur in conjunction with different daily workweek schedules--that is, Monday through Thursday or Tuesday through Friday.

### Evaluating Alternatives

Evaluation of alternatives was very subjective. No objective or quantified criteria for evaluation were established. The managers involved did not try to obtain information concerning the relationship between productivity and daily hours of work. Also, no criteria were established to evaluate the progress and success of the plan to convert. Such criteria would be necessary for a control system. Rather than have objective criteria for evaluation, subjective judgments were used.

An employee vote was used as the basis for making the decision "to try" and "to continue" the 4-day workweek.

#### Selection of an Alternative

The 4-day, 38-hour schedule was selected, based on subjective judgments which considered the following items:

1. The decrease in weekly hours would result in an hourly rate increase.
2. While daily hours were increased, it was management's hope that the decrease in total weekly hours would indicate management's concern for the employees' welfare.

#### Derivative Plans

The discussion of derivative plans which follows is essentially based on interviews with various levels of managers.

Interviews with managers at all levels revealed dissatisfaction with the planning process. The main criticism was that primary planning was restricted to 2 top managers, that is, the president and the vice-president of production.

All levels of managers indicated that the minimal communications regarding the 4-day workweek were essentially from the top to lower levels, but only after planning was accomplished. Then appeals were made upward by first-line supervisors.

First-line supervisors indicated that they wanted to become involved in the decision-making process. Most declared that such involvement would have resulted in a better understanding of the reasons for utilization of a restructured workweek, and thus a more enthusiastic attitude toward implementation.

Also, first-line supervisors felt that top management could have prepared them more effectively to respond to some of the adverse criticism given by employees prior to and after installation.

Interviews with the president indicated that he considered lower level managers to be competent in planning and decision-making, and that he believed in delegating authority to all levels of management. However, when given the opportunity to practice delegation, he failed to do so. Perhaps the president did not delegate because of the absence of specific sub-goals.

In fact, all managers involved in the production activity, including the vice-president of production, indicated in interviews that goals and job requirements were never written or clearly defined. Thus, ambiguity existed in conjunction with the roles of managers' activities. First-line production supervisors revealed that they became frustrated because direct and relevant answers to employee questions

could not be given. This inability to show upward influence in the management system reduced the effectiveness of the supervisors in the implementation and utilization of the re-structured workweek. The supervisors' role became further clouded when they were not allowed to participate in the interviews of the individuals who voted "no" for continuation.

As a result, contributions by first-line supervisors were minimal and a significant management resource was not used in a manner that could have promoted and encouraged cooperative effort in the desired direction.

#### Coordination

Initially, serious coordination problems occurred in the feeder departments and P-1, the first fabricating department to utilize the 4-day workweek. Production control was not involved in the planning and sufficient material inputs were not available in P-1 during the first week of conversion. Furthermore, both the vice-president of administration and the personnel manager thought that the holiday question could have received more attention from staff members specializing in such matters if their roles had been clearly defined.

### Motivational Implications

In 1957, Georgopoulos, Mahoney, and Jones reported on a path-goal approach to productivity.<sup>4</sup> The path-goal hypothesis was stated in the following manner: "If a worker sees high productivity as a path leading to the attainment of one or more of his personal goals, he will tend to be a high producer. Conversely, if he sees low productivity as a path to the achievement of his goals, he will tend to be a low producer."<sup>5</sup>

House summarizes the broad class of expectancy theory of motivation by stating:

The central concept of expectancy theories is that the force on an individual to engage in a specific behavior is a function of (1) his expectations that the behavior will result in a specific outcome; and (2) the sum of the valences, that is, personal utilities or satisfactions, that he derives from the outcome . . . According to this theory of motivation, an individual chooses the behaviors he engages in on the basis of (1) the valences he perceives to be associated with the outcomes of the behavior under consideration; and (2) his subjective estimate of the probability that his behavior will indeed result in the outcomes.<sup>6</sup>

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<sup>4</sup>Basil Georgopoulos, Gerald Mahoney, and Nyle Jones, Jr., "A Path-Goal Approach to Productivity," Journal of Applied Psychology, XLI (December, 1957), 345-353.

<sup>5</sup>Ibid., 346.

<sup>6</sup>Robert J. House, "A Path Goal Theory of Leader Effectiveness," Administrative Science Quarterly, XVI (September, 1971), 322.

Initiating changes in the work schedule can be interpreted to be an integration of personal and organizational goals that results in higher motivation to produce. The higher motivation can be measured by positive changes in labor productivity.

In this research, organizational effectiveness was measured by absenteeism, tardiness, turnover and attitudes as each related to the organizational goal of employee satisfaction (see Chapter I). Productivity also measures organizational effectiveness.

Management, in essence, initiated a change in the working schedule in order to allow the employee to achieve what management believed to be a desirable personal goal of the employee. Such action was consistent with the organizational objective of having satisfied employees. Management was also concerned with objectives such as fair compensation and productivity. It reduced weekly working hours to a level that it thought would provide no deterioration in previous levels of output, and would also increase gross pay.

Critical questions present themselves in conjunction with motivational expectation theory and management's decision, namely:

1. Would the employee desire the rearranged allocation of leisure time?

2. Would the employee realize that productive performance is related to the achievement of the personal goal of rearranged allocation of leisure time?
3. Would management provide an uninhibited path to the goal?

Dr. Justin Voss, who testified at the Department of Labor hearings on the exemption of 4-day companies from overtime provisions of the Walsh-Healey Act, provides significant insights into the first 2 questions stated above. The following information is based on his testimony.<sup>7</sup>

1. Consumers spend from 2 resource budgets, namely, a time budget and a money budget.
2. As incomes grow, consumers place more value on time budgets.
3. Such a value inversion occurs because some commodities require consumers to spend time as well as money.
4. Consumers have been expressing preferences for purchases that require spending larger amounts of time, that is, traveling and recreational activities. (Between 1965 and

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<sup>7</sup>U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Proposed Adoption of a Four-Day, Forty-Hour Workweek, Without Payment of Time and One-Half Overtime Compensation For Work Days Exceeding Eight Hours, Hearings, (Washington, D.C.: Wage and Hour Publication No. 1357, September, 1971), pp. 53-75.

1969, it is estimated that the leisure industry has grown by 42 percent.)

5. Demand factors by themselves do not account for the resource inversion, that is, the desire for leisure time rather than money.

6. Employers are prime suppliers of leisure time.

7. In this century, workers have taken productivity increases in the form of income and added leisure (67 and 33 percent respectively).

- a. However, since 1947, workers have not been given significant increases in leisure time.
- b. From 1870 to 1970, workers have gained approximately 800 hours in leisure time. Most of this (675 hours or 85 percent) comes from a shorter workweek. About 70 hours were added through paid vacations and another 45 hours through paid holidays.
- c. From 1960 to 1970, the worker gained approximately 50 hours of leisure time. This increase resulted from changes in the workweek (30 hours), paid vacations (15 hours), and paid holidays (4 hours).
- d. Thus, it is important to realize that recently the trend toward increases in leisure hours has

been slowing down. In addition, workers have chosen to take their leisure in block time (paid holidays and vacations) rather than shorter workweeks.

8. One strong implication of the 4-day studies is that workers prefer a 4-day workweek and are willing to be more productive in order to get it.

9. Working behavior can be explained in the following manner: the 4-day week produces block time and workers today prefer their leisure time in blocks. Since employees prefer block time and the only means of obtaining it is from the employer, they are willing to increase productivity to achieve their goal.

This conclusion is verified by responses to the questionnaire administered during January, 1972 (see Appendix D, beginning on page 219). Employees, when asked why they choose the 4-day workweek, consistently replied that they like the Friday off.

There is reason to believe that the force which is acting on the employee is a function of his expectation that the behavior (increased productivity) will result in a specific outcome (more leisure time in blocks), and that the block time preference results in satisfaction that is greater than utilities associated with other possible outcomes.

The managers initiated a change in the workweek and permitted employees to accept or reject it. Also, management did not impede the path to increased productivity. In fact, a monetary incentive was added in the form of overtime payments for daily hours exceeding 8, which resulted in increases in gross pay. However, as discussed later in Chapter V, most employees did not perceive the pay as increasing. Thus, the employee preference was clearly a desire for blocks of leisure time.

### Leadership

Filley and House state that "there seems to be little data to question the proposition that the combination of highly supportive and instrumental behavior will result in effective group operations."<sup>8</sup>

Leadership research has focused on 2 aspects of leader behavior: leader consideration and initiating structure, which Filley and House describe as supportive and instrumental respectively.

Fleishman and Harris define the terms as follows:

Consideration includes behavior indicating mutual trust, respect, and a certain warmth and rapport between the supervisor and his group. This does not mean that this dimension reflects a superficial "pat-on-the-back", first

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<sup>8</sup>Alan C. Filley and Robert J. House, Managerial Process and Organizational Behavior (Glenview, Ill.: Scott, Foreman and Company, 1969), p. 415.

name calling kind of human relations behavior. This dimension appears to emphasize a deeper concern for group members and includes such behavior as allowing subordinates more participation in decision making and encouraging more two-way communication.

Structure includes behavior in which the supervisor organizes and defines group activities and his relation to the group. Thus, he defines the role he expects each member to assume, assigns tasks, plans ahead, establishes ways of getting things done, and pushes for production. This dimension seems to emphasize overt attempts to achieve organizational goals.<sup>9</sup>

House says that a current review of leadership research reveals:

. . . Leaders who initiate structure for subordinates are generally rated highly by supervisors and have higher producing work groups than leaders who are low on initiating structure; and that leaders who are considerate of subordinates have more satisfied employees . . . However, the evidence with respect to the relationship between initiating structure and satisfaction of subordinates is very mixed.<sup>10</sup>

Thus far, the analysis of the firm's managerial activities in introducing the 4-day workweek reveals the absence of initiating structure for middle and first-line managers. No sub-goals were established; tasks were not defined. As a result, the lower level managers could not plan for a more efficient conversion.

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<sup>9</sup>Edwin A. Fleishman and Edwin F. Harris, "Patterns of Leadership Behavior Related to Employee Grievances and Turnover," Personnel Psychology, XV (Spring, 1962), 43-44.

<sup>10</sup>House, A Path Goal Theory, p. 321.

The top 2 managers involved in the planning process did engage in some form of instrumental behavior: that is, planning did take place with regard to the employees. Also, consideration was practiced to a great extent. The president did have a deep concern for group members and he did allow employees full participation in the decision-making process by voting. However, middle and first-line managers were not involved in the decision-making process, and communications were minimal.

#### Chapter Summary

Within a rather short period of time, a conversion plan was utilized which proved successful. Management did engage in planning behavior with some deficiencies. One significant deficiency was present, that is, the absence of involvement of managers other than the president and vice-president of production. If participative management were practiced, better results would have been forthcoming. Also, first-line supervisors thought that involvement and better communications would have permitted them to implement the rearranged workweek more effectively.

In essence, no formal sub-goals existed in conjunction with the utilization of the 4-day workweek. Job requirements were not formalized. All levels of management indicated that performance was hampered by their inability to determine what

was expected of them. The ambiguity resulted in an uncoordinated plan which lacked the contributions of middle and first-line managers.

Since no delegation of authority took place, no control system was established by the 2 planners for lower levels of management. However, the 2 planners did not establish any criteria. Subjective judgments were utilized to determine the successes or failures of the conversion plan.

The success of the conversion can be explained by expectancy motivation theory. Individual productivity is a function of motivation to produce. In turn, motivation to produce depends upon the particular needs of an individual as reflected in the goals toward which he is moving, and the individual's perception regarding the relative usefulness of productivity behavior as a path to the attainment of the goals.

Analysis of gains in leisure time by Dr. Justin Voss indicates that employees prefer leisure time in blocks. Employee responses to questionnaires verify this fact. Since management enabled employees to obtain their goal by restructuring the workweek, the employees linked their productivity behavior with the goal they desired and moved toward that goal by increasing labor productivity. Management did not impede the path in any way. In fact, management encouraged productive behavior by increasing gross pay.

A democratic climate was established by having the employees vote "to try" and "to continue" utilization of the restructured workweek.

However, the president did not practice general supervision. He made minimal use of the management resource.

## CHAPTER IV

### MEASURES OF ORGANIZATIONAL EFFECTIVENESS

Various measures will now be used to determine the effect of the 4-day workweek on organizational effectiveness. The items to be investigated in this chapter are before and after measures of labor cost, productivity, absenteeism, labor turnover and tardiness, as each of these applies to the first 6 fabricating departments. The discussion on attitudes presents a before and after measure of employee satisfaction in fabricating department P-7. The latter department was the only production unit where before and after measures of attitudes could be taken because the other fabricating departments were already utilizing the 4-day workweek when this study began. The after measures of the attitudes of the employees in the first 6 fabricating departments will be presented in Chapter V.

### Summary of Production Aspects

A summary of the critical production factors already mentioned in Chapter III, is presented below.

1. Production personnel number 409.
2. Production employees associated with the 4-day workweek number 273 or 67 percent of the total.
3. Most jobs (95 percent) are piecework.
4. Prior to conversion, the workweek and hours of work were 5 days, 40 hours (8 hours per day, from 7:30 A.M. to 4:00 P.M., with a half hour for lunch). After conversion the workweek was 4 days, 38 hours. Daily hours were 7:00 A.M. to 5:00 P.M., with a half hour for lunch.
5. The restructured workweek provided for the payment of overtime for all hours over 8 hours per day, and for all hours over 38 per week.
6. Total scheduled productive time per week prior to conversion amounted to 2,300 minutes or 38.3 hours. After conversion, comparable time was 2,200 minutes or 36.7 hours.

### Measures of Effectiveness

The measures of effectiveness are:

1. Labor cost.
2. Productivity.

3. Absenteeism.
4. Turnover.
5. Tardiness.
6. Attitudes.
7. Profits.
8. Return-on-investment.

### Labor Cost

Table 13 on page 117 presents labor data for the fabricating departments. Hours involved in comparable periods show a total decrease of 4,667. However, due to the payment of overtime, payroll cost increased by \$1,794. Thus, employees were spending less hours working and were actually obtaining higher wages. Overtime increased by 19,890 hours but was offset by a decrease of 24,557 in straight time hours. The increase in overtime compensation resulted from the change in the method of calculating gross pay (overtime for all hours exceeding 8 hours per day).

### Productivity

Tables 14 and 15 on pages 118 and 119 present various labor productivity calculations for fabricating departments in 1970 and 1971. Comparable time periods were utilized for both years. Data for 1970 relate to the previous 5-day, 40-hour workweek, while the data for 1971 relate to the 4-day, 38-hour workweek after conversion.

TABLE 13

LABOR DATA: FABRICATING DEPARTMENTS  
COMPARABLE PERIODS - 1970 and 1971

	<u>1970</u>	<u>1971</u>
Average Hourly Rates	<u>\$2.73</u>	<u>\$2.86</u>
Total Gross Payroll	<u>\$317,960</u>	<u>\$319,754</u>
Overtime Hours Worked	14,796	34,686
Straight-Time Hours Worked	<u>101,673</u>	<u>77,116</u>
Total Hours	<u>116,469</u>	<u>111,802</u>

Source: Prepared by the author.

TABLE 14  
LABOR PRODUCTIVITY IN FABRICATING DEPARTMENTS  
1970

<u>Department</u>	<u>Total Man Hours</u>	<u>Units Produced</u>	<u>Value of Production</u>	<u>Total Payroll Cost</u>	<u>Labor Productivity</u>		
					<u>Units Produced Per Man-Hour</u>	<u>Value of Production Per Man Hour</u>	<u>Value of Production Per Payroll Dollar</u>
P-1	46,772	182,395	\$ 787,107	Not Available	3.9	\$16.83	Not Available
P-2	8,309	39,112	99,432	Not Available	4.7	11.97	Not Available
P-3	18,780	32,399	315,172	Not Available	1.7	16.78	Not Available
P-4	8,413	21,519	220,055	Not Available	2.6	26.16	Not Available
P-5	21,656	38,730	403,083	Not Available	1.8	18.61	Not Available
P-6	<u>12,539</u>	<u>18,544</u>	<u>275,569</u>	<u>Not Available</u>	1.5	21.98	Not Available
Total	<u>116,469</u>	<u>332,699</u>	<u>\$2,100,418</u>	<u>\$317,960</u>	<u>2.9</u>	<u>\$18.03</u>	<u>\$6.61</u>

Source: Prepared by the author.

TABLE 15  
LABOR PRODUCTIVITY IN FABRICATING DEPARTMENTS  
1971

<u>Department</u>	<u>Total Man Hours</u>	<u>Units Produced</u>	<u>Value of Production</u>	<u>Total Payroll Cost</u>	<u>Labor Productivity</u>		
					<u>Units Produced Per Man-Hour</u>	<u>Value of Production Per Man-Hour</u>	<u>Value of Production Per Payroll Dollar</u>
P-1	43,200	195,942	\$ 860,271	Not Available	4.5	\$19.91	Not Available
P-2	9,625	54,651	154,651	Not Available	5.7	16.07	Not Available
P-3	15,187	28,796	287,259	Not Available	1.9	18.91	Not Available
P-4	10,309	22,975	239,672	Not Available	2.2	23.25	Not Available
P-5	23,560	44,195	447,275	Not Available	1.9	18.98	Not Available
P-6	<u>9,921</u>	<u>15,359</u>	<u>186,204</u>	<u>Not Available</u>	1.5	18.77	Not Available
Total	<u>111,802</u>	<u>361,918</u>	<u>\$2,175,332</u>	<u>\$319,754</u>	<u>3.2</u>	<u>\$19.46</u>	<u>\$6.80</u>

Source: Prepared by the author.

Changes in Product-Mix, Prices and Technology. Investigation of product-mix changes between 1970 and 1971 revealed various changes in designs but, in the opinion of the manager of industrial engineering, none significantly influenced labor standards. Also, investigation of confidential price listings revealed minor adjustments in price. Some increased, some decreased. The vice-president of marketing indicated that the effect of design changes and related influences on price were minimal. Also, the market was too competitive to allow for raising prices significantly. No technological changes took place in production activities during the time periods under investigation. Thus, the 2 time periods are essentially comparable.

Labor Productivity. Tables 14 and 15 on pages 118 and 119 indicate that for the time periods under consideration total units produced as well as total value of production increased, while total man-hours utilized decreased, thus producing an overall increase in labor productivity. The decrease in total man-hours occurred as a result of an increase in the separation rate (see Table 19 on page 128). The separations were primarily due to attrition. Accessions were minimal due to the recession aspects of the economy and the industry. Nevertheless, production was not curtailed even with the recession aspects because of the company's policy of

providing steady work and producing for inventory during recession.

As indicated in Table 16 on page 122, all 3 measures of total labor productivity showed increases. This was true in all departments except P-4 and P-6. The decrease in value of production per man-hour in P-6 is due to the fact that some of this department's labor force was being utilized to produce products for another department, P-7. The value was being reported in P-7 and the labor hours were being absorbed by P-6. Investigation of production reports did not reveal data that could be directly related to this work, thus proper adjustments could not be made. The productivity decrease in P-4 was slight but real. Absenteeism in the department could be the reason for the decrease (see the discussion beginning on page 126).

Adjustment Period. As indicated previously, overall productivity for the 6 fabricating departments did increase. However, it was the opinion of the vice-president of production that a 4-week adjustment period was necessary before increases in productivity could be expected.

Table 17 on page 123 presents total labor productivity data for comparable periods in 1970 and 1971. The data classifies the time periods for each year into the "first 4 weeks" and "remaining period."

TABLE 16  
SUMMARY: LABOR PRODUCTIVITY

	<u>Units Produced Per Man-Hour</u>	<u>Value of Production Per Man-Hour</u>	<u>Value of Production Per Payroll Dollar</u>
1970	<u>2.9</u>	<u>\$18.03</u>	<u>\$6.61</u>
1971	<u>3.2</u>	<u>\$19.46</u>	<u>\$6.80</u>
Percentage Increase	<u>10 percent</u>	<u>8 percent</u>	<u>3 percent</u>

Source: Prepared by the author.

TABLE 17  
 PRODUCTIVITY DATA: FIRST 4  
 WEEKS VERSUS REMAINING  
 PERIOD OF TIME  
 1970 - 1971

	1970				
	<u>Value of Production</u>	<u>Units Produced</u>	<u>Total Man-Hours</u>	<u>Value of Production Per Man-Hour</u>	<u>Units Produced Per Man-Hour</u>
First 4 Weeks	\$ 807,997	125,663	44,860	\$18.01	2.8
Remaining Period	<u>1,292,421</u>	<u>207,036</u>	<u>71,609</u>	\$18.05	2.9
Total	<u>\$2,100,418</u>	<u>332,699</u>	<u>116,469</u>	<u>\$18.03</u>	<u>2.9</u>
	1971				
First 4 Weeks	\$ 830,013	133,486	46,014	\$18.04	2.9
Remaining Period	<u>1,345,319</u>	<u>228,432</u>	<u>65,788</u>	\$20.45	3.5
Total	<u>\$2,175,332</u>	<u>361,918</u>	<u>111,802</u>	<u>\$19.46</u>	<u>3.2</u>

Source: Prepared by the author.

Value of production per man-hour during 1970 is between \$18.01 and \$18.05, with the first 4 weeks being lower than the remaining period of time. The 1971 range for the same labor productivity measure is \$18.04 and \$20.45, with a larger value per man-hour in the remaining period. Labor productivity continued approximately at the same level experienced in 1970 for the first 4 weeks of 1971. The labor productivity measure increased by \$2.41 for the remaining period of 1971.

When units produced per man-hour is used as a measure of productivity, favorable results are indicated. The first 4 weeks of the rearranged workweek produced results similar to a corresponding period of 1970, that is, 2.9 units per man-hour versus 2.8 to 2.9 in 1970. However, the remaining period of 1971 shows an increase of .6 units produced per man-hour.

It appears that the vice-president of production was correct in estimating the period of adjustment. However, a more detailed analysis by week or day would be necessary in order to substantiate the adjustment period. In fact, some workers indicated that their productivity on Monday was increased because they were well rested.

It is interesting that productivity did not decrease during the initial stages of the 4-day workweek. Perhaps the motivation to produce was linked to the desire for block leisure time rather early and as a result no decrease occurred.

Fatigue was cited by many employees as a possible problem that could hurt productivity. Interviews with first-line supervisors revealed that the fatigue question was raised when the plan for the 4-day workweek was communicated to the workers. Such anxieties proved unfounded; analysis indicates that labor productivity did increase after a period of utilization and beyond the levels experienced in 1970.

At the overtime hearings in September, Dr. Voss suggests that fatigue does not have an adverse effect on productivity because workers in general consider the extended workday as a form of exercise.<sup>1</sup>

Quality and Safety. Quality of the products was not damaged by the 4-day workweek. Quality was measured by the percent of acceptances made by inspectors. The rates were 98.1 and 98.5 for 1970 and 1971 respectively. Investigation of scrap rates, rework, customer complaints, and returns and allowances reveals no significant changes.

Reports on the firm's safety program revealed that no adverse effects resulted from extended daily hours. This result was verified in interviews with the company nurse.

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<sup>1</sup>U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Proposed Adoption of a Four-Day, Forty-Hour Workweek Without Payment of Time and One-Half Overtime Compensation For Work Days Exceeding Eight Hours, Hearings, (Washington, D.C.: Wage and Hour Publication No. 1357, September, 1971), p. 64.

### Absenteeism

Table 18 on page 127 indicates that the total number of absences declined from 755 in 1970 to 536 in 1971, dropping from 4.7 percent in 1970 to 4.4 in 1971. Discussions with workers and first-line supervisors indicate that too much money is lost if an absence occurs; thus individuals are provided with a monetary incentive to come to work. All departments except P-4 experienced a decrease in the number of absences. Departments P-1 and P-4 show an increase in the rate of absenteeism. Even though the number of absences decreased in P-1, the rate increased. This resulted from the fact that the absolute decrease was not sufficient to offset the decrease in total possible hours resulting from the 4-day, 38-hour workweek. The rise in absenteeism in P-4 was caused by sickness and was not related to the restructured workweek. Also, marginal workers had been transferred into the department; sufficient output was not forthcoming and productivity dropped.

### Turnover

Data presented in Table 19 on page 128 indicate that separations increased while accessions decreased for comparable periods between 1970 and 1971. Exit interviews revealed that those who left did so because of reasons not related to the 4-day workweek. In many instances they were indifferent

TABLE 18

## ABSENTEEISM IN FABRICATING DEPARTMENTS

<u>Department</u>	<u>Number of Absences</u>		<u>Equivalent Hours Absent</u>		<u>Total Possible Hours</u>		<u>Percent Absent</u>	
	<u>1970</u>	<u>1971</u>	<u>1970<sup>a</sup></u>	<u>1971<sup>b</sup></u>	<u>1970<sup>c</sup></u>	<u>1971<sup>d</sup></u>	<u>1970</u>	<u>1971</u>
P-1	312	252	2,496	2,394	49,840	44,574	5.0	5.4
P-2	21	16	168	152	8,920	9,614	1.9	1.6
P-3	135	78	1,080	741	21,680	16,036	5.0	4.6
P-4	60	67	480	637	9,720	10,754	4.9	5.9
P-5	107	64	856	608	24,000	23,294	3.6	2.6
P-6	<u>120</u>	<u>59</u>	<u>960</u>	<u>561</u>	<u>14,360</u>	<u>10,298</u>	6.7	5.4
Total	<u>755</u>	<u>536</u>	<u>6,040</u>	<u>5,093</u>	<u>128,520</u>	<u>114,570</u>	<u>4.7</u>	<u>4.4</u>

<sup>a</sup>Number of absences times 8 hours.

<sup>b</sup>Number of absences times 9.5 hours.

<sup>c</sup>Based on average number of employees and a 5-day, 40-hour week.

<sup>d</sup>Based on average number of employees and a 4-day, 38-hour week.

Source: Prepared by the author.

TABLE 19  
 TURNOVER IN FABRICATING DEPARTMENTS

	<u>Monthly Average Number of</u>		<u>Turnover Rates Per Month</u>	
	<u>Accessions</u>	<u>Separations</u>	<u>Accessions</u>	<u>Separations</u>
1970	<u>21</u>	<u>12</u>	<u>6.4</u>	<u>3.7</u>
1971	<u>5</u>	<u>15</u>	<u>1.7</u>	<u>4.9</u>
	<u>Industry Data</u>			
1970	Not Available		<u>5.8</u>	<u>6.5</u>
1971	Not Available		<u>5.8</u>	<u>5.2</u>

Source: Prepared by the author.

to the restructured workweek and left because better paying jobs were available elsewhere. Even though the firm had received considerable publicity, job applicants generally did not know that the firm was using the 4-day workweek. Thus, it would appear that obtaining a job during a period of depressed economic activity was more important than the length of the workweek. It should be noted that the firm's turnover rates are generally better than those in the industry. This again is another indication of a successful approach to the management of the human resource.

#### Tardiness

The data in Table 20 on page 130 indicate that tardiness has not been a significant problem. It was .15 percent in 1970 versus .10 percent in 1971. Incidents of tardiness decreased by 26, and the average hours lost per incident decreased by .23 hours. Most of the improvement can be attributed to the employees' realization that lateness reduces productive time and gross pay.

#### Attitudes

The following discussion is based upon "before" and "after" interviews of employees in fabricating department P-7. Since all other fabricating departments were already utilizing the 4-day workweek, no "before" measures could be

TABLE 20  
TARDINESS IN FABRICATING DEPARTMENTS

	<u>Number of Tardy Incidents</u>	<u>Hours Lost</u>	<u>Total Possible Hours</u>	<u>Percent Tardy</u>	<u>Average Hours Lost Per Incident</u>
1970	<u>281</u>	<u>190</u>	<u>128,520</u>	<u>.15</u>	<u>.68</u>
1971	<u>255</u>	<u>115</u>	<u>114,570</u>	<u>.10</u>	<u>.45</u>

Source: Prepared by the author.

obtained. Department P-7 was the last fabricating department scheduled for the conversion.

Interviews. Approximately 28 employees were involved in the interviews which took 20 minutes each. Appendices B and C, beginning on pages 207 and 212 respectively, contain the interview format. The "before" measure was taken in June, 1971, and the "after" in September, 1971. The department had been on the 4-day workweek for 5 weeks when the "after" measure was taken.

To compare responses for identical people, 2 workers from the "before" group were omitted. One had retired and the other had quit. Both were female and in favor of the 4-day workweek. The 2 employee replacements and 3 additional new employees were eliminated from the "after" measures.

Characteristics of Group. Table 21 on page 132 presents the composition of the group. It was primarily female (81 percent) with an age range primarily between 51 and 60.

A long employment period is characteristic of the department's employees. Most (88 percent or 23 employees) were employed by the company for 20 to 25 years. The remainder (3 employees) were spread equally among the 5 to 10, 11 to 15, and 16 to 20 years of service groupings.

The educational level is below high school.

TABLE 21  
 CHARACTERISTICS OF EMPLOYEES IN  
 DEPARTMENT P-7

	Sex		
	Males	Females	Total
Number	<u>5</u>	<u>21</u>	<u>26</u>
Percentage	<u>19</u>	<u>81</u>	<u>100</u>
	Age		
	Frequency of Response	Percent of Total	
Under 30	2	8	
30-40	3	12	
41-50	7	26	
51-60	11	42	
Over 60	2	8	
No Response	<u>1</u>	<u>4</u>	
Total	<u>26</u>	<u>100</u>	

Source: Prepared by the author.

Results of Interviews. Table 22 on page 134 indicates that employees' attitudes change favorably toward the 4-day workweek over a period of time. At first, 62 percent of the employees opposed the concept. However, when the vote was taken for a possible trial period, 54 percent voted to implement the 4-day workweek. Interviews 5 weeks after conversion indicate that 50 percent of the workers favored the restructured workweek. A measure taken in January, 1972, in the same department, showed that 72 percent favored continuance of the 4-day workweek.

There is some degree of consistency indicated by the data presented in Table 23 on page 135. The results are derived from answers to the question, "What would best describe your feelings about the 4-day workweek?" Before conversion, employees tended to dislike the 4-day workweek (see Table 22 on page 134). After conversion, attitudes appear to change in a favorable direction, as summarized in Table 24 on page 136.

It should be noted that all 5 male employees consistently favored the 4-day workweek.

Female employees gave the following negative reactions to the idea of a 4-day workweek:

1. Fatigue will be great.
2. Cruel.

TABLE 22

## DEPARTMENT P-7'S ATTITUDE TOWARDS THE 4-DAY WORKWEEK

	<u>Before</u>				<u>After</u>			
	Utilization of 4-Day Workweek				Conversion to 4-Day Workweek			
	Did you favor the 4-day week when you first heard about it?		At this time do you favor the 4-day workweek?		Results of Actual Vote To Try		At this time do you favor the 4-day workweek?	
	<u>Fre-</u> <u>quency</u>	<u>Percent-</u> <u>age</u>	<u>Fre-</u> <u>quency</u>	<u>Percent-</u> <u>age</u>	<u>Fre-</u> <u>quency</u>	<u>Percent-</u> <u>age</u>	<u>Fre-</u> <u>quency</u>	<u>Percent-</u> <u>age</u>
Yes	10	38	11	42	14	54	13	50
No Opinion	0	0	0	0	0	0	1	4
No	<u>16</u>	<u>62</u>	<u>15</u>	<u>58</u>	<u>12</u>	<u>46</u>	<u>12</u>	<u>46</u>
Total	<u>26</u>	<u>100</u>	<u>26</u>	<u>100</u>	<u>26</u>	<u>100</u>	<u>26</u>	<u>100</u>

Source: Prepared by the author.

TABLE 23

VERIFICATION OF DEPARTMENT P-7's ATTITUDE  
TOWARD THE 4-DAY WORKWEEK

<u>Remarks</u>	<u>Before</u>		<u>After</u>	
	<u>Fre- quency</u>	<u>Percent- age</u>	<u>Fre- quency</u>	<u>Percent- age</u>
Pleased or Very Pleased	10	38	13	50
Indifferent	0	0	0	0
Displeased or Very Displeased	13	50	13	50
No Opinion	<u>3</u>	<u>12</u>	<u>0</u>	<u>0</u>
Total	<u>26</u>	<u>100</u>	<u>26</u>	<u>100</u>

Source: Prepared by the author.

**TABLE 24**  
**SUMMARY OF ATTITUDE CHANGE**  
**IN DEPARTMENT P-7**

<u>Date and Remarks</u>	<u>Percentages Favoring</u>	
	<u>Before</u>	<u>After</u>
June - Interviews	38 <sup>a</sup> , 38 <sup>b</sup> , 42 <sup>b</sup>	---
July - Vote to Try	54 <sup>b</sup>	---
August - Installation & Utilization	---	---
September - Interviews	---	50 <sup>a</sup> , 50 <sup>b</sup>
January - Questionnaire	---	72 <sup>c</sup>

<sup>a</sup>From Table 23 on page 135.

<sup>b</sup>From Table 22 on page 134.

<sup>c</sup>From Table 33 on page 159.

Source: Prepared by the author.

3. Commuting during darkness is difficult.
4. Fear of violence on streets after dark.
5. Going back to dark ages.
6. No public transportation.
7. Car pool will not be available.
8. Do not like the manner in which the holidays are being handled.
9. Must get up too early.
10. Get home too late, and have no time to do anything.
11. Supper must be delayed.
12. Obtaining a babysitter will be a problem.
13. If you miss a day's work you lose too much money.
14. Health will deteriorate.
15. Sexual activities will be minimized because of fatigue caused by working long hours.

While all these reasons were mentioned as answers to several questions in the "before and after" interviews, only a few were repeated (numbers 3, 4, 9, 11 and 15) as "anticipated adjustment problems." In fact, 50 percent of the answers to the "anticipated adjustment problems" question in the "before" measure said that "no" problems will exist. Only 25 percent of the "after" responses reported adjustment problems.

The following positive aspects were mentioned in the "before" interviews:

1. More leisure time in one huge block.
2. I can help my wife.
3. I can travel more.
4. Housework can be accomplished on Friday, which will result in a more enjoyable Saturday and Sunday.

The interviews after the conversion revealed additional advantages: quicker commuting time resulting from less congestion; a decrease in commuting cost; increased productivity on Monday since the individual was well rested; it is no longer necessary to be in contact with the boss 5 days a week. The last comment was made by a worker about a first-line supervisor who is generally disliked by the workers.

When employees were initially asked about advantages and disadvantages accruing to the company as a result of a 4-day workweek, the following responses were given:

Advantages

1. Less absenteeism.
2. Less utility cost.
3. More productivity.
4. Less overtime cost.
5. Better profits.

Disadvantages

1. Fatigue will result in less productivity.

Most employees could not state any disadvantages for the company. No employee seemed to recognize that the efficiencies accruing to the company would favorably influence profitability, and employee profit-sharing.

Interviews conducted after conversion revealed the following company disadvantages from the employees' viewpoint:

1. Employees were leaving their work stations earlier than usual in order to "punch out."
2. Break time was being extended beyond the time provided.

Better control on the part of first-line supervisors eliminated both problems.

A "before and after" measure was taken with reference to employees "liking" the company more, the same, or less. Both before and after measures were approximately the same-- that is, most employees "liked" the company "the same" (75 percent before, 73 percent after). Again, a favorable change occurred toward the "more" classification (12 percent before, 14 percent after).

Even though the employees in this department were receiving favorable informal reports from other production departments concerning increases in gross pay, 38 percent still thought that gross pay would remain the same. This is shown in Table 25 on page 140. The after measure shows a

TABLE 25  
DEPARTMENT P-7: ATTITUDE TOWARDS  
CHANGES IN GROSS PAY

<u>Gross Pay Will</u>	Before		After	
	<u>Fre- quency</u>	<u>Percent- age</u>	<u>Fre- quency</u>	<u>Percent- age</u>
Decrease	3	12	3	12
Remain the Same	10	38	10	38
Increase	3	12	13	50
No Response	<u>10</u>	<u>38</u>	<u>0</u>	<u>0</u>
Total	<u>26</u>	<u>100</u>	<u>26</u>	<u>100</u>

Source: Prepared by the author.

significant change in the number of those classified as "no response" in the "before" measure. After conversion, all workers in P-7 did respond to the question related to changes in gross pay. In the after measure, 50 percent of the responses indicated that an increase had occurred, compared to 12 percent in the before measure.

No employee foresaw layoffs resulting from the conversion. All answered the question concerning the possibility of layoffs negatively in both the before and after measure.

Table 26 on pages 142 and 143 indicates that certain activities did increase as a result of the utilization of the 4-day workweek. The most significant increases can be associated with travel and other hobbies. The activities engaged in are rather sedate in nature due to the composition of the group. Only 2 individuals indicated that they were spending more money as a result of the activities engaged in during the restructured workweek. No moonlighting was reported.

All 3 new employees, who were not included in the measures discussed so far, indicated that the 4-day workweek had little to do with their accepting employment. They simply needed a job.

TABLE 26  
LEISURE ACTIVITIES ASSOCIATED WITH  
A 5-DAY AND 4-DAY WORKWEEK

<u>Activity</u>	<u>Number of Responses</u>	
	<u>5-Day Workweek</u>	<u>4-Day Workweek</u>
1. Work around the house	26	26
2. Time with family	22	26
3. Travel	9	20
4. Spectator at sporting events	4	4
5. Fishing and hunting	0	1
6. Participate in athletics	3	3
7. Other hobbies	5	10
8. Read	13	15
9. School	1	1
10. Community affairs	4	4
11. Have another job:		
Full time	0	0
Part time	0	0
12. Social club	9	10
13. Political work	0	0
14. Rest and relax	23	25
15. Swimming and boating	9	10
16. Work on car	1	2
17. Church activities	7	7

(Continued on the next page.)

TABLE 26--Continued

<u>Activity</u>	<u>Number of Responses</u>	
	<u>5-Day Workweek</u>	<u>4-Day Workweek</u>
18. Vacation home - bought or buying	1	1
19. Bored with free time	1	1
20. Visit relatives	23	25
21. Watch television	22	26
22. Attend movies and/or theater	4	4
23. Other (specify)	0	0
Total	<u>187</u>	<u>221</u>

Source: Prepared by the author.

### Profits and Return-On-Investment

It was not possible to obtain detailed data on profits and return-on-investment. However, some implications can be drawn from the available financial data. All data shown in Table 27 on page 145 are for comparable periods for 6 of the 7 fabricating departments. While gross pay increased, the increase was offset by a greater gain in the value of production. The increase in value of production is not due to price increase but an increase in the number of units produced. Also, there was a significant drop of 4,667 in the number of man-hours utilized.

The judgment as to return-on-investment is based on the opinion of a financial manager. The goal is 8 to 12 percent. Actual results based on comparable time periods for 1970 and 1971 indicate a figure within that range. No significant increases or decreases occurred as a result of the restructured workweek.

### Chapter Summary

Table 28 on pages 146 and 147 shows that measures of effectiveness reveal a movement in a positive direction. Efficient utilization of resources is indicated and employees are satisfied. Thus, it would appear that a win-win situation has resulted.

TABLE 27  
SELECTED FINANCIAL AND PRODUCTION DATA

	<u>1970</u>	<u>1971</u>
Total Value of Production	\$2,100,418	\$2,175,332
Less: Total Gross Pay	<u>317,960</u>	<u>319,754</u>
Remainder	<u>\$1,782,458</u>	<u>\$1,855,578</u>
Percent of Remainder to Value of Production	<u>84.9</u>	<u>85.3</u>
Units Produced	<u>332,699</u>	<u>361,918</u>
Man-Hours Utilized	<u>116,469</u>	<u>111,802</u>

Source: Prepared by the author.

TABLE 28  
SUMMARY OF MEASURES OF EFFECTIVENESS

<u>Item</u>	<u>1970</u>	<u>1971</u>
Gross Payroll	<u>\$317,960</u>	<u>\$319,754</u>
Total Hours	<u>116,469</u>	<u>111,802</u>
Units Produced	<u>332,699</u>	<u>361,918</u>
Value of Production	<u>\$2,100,418</u>	<u>\$2,175,332</u>
Units Produced Per Man-Hour	<u>2.9</u>	<u>3.2</u>
Value of Production Per Man-Hour	<u>\$18.03</u>	<u>\$19.46</u>
Product Acceptance Rate-Inspection	<u>98.1</u>	<u>98.5</u>
Value of Production Per Payroll Dollar	<u>\$6.61</u>	<u>\$6.80</u>
Percent Absent	<u>4.7</u>	<u>4.4</u>
Turnover Rates		
Accessions	<u>6.4</u>	<u>1.7</u>
Separations	<u>3.7</u>	<u>4.9</u>
Percent Tardy	<u>.15</u>	<u>.10</u>
Attitudes	Generally, attitudes changed in a positive direction after utilization. This is true for department P-7 and all other production departments.	

(Continued on the next page.)

TABLE 28--Continued

<u>Item</u>	<u>1970</u>	<u>1971</u>
Profits and Return-On-Investment	The restructured workweek did not adversely influence profits and return-on-investment. Profits appear to be slightly improved, while return-on-investment remained within the range sought by the company.	

Source: Prepared by the author.

## CHAPTER V

### EMPLOYEE ATTITUDES AND SATISFACTION

The previous chapter presented before and after comparisons of productivity, profits, return-on-investment, absenteeism, tardiness, and turnover, as related to the dependent variable, organizational effectiveness. The last 3 items are also measures of employee satisfaction with the 4-day workweek. This chapter investigates the attitudes of employees in the first 6 fabricating departments after conversion to the 4-day workweek. The attitudes are measures of satisfaction, which in turn is related to organizational effectiveness. Each element of the hypothesis will be investigated in this chapter.

#### Administration of Questionnaire

The questionnaire contained in Appendix C, beginning on page 212, was used to determine employee attitudes with regard to the 4-day workweek. A questionnaire was given to the workers in the first 6 fabricating departments that utilized

the 4-day workweek. All had 2 to 8 months experience with the restructured workweek.

Table 29 on page 150 indicates that the overall usable rate is 57 percent. More than 50 percent of the questionnaires for each department, except P-1, were usable.

### Hypothesis

Attitudes toward the 4-day workweek will be affected by age, length of service with the company, sex of the worker, marital and family status, climatic conditions, benefits derived from increased block leisure time, and the length of time the program has been in effect.

### Investigation of Hypothesis

Each element of the above hypothesis will be investigated in this section of the study.

#### Age

Table 30 on page 151 indicates the attitudes toward the 4-day workweek by age. Of the 129 responses, 89 or 69 percent favored it. Those against represented 22 percent of the total, while 9 percent had no opinion.

The majority of employees in each age classification preferred the 4-day week. The older employee, that is, 51 and over, represents 59 percent of the total of 29 employees who opposed the 4-day workweek. The older category represents

TABLE 29  
ADMINISTRATION  
OF  
QUESTIONNAIRE

<u>Fabricating Departments</u>	<u>Number</u>				
	<u>Given Employees</u>	<u>- Not Re- turned</u>	<u>= Re- turned</u>	<u>- Not Usable</u>	<u>= Usable</u>
P-1	58	20	38	13	25
P-2	17	0	17	6	11
P-3	25	7	18	3	15
P-4	56	18	38	1	37
P-5	75	16	59	15	44
P-6	<u>29</u>	<u>9</u>	<u>20</u>	<u>5</u>	<u>15</u>
Total	260	<u>70</u>	<u>190</u>	<u>43</u>	<u>147</u>
Number Absent	<u>13</u>				
Grand Total	<u>273</u>				

Source: Prepared by the author.

TABLE 30

ATTITUDES: 4-DAY  
WORKWEEK BY AGE

4-Day Workweek - Number of Responses and Percentage

<u>Age Range</u>	<u>For</u>	<u>Percentage</u>	<u>Against</u>	<u>Percentage</u>	<u>No Opinion</u>	<u>Percentage</u>	<u>Total</u>	<u>Percentage</u>
Under 30	19	61	8	26	4	13	31	100
30 - 50	45	83	4	7	5	10	54	100
51 and over	<u>25</u>	57	<u>17</u>	39	<u>2</u>	4	<u>44</u>	100
Total	<u>89</u>	<u>69</u>	<u>29</u>	<u>22</u>	<u>11</u>	<u>9</u>	129	100
No Response To Age (7) and/or Preference (18)							<u>18</u>	
Grand Total							<u>147</u>	

Source: Prepared by the author.

the one age group that has the lowest percentage of employees favoring the restructured workweek.

The group that favors the 4-day workweek the most or disliked it the least is the 30-50 year age category.

In conjunction with age, it appears that the following items are significant:

1. Most employees in the older classification favor the 4-day workweek (25 of 44).
2. Only 57 percent of the older classification voted for the 4-day workweek. This represents the smallest percentage of each of the age groups.
3. The greatest concentration of attitudes against the 4-day workweek is found in the older classification (17 of 29).
4. Employees in the 30-50 age range like the restructured workweek the most.
5. Younger workers rank second in expressing preference for the 4-day workweek.

#### Length of Service

Table 31 on page 153 shows that the majority of employees in each length of service classification favors the utilization of the 4-day workweek. However, the under-15-year classification represents the one group with the highest percentage against the concept (28 percent). The same

TABLE 31

ATTITUDES: 4-DAY WORKWEEK  
BY LENGTH OF SERVICE

Length of Service	4-Day Workweek - Number of Responses and Percentage							
	<u>For</u>	<u>Percentage</u>	<u>Against</u>	<u>Percentage</u>	<u>No Opinion</u>	<u>Percentage</u>	<u>Total</u>	<u>Percentage</u>
Under 15 years	47	65	20	28	5	7	72	100
15 - 30	37	76	7	14	5	10	49	100
31 and over	<u>5</u>	63	<u>2</u>	25	<u>1</u>	12	<u>8</u>	100
Total	<u>89</u>	<u>69</u>	<u>29</u>	<u>22</u>	<u>11</u>	<u>9</u>	129	100
No Response to Length of Service (10) and/or Preference (18)							<u>18</u>	
Grand Total							<u>147</u>	

Source: Prepared by the author.

category also represents 20 of 29 of the responses that do not favor use of the rearranged workweek.

The following data appears to be relevant:

1. Table 30 on page 151 indicates that the older employee classification is the one that least prefers the 4-day workweek, and also represents the largest portion of those voting against the rearranged workweek.
2. Table 31 on page 153 indicates that while all categories of length of service favor the restructured workweek, employees with shorter service constitute the length of service classification that dislikes the 4-day week the most. The same category contains the largest percentage of those voting against the 4-day workweek.

Based on the above data, various implications can be drawn. Anyone working for the company for at least 31 years and who began employment at age 16 (see Table 1 on page 8) must be at least 47 years old. Thus, while older employees tend to vote against the 4-day workweek more than other age classifications (see Table 30 on page 151), these employees have not been employed by the firm for long periods of time (see Table 31 on page 153). Analysis of the less than 15 years of service classification reveals that the older

employee with a shorter service record has a tendency to vote against the restructured workweek. Perhaps the favorable attitude of the older employee who has a long service record is related to confidence in management's judgment.

#### Sex of Employee

The classification of preferences related to the 4-day workweek on the basis of gender is presented in Table 32 on page 156.

All male employees clearly preferred the 4-day week.

The majority of the females, 62 percent of 106, also favored the restructured workweek. However, it is interesting to note that all those against the concept, and all those having "no opinion" are female.

Analysis of the questionnaires of those having "no opinion" reveals that most must work and thus will adapt to the change made by the company. They felt that their opinion did not matter.

The majority of those not favoring the rearranged workweek were females in the older category (see Table 30 on page 151). These older employees complained about fatigue, fear of darkness and violence on the street, and the inability to obtain transportation at the required times. The 8 females in the under-30 age classification did not like the holiday rules. Each thought that holiday pay should be based

TABLE 32

ATTITUDES: 4-DAY  
WORKWEEK BY SEX

4-Day Workweek - Number of Responses and Percentage

<u>Sex</u>	<u>For</u>	<u>Percentage</u>	<u>Against</u>	<u>Percentage</u>	<u>No Opinion</u>	<u>Percentage</u>	<u>Total</u>	<u>Percentage</u>
Male	23	100	0	0	0	0	23	100
Female	<u>66</u>	62	<u>29</u>	27	<u>11</u>	11	<u>106</u>	100
Total	<u>89</u>	<u>69</u>	<u>29</u>	<u>22</u>	<u>11</u>	<u>9</u>	129	100
No Response to Sex (7) and/or Preference (18)							<u>18</u>	
Grand Total							<u>147</u>	

Source: Prepared by the author.

on 9.5 hours rather than 8, and they also disliked the Friday workday when a holiday falls on a Monday. The remaining 4 employees in the 30-50 age group complained of decreases in pay, transportation problems, and getting up too early and getting home too late.

The data indicate that all male and the majority of female employees favor the 4-day workweek. However, rejection and indifference is more likely to occur with female employees. Furthermore, rejection is found with the older female employee, with less than 15 years of service, while indifference is more likely with a female employee 50 years or younger, with less than 31 years of service.

#### Marital and Family Status

Responses to questions about both marital and family status were disappointing. Only 5 percent of 147 individuals responded in a manner that was usable. As indicated in prior analysis, some individuals refused to respond to inquiries about age, length of service, and sex. The low response to marital and family status surpassed the "no response" classification on other items.

At first, an attempt was made to acquire marital and family status data by investigating appropriate records. In most such cases, the records were incomplete or not up to date. Exemption forms for Federal Income Tax purposes

provided the author with the initial clue to the low response rate in these categories.

Investigation of exemption forms indicated that individuals who were known to be single were claiming children as exemptions. The personnel manager revealed that marital and family status of the work force could not be determined by use of records. It was the opinion of the personnel manager that most of the work force was married at one time or another, with some being divorced or separated. Furthermore, the employees who could be classified as single were not necessarily without a family.

The personnel manager also stated that since marital and family status had no relationship to the jobs offered by the company, no effort was made to obtain such information for fear of violating the Civil Rights Act of 1964.

Because of the minimal response, investigation of this element in the hypothesis was not possible.

#### Climatic Conditions

This element of the hypothesis was tested during January, 1972. The firm was located in a geographical area that experienced changing seasons. The attitude survey is presented in Appendix D, on page 219.

Table 33 on pages 159 and 160 summarizes the responses by number and percentages. The overwhelming choice

TABLE 33

ATTITUDES TOWARD LENGTH OF WORKWEEK FOR  
VARIOUS PERIODS OF THE YEAR

Depart- ments	4-Day Week Entire Year		4-Day Week, Summer; 5-Day week, Winter		5-Day Week Entire Year		No Opinion		Total	
	Num- ber	Percent- age	Num- ber	Percent- age	Num- ber	Percent- age	Num- ber	Percent- age	Num- ber	Percent- age
P-1	39	83	2	4	2	4	4	9	47	100
P-2	26	79	3	9	4	12	0	0	33	100
P-3	7	58	0	0	5	42	0	0	12	100
P-4	40	82	0	0	9	18	0	0	49	100
P-5	49	58	8	10	25	30	2	2	84	100
P-6	33	79	0	0	7	16	2	5	42	100
P-7	16	72	3	14	3	14	0	0	22	100
F-1	7	64	1	9	3	27	0	0	11	100
F-2	8	73	2	18	1	9	0	0	11	100

(Continued on next page.)

TABLE 33--Continued

Departments	4-Day Week Entire Year		4-Day Week, Summer; 5-Day Week, Winter		5-Day Week Entire Year		No Opinion		Total	
	Num- ber	Percent- age	Num- ber	Percent- age	Num- ber	Percent- age	Num- ber	Percent- age	Num- ber	Percent- age
F-3	19	76	0	0	6	24	0	0	25	100
Miscel- la- neous	7	100	0	0	0	0	0	0	7	100
<b>Total</b>	<b>251</b>	<b>73</b>	<b>19</b>	<b>6</b>	<b>65</b>	<b>19</b>	<b>8</b>	<b>2</b>	<b>343</b>	<b>100</b>

Source: Prepared by the author.

(73 percent) favored the 4-day workweek for the entire year. Only 19 percent preferred to return to the 5-day workweek for the entire year. All employees were asked to answer this questionnaire under the assumption that all other conditions remained the same except the length of the workweek for various time periods during the year. Only 6 percent preferred using different workweek periods for different seasons of the year.

Eleven first-line supervisors were asked to respond to the same questionnaire. The results, which are presented in Table 34 on page 162, indicate that 64 percent prefer the 4-day workweek for the entire year.

It appears that operative employees and supervisors prefer the 4-day workweek for the entire year. Driving during darkness, violence during darkness, early starts, and late suppers appear to be incidental complaints.

#### Benefits Derived From Increased Block Leisure Time

Employees were given a list of activities and asked to check those in which they regularly engage during a 5-day and 4-day workweek. The results are presented in Table 35 on pages 163, 164, and 165.

TABLE 34

ATTITUDES OF FIRST-LINE SUPERVISORS TOWARD  
LENGTH OF WORKWEEK FOR VARIOUS  
PERIODS OF THE YEAR

	<u>Response</u>	
	<u>Number</u>	<u>Percentage</u>
4-Day Week, Entire Year	7	64
4-Day Week, Summer; 5-Day Week, Winter	1	9
5-Day Week, Entire Year	<u>3</u>	<u>27</u>
Total	<u><u>11</u></u>	<u><u>100</u></u>

Source: Prepared by the author.

TABLE 35  
LEISURE ACTIVITIES: 5-DAY  
VERSUS 4-DAY WORKWEEK

<u>Groupings and Activities</u> <sup>a</sup>	Number of Responses		
	<u>Workweek</u>		Increase or <u>(Decrease)</u>
	<u>5-Day</u>	<u>4-Day</u>	
<u>Moonlighting</u>			
Have another job:			
Full time	0	0	0
Part time	<u>1</u>	<u>4</u>	<u>3</u>
Total	<u>1</u>	<u>4</u>	<u>3</u>
<u>Participative</u>			
Fishing and hunting	9	15	6
Athletics	10	16	6
Swimming and boating	15	22	7
Travel	<u>20</u>	<u>32</u>	<u>12</u>
Total	<u>54</u>	<u>85</u>	<u>31</u>
<u>Family Related</u>			
Work around house	75	94	19
Spend time with family	56	66	10
Visit relatives	32	41	9
Watch television	50	44	(6)
Rest and relax	<u>39</u>	<u>59</u>	<u>20</u>
Total	<u>252</u>	<u>304</u>	<u>52</u>

(Continued on next page.)

TABLE 35--Continued

<u>Groupings and Activities</u> <sup>a</sup>	Number of Responses		
	<u>Workweek</u>		<u>Increase or (Decrease)</u>
	<u>5-Day</u>	<u>4-Day</u>	
<u>Spectator</u>			
Attend sporting events	12	15	3
Attend movies, theater	<u>20</u>	<u>23</u>	<u>3</u>
Total	<u>32</u>	<u>38</u>	<u>6</u>
<u>Other Social Groups</u>			
Community affairs	7	7	0
Social club	12	13	1
Political work	2	5	3
Church activities	<u>15</u>	<u>18</u>	<u>3</u>
Total	<u>36</u>	<u>43</u>	<u>7</u>
<u>Creative</u>			
Hobbies	18	17	(1)
Read	29	27	(2)
Go to school	<u>3</u>	<u>2</u>	<u>(1)</u>
Total	<u>50</u>	<u>46</u>	<u>(4)</u>
<u>Other</u>			
Work on car	12	14	2
Have vacation home	2	2	0
Bored with free time	1	3	2
Bingo, sewing	<u>3</u>	<u>9</u>	<u>6</u>
Total	<u>18</u>	<u>28</u>	<u>10</u>

(Continued on next page.)

TABLE 35--Continued

<u>Groupings and Activities</u> <sup>a</sup>	<u>Number of Responses</u>		
	<u>Workweek</u>		<u>Increase or (Decrease)</u>
	<u>5-Day</u>	<u>4-Day</u>	
<u>Number of Individuals Not Responding</u>	<u>7</u>	<u>7</u>	<u>0</u>
Grand Total	<u>450</u>	<u>555</u>	<u>105</u>

<sup>a</sup>Based on James Steele and Riva Poor's study in 4 Days, 40 Hours: Reporting a Revolution in Work and Leisure (Cambridge, Mass.: Bursk and Poor Publishing, 1970), pp. 105-122.

Source: Prepared by the author.

The family-related activities that show increases are:

1. Work around the house.
2. Spend time with family.
3. Visit relatives.
4. Rest and relax.

One activity that increased significantly was rest and relaxation (a 51 percent increase). It is not possible to determine from the data whether the increase in rest and relaxation results from the pressures of the 4-day workweek or is an activity that employees simply prefer. It is interesting to note that the increase in family-related activities may indicate a return to a more closely knit family.

Three older employees reported that they were bored with the leisure time. All considered themselves too old to travel and essentially had no immediate family. "Travel" increased by 60 percent and "time with family" 18 percent.

Creative activities such as reading, going to school, and "other hobbies" all show decreases. The only other decrease resulted in the family-related activity labeled "watch television."

Spectator activities such as attending ball games, movies, and theater indicate increases.

Participant activities such as fishing, hunting, athletics, swimming, boating, and bingo all show increases.

Activities related to various other social groups such as social clubs, political work, and church activities show increases. Such interest may indicate that people are willing to become involved if given sufficient time to do so.

A summary of the various groupings is presented in Table 36 on page 168. Moonlighting showed the largest percentage increase, but involved only 4 workers. All moonlighting was on a part-time basis. A profile of the individuals moonlighting is presented in Table 37 on page 169.

The one employee moonlighting on a part-time basis while working a 5-day week represents approximately .7 percent of the total number of employees responding (140). After the 4-day workweek was utilized, the moonlighting figure increased to approximately 3 percent. The latter figure is below the national average of 5 percent and far below the 17 percent reported by Mrs. Poor.<sup>1</sup>

When asked if more money was being spent on the activities engaged in since the 4-day week began, the employees (147 in number) responded in the manner indicated in Table 38 on page 170.

Those responding in the affirmative indicated that the money was being spent mostly on general shopping, travel,

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<sup>1</sup>Riva Poor, ed., 4 days, 40 hours: Reporting a Revolution in Work and Leisure (Cambridge, Mass.: Bursk and Poor Publishing, 1970), pp. 109-110.

TABLE 36  
SUMMARY OF LEISURE ACTIVITIES

<u>Grouping</u>	<u>Number of Responses</u>		<u>Number</u>	<u>Percent</u>
	<u>5-Day</u>	<u>4-Day</u>	<u>Increase</u>	<u>Increase</u>
	<u>Week</u>	<u>Week</u>	<u>or</u>	<u>or</u>
			<u>(Decrease)</u>	<u>(Decrease)</u>
Moonlighting	1	4	3	300
Participative	54	85	31	57
Family-Related	252	304	52	21
Spectator	32	38	6	19
Other Social Groups	36	43	7	19
Creative	50	46	(4)	(8)
Other	18	28	10	56

Source: Prepared by the author.

TABLE 37  
 PROFILES OF INDIVIDUALS  
 MOONLIGHTING

	<u>Male</u>	<u>Female</u>
Sex:	2	2
Age:	1, under 30 <sup>a</sup>	1, under 30
	1, 30-40	1, 30-40
Length of service:	1, under 1 year <sup>a</sup>	1, under 1 year
	1, 10 to 15 years	1, 15 to 20 years
Feelings toward salary as a result of utiliz- ing the 4-day week	1, salary stayed the same <sup>a</sup> 1, salary was reduced	1, salary increased 1, no response
Did you favor the 4-day week when you first heard about it?	2, yes	1, yes 1, no
How did you vote in reference to try- ing the 4-day week?	2, yes	1, yes 1, no
At this time do you favor the 4-day week?	2, yes	2, yes

<sup>a</sup>Indicates an employee who was working part-time when a 5-day week was utilized.

Source: Prepared by the author.

TABLE 38  
 MONETARY EXPENDITURES AND THE  
 4-DAY WORKWEEK

<u>Is more money being spent?</u>	<u>Responses</u>	<u>Percentage</u>
Yes	37	25
No	87	59
Do not know	14	10
No response	<u>9</u>	<u>6</u>
Total	<u>147</u>	<u>100</u>

Source: Prepared by the author.

children's recreational equipment, and going out more frequently. Six of the 37 did not report on the activities on which the money was being spent.

Based on the data analyzed, it appears that employees do utilize their leisure time differently when working a restructured workweek.

#### Attitude Changes Over a Period of Time

Table 39 on pages 172 and 173 presents the attitudes of employees toward the 4-day workweek after a time lapse of approximately 15 months. Those favoring the 4-day workweek steadily increased from 52 percent in October, 1970, to 78 percent in January, 1972, the end of the 15-month period.

The percentage of employees disliking the 4-day workweek dropped from 28 in October, 1970, to 20 in January, 1972.

Employees having "no opinion" prior to conversion definitely did express themselves as being for or against the restructured workweek after utilization.

Analysis of the questionnaires of the 13 employees who had expressed "no opinion" prior to conversion indicates that approximately 90 percent subsequently changed to a favorable attitude. The remainder did not favor the 4-day workweek.

Attitude Toward Pay. As shown in Table 40 on page 174, the majority of employees stated that their pay remained the

TABLE 39

OVERALL ATTITUDES:  
4-DAY WORKWEEK

4-Day Workweek, Number of Responses and Percentages

	<u>For</u>	<u>%</u>	<u>Against</u>	<u>%</u>	<u>No Opinion</u>	<u>%</u>	<u>No Response</u>	<u>%</u>	<u>Total</u>	<u>%</u>
First heard of concept - October, 1970	76	52	41	28	13	9	17	11	147	100
Vote to try - various dates from November, 1970, to June, 1971	80	55	37	25	12	8	18	12	147	100
After utilization - 2 to 8 months										
1. At this time do you favor the 4-day workweek?	89	61	29	20	11	7	18	12	147	100
2. What phrase would best describe your feelings toward the 4-day workweek? <sup>a</sup>	92	63	27	18	23	16	5	3	147	100

(Continued on next page.)

TABLE 39--Continued

4-Day Workweek, Number of Responses and Percentages										
	<u>For</u>	<u>%</u>	<u>Against</u>	<u>%</u>	<u>No</u> <u>Opinion</u>	<u>%</u>	<u>No</u> <u>Response</u>	<u>%</u>	<u>Total</u>	<u>%</u>
After utilization - 8 to 15 months	251	78	65	20	--	--	8	2	324 <sup>b</sup>	100

<sup>a</sup>This is question 1a on the questionnaire presented in Appendix C, beginning on page 212.

The responses of "very pleased" and "pleased" were classified as "for"; "displeased" and "very displeased" were classified as "against"; "indifferent" and "no opinion" were classified as "no opinion".

<sup>b</sup>Preferences for .5 years on 4-days and .5 years on 5-days have been eliminated.

Source: Prepared by the author.

TABLE 40  
ATTITUDE TOWARDS PAY

<u>Weekly salary was:</u>	<u>Response</u>	<u>Percentage</u>
Reduced	22	15
Increased	38	26
Stayed The Same	56	38
No Response	<u>31</u>	<u>21</u>
Total	<u>147</u>	<u>100</u>

Source: Prepared by the author.

same. However, in fact, gross pay did actually increase (see Chapter IV, Table 13, page 117).

Attitude Toward Layoffs. As indicated in Table 41 on page 176, most employees did not think layoffs would occur as a result of the restructured workweek.

Employees' Attitude Toward the Company. As indicated in Chapter III, the president was seriously concerned about the welfare of employees. He initiated the implementation of the 4-day workweek because he thought the employees would like it. No doubt they do.

In order to determine if employee attitudes changed toward the firm as a result of the use of the restructured workweek, the following question was asked (see Appendix C, question 3a on page 213).

Which statement would best describe your feelings about the company now that the 4-day week has been used?

1. I like the company more than I did when we were on 5 days.
2. I like the company the same as I did when we were on 5 days.
3. I like the company less than I did when we were on 5 days.

Results are presented in Table 42 on page 177.

TABLE 41  
ATTITUDE TOWARDS LAYOFFS

<u>Remarks<sup>a</sup></u>	<u>Response</u>	<u>Percentage</u>
Yes	2	1
No	66	45
Do Not Know	64	44
No Response	<u>15</u>	<u>10</u>
Total	<u>147</u>	<u>100</u>

<sup>a</sup>The question was, "Will layoffs occur as a result of the utilization of the 4-day workweek?"

Source: Prepared by the author.

TABLE 42

## EMPLOYEE ATTITUDE TOWARD THE COMPANY

<u>I like the Company:</u>	<u>Number of Responses</u>	<u>Percentage</u>
More	16	11
Same	104	71
Less	12	8
Not Applicable	4	3
No Opinion	<u>11</u>	<u>7</u>
Total	<u>147</u>	<u>100</u>

Source: Prepared by the author.

Most employees feel the same toward the firm. However, there is a net favorable change of 4 when a comparison is made of the "like more" and "like less" categories. Since the favorable change did take place, it appears that employee attitudes toward the firm do change in a positive direction as a result of the 4-day workweek.

Summary of Attitude Changes. Based on the analysis made in this chapter it appears that attitudes do change in a positive manner to favor the 4-day workweek and the company. This positive change in attitudes occurs even though most employees indicate that their pay has remained the same. Thus, the desire for leisure time in blocks appears to be a goal of the employee.

#### Chapter Summary

Most employees in each age classification do prefer the 4-day workweek. However, employees 51 years and over tend to dislike the concept more than the other age classifications.

All length of service categories favored the restructured workweek. However, a larger number of older employees with under 15 years of service dislike the 4-day policy. Employees over 50 years and employed by the firm for over 30 years favor the rearranged schedule.

All males favor the restructured workweek. Though a majority of females accept the 4-day workweek, rejection is

more likely with females 51 years and older, with less than 15 years of service. Indifference toward the concept is found among females under 50 years of age with less than 31 years of service.

Unfortunately, the marital and family status element of the hypothesis could not be investigated because of insufficient response.

Responses to questionnaires indicate that 73 percent of the employees and 64 percent of first-line supervisors prefer the 4-day workweek for the entire year. It appears that there are some negative reactions to the 4-day workweek on grounds of general disruption of home life, darkness, winter driving, and fear of violence.

Leisure time is used differently when the 4-day workweek is in operation. The most significant percentage increases occurred in the moonlighting and participative classifications. The increase in family-related activities may mean that the 4-day workweek will have a favorable influence on family ties.

Attitudes toward the 4-day workweek generally change in a favorable direction as the time period of utilization increases. Also, data indicate that a slight shift to more favorable attitudes toward the firm does occur.

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

This study was made to determine the influence of the 4-day workweek on the organizational effectiveness of a specific firm. This chapter summarizes the measures of effectiveness and the managerial activities involved in installing and utilizing the 4-day workweek. The conclusion presents a discussion of certain myths about the 4-day workweek. Variables are also examined which should help to insure a successful conversion. These variables will be presented in the form of a check list for managers contemplating conversion.

#### Summary

It is too soon to determine the long-range implications of the restructured workweek movement. The movement at this time is rather moderate in nature. The employees working under the restructured workweek represent .12 percent of the total national work force. While the rate of conversion is approximately 150 firms per month, only 6

percent of total business entities in the United States are using a rearranged workweek. Most are small manufacturing companies located primarily along the East Coast and are not unionized.

### Obstacles

It appears that the momentum of the movement is impeded by Federal law (Walsh-Healey Act) and the attitude of unions. A recent ruling by the Department of Labor does not exempt 4-day companies from the Act.

This notice is issued for the purpose of informing interested parties of the results of the public hearing held on September 7-9, 1971, by the Department of Labor, pursuant to a notice published in the FEDERAL REGISTER on July 22, 1971, concerning the possible adoption of 4 10-hour day, 40-hour workweek without payment of time and one-half overtime compensation for workdays exceeding 8 hours by contractors subject to the Walsh-Healey Public Contracts Act or the Contract Work Hours and Safety Standards Act.

A careful analysis and evaluation of the full written and oral record of these hearings shows that no persuasive or conclusive evidence has been presented or may be adduced to establish that an administrative change in or waiver from the present daily overtime standards of the above statutes would be in the public interest at the present time.

Consequently, the Department of Labor does not find a basis to recommend any administrative action leading to modifications in the daily overtime provisions of the statutes, nor does it propose to grant individual waivers or exemptions at this time.<sup>1</sup>

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<sup>1</sup>"Four-Day, Forty-Hour Workweek: Results of the Public Hearing on Possible Recommendation of Adoption by Government Contractors," Federal Register, XXXVII (March 15, 1972), 5416.

Further impetus could be forthcoming if the Federal government were to adopt the concept for its employees. Historically, the major thrust toward the use of a shorter workweek was provided by Federal and State governments.

#### Experience of Swirk Company

The particular firm involved in the study is a soft-goods manufacturing concern located on the East Coast. Production personnel primarily were scheduled for the 4-day workweek.

The restructured workweek was gradually introduced in fabricating departments where 95 percent of all jobs are paid on a piece-rate basis. Working hours for each day of the 4-day week are scheduled from 7:00 A.M. to 5:00 P.M., or 9.5 hours per day, with .5 hours for lunch. Employees are paid overtime for all daily hours beyond 8. Thus, the employees work 38 hours per week and receive pay that is equivalent to 41 straight time hours.

Measures of Organizational Effectiveness. Generally, the measures of organizational effectiveness show favorable results. The priority goal of the president was to provide more leisure time for the employees in block time. The most current measure of employee satisfaction indicates that 73 percent of the employees prefer to continue working a 4-day schedule. Thus, it appears that the president's action did

improve organizational effectiveness by providing satisfaction to the employees.

The satisfied employee responded with increased labor productivity. Factors that reveal a positive change in labor productivity were reduced absenteeism, reduced tardiness, and favorable turnover rates.

Payroll cost increased slightly as a result of the overtime payments required by the daily work schedule. However, total hours utilized decreased and the value of production increased, resulting in higher labor productivity. Quality of the product was not impaired; neither was safety. Since no direct analysis could be made of profitability and return-on-investment, opinions of appropriate company managers were obtained. In essence, both profits and return-on-investment were not adversely influenced as a result of the 4-day workweek.

Attitudes of Employees. Investigation of each element of the hypothesis reveals pertinent information. Employees in each age classification do favor the 4-day workweek. Rejection of the 4-day workweek is more likely to be found among females with less than 15 years of service and who are more than 50 years old. Employees indifferent to the 4-day workweek are also more likely to be females under 50 with less

than 31 years of service. All male employees have favorable attitudes toward the rearranged workweek.

It is significant to realize that employee attitudes, after initial doubts, changed in a favorable direction. Similar positive changes occurred in attitudes toward the company.

Responses to questionnaires indicate that even though some negative factors make the 4-day workweek less appealing--such as general disruption of home life, driving in darkness, winter driving, and violence in the streets--the overwhelming satisfaction obtained from the extra day off offset the disadvantages.

With the new work schedule most employees do utilize their time differently. Results indicate significant increases in participative activities and decreases in creative activities. The sparse data show that moonlighting increased, but it was below the national level for all types of firms, and was below the level of other 4-day firms. Family-related activities also increased, which may indicate the establishment of closer family relationships.

Role of Management. Significant findings emerge from an examination of the managerial concerns involved in the conversion. The motivation to work was heightened by the 4-day workweek. Management provided a desirable goal for

employees, and employees in turn linked their productive behavior to the achievement of the goal. As a result, both employee and employer were satisfied. Some aspects of democratic leadership were practiced by the top managers. The instrumental aspects of leadership were present in the form of effective planning, and consideration was practiced when managers expressed concern for employees who voted "no" for continuation.

Actual planning included the various steps that are generally accepted in management theory. Top executives were aware of opportunities for increasing employee satisfaction, goals were established, and various alternatives were evaluated. However, some deficiencies were evidenced in the planning. No criteria were established for control purposes, and general supervision was not implemented. Utilization of both of these concepts could have improved the overall plan. Nevertheless, despite some expressed dissatisfaction with the holiday aspects of the new schedule, employees were satisfied and the planned schedule change was successful.

As suggested in Chapter III, perhaps delegation of decision-making and planning did not take place because of the absence of sub-goals and job requirements.

### Conclusions

The research accomplished in this study does provide insights into some of the subjective beliefs that exist concerning the 4-day workweek. Such beliefs can be called myths in the sense that they are unproven collective beliefs that are accepted uncritically and used to justify behavior.

### Myths

Four such myths are examined below.

Extending the Workday Will Reduce Productivity. This research indicates that labor productivity increased when the workday was extended. The firm did reduce nominal hours and the length of the workweek but extended daily hours. Furthermore, a monetary incentive was provided that could have contributed to the increase in labor productivity. However, employees generally felt that their gross pay did not increase; thus the change in wage determination must be eliminated as a variable that influenced the results. This research does provide evidence to dispose of the myth that extending the workday will result in reduced productivity. Extension of the workday coupled with a decrease in nominal hours did yield increased labor productivity. Furthermore, 66 percent of the 143 companies surveyed by Wheeler, Gurman,

and Tarnowieski report increases in productivity, and only 3 percent report decreases.<sup>2</sup>

"When Pro-Four-Day Week Companies Talk About Increased Productivity, They're Usually Talking About Machines Rather Than People."<sup>3</sup> Since technology was constant in this research, it appears that the productivity increases were solely associated with labor and not machines or any other improvements in methods.

Overall Costs Increase as a Result of a Restructured Workweek. Labor costs did increase slightly but were offset by reduced hours and increased productivity. While the influence on overall cost could not be objectively determined, it is proper to indicate that no adverse influences occurred. Also, Wheeler, Gurman and Tarnowieski indicate that 38 percent of the 143 re-scheduled companies report decreases in cost while 51 percent report that costs remain about the same.<sup>4</sup>

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<sup>2</sup>Kenneth E. Wheeler, Richard Gurman, and Dale Tarnowieski, The Four-Day Week (New York: American Management Association, Inc., Research Report, 1972), p. 19.

<sup>3</sup>Research Institute of America, "Executive Members Tell Their Experiences With a Four-Day Workweek," Alert, July 7, 1971, Item 270.

<sup>4</sup>Wheeler, Gurman, and Tarnowieski, The Four-Day Week, p. 19.

Female Workers Dislike the 4-Day Workweek Because It Disrupts Their Daily Role Away From Work. Initially, women employees cite many disadvantages relating to their life away from work. They fear traveling after dark, driving in winter, and violence on the streets. It appears that after utilization of the rearranged workweek, all the stated disadvantages become incidental, and the women do like the 4-day workweek because of the leisure block time that it provides. Also, when given the choice to work a 5-day workweek in the winter in order to alleviate some of the stated disadvantages, they express a desire for the 4-day workweek throughout the year.

#### A Check List for Converting

This section of the study presents a check list of items that should be included in any contemplated conversion to a restructured workweek. Many of the items are inter-related, and cannot be considered independently from each other. Each manager should consider his situation as unique, and relate the items to each other in an appropriate manner.

## I. Preliminary Steps

1. Who will do the feasibility study?
  - a. Company personnel?
  - b. Outside consultants?
  - c. Both?
2. Has all relevant information been obtained?
  - a. Which company personnel should attend meetings on the subject?
  - b. Has general source material been obtained--for example, Poor's Workweek Letter?
  - c. Have contacts been made with similarly situated 4-day companies?

## II. Planning Process

1. Are all segments of the management team represented in the planning process?
  - a. Specifically, have first-line supervisors' opinions been solicited?
  - b. Will brainstorming and/or buzz sessions be used?

## III. Evaluation Criteria

1. What objective criteria will be used for evaluation purposes?
  - a. Records of employee behavior:
    - (1) Absenteeism?
    - (2) Tardiness?

- (3) Turnover?
- (4) Actual versus planned use of break time?
- (5) Early arrivals at punch-out stations?
- (6) Applications for job openings?
- (7) Number of grievances?
- (8) Vote for unionization?
- (9) Exploitation of sick leaves?

b. Financial effect of 4-day week on:

- (1) Profits?
- (2) Return-on-investment?
- (3) Costs?
  - (a) Payroll?
  - (b) Fringe Benefits?
  - (c) Utilities?
- (4) Will maintenance be improved and influence asset life?
- (5) Are changes in depreciation policy warranted?
- (6) What are the cash flow implications?

c. Production and the 4-day week:

- (1) Will maintenance be improved?
- (2) How will productivity be affected?
- (3) Is it possible to minimize the number of change-overs?

- (4) Will improved tooling be required due to extended usage?
- (5) How will quality be affected?
  - (a) Scrap rates?
  - (b) Sales returns and allowances?
  - (c) Customer service complaints?
  - (d) Rework?
  - (e) Rejection rate of inspectors?

d. Safety

IV. Legal Problems

- 1. What are the legal implications?
  - a. Do State laws restrict maximum hours that women may work?
  - b. If so, has the State law been challenged to test the supremacy of the Federal Civil Rights Act of 1964?
  - c. If not, will a challenge be made or will an exemption to the State law be sought?
  - d. Is work on Federal contracts involved?
    - (1) If so, do the overtime provisions of the Davis-Bacon Act or the Walsh-Healey Act apply? (No individual exemptions from the Walsh-Healey Act will be granted to 4-day companies.)

- e. Does the union contract require premium wage payments for all daily hours in excess of 8?

## V. Union Implications

- 1. Are unions involved?
  - a. Have union representatives been contacted?
  - b. What is the union position?
  - c. Can union objections, if any, be overcome?
  - d. If the union agrees to the concept will it demand a further reduction in the workweek or hours of work?
  - e. If the concept is adopted, what are the ramifications in regard to all provisions of the contract?
  - f. Is the restructured workweek acceptable to the local union, but unacceptable to the national union?
    - (1) If so, what new strategies must be undertaken?

## VI. Basic Decisions

- 1. Which workweek is best?
  - a. Compressed workweek?
  - b. Reduced workweek?
  - c. Staggered workweek?

- d. Flexible workweek?
  - e. Any combination?
2. Will the workweek selected present significant administrative problems?
- a. Will the scheduling of meetings and training sessions become difficult?
3. Who will be included in the program?
- a. Production employees?
  - b. Management?
  - c. Office workers?
  - d. Salesmen?
  - e. Shipping and receiving personnel?
  - f. Maintenance workers?
  - g. Staff personnel?
4. If all personnel are not to be affected immediately, but gradually, has the tentative schedule been determined?
5. Will manning requirements change?
- a. Will the schedule mandate additional supervisory and non-supervisory personnel?
  - b. Will the turnover rate be favorably influenced?
  - c. If so, will supervision become more effective so that more responsibility may be absorbed?

- d. Does management intend to use overtime on the days off, or schedule meetings on these days?
    - (1) If so, has consideration been given to the first-line supervisors' use of leisure time?
6. Will overtime costs be prohibitive?
- a. Will increased productivity offset increases in overtime, and to what extent?
  - b. Will overtime rates be paid at the start of the workday (to provide incentive for early arrival) or at the end?
  - c. Will regular workers reject overtime in favor of block leisure time?
  - d. If so, have provisions been made to hire temporary workers?
    - (1) Has the employment cost of temporary help been included in the financial implications?
    - (2) Have the production inefficiencies of temporary workers been comprehended in production planning?
7. Will a 3-shift operation hamper conversion?
- a. Can 2, 10-hour shifts and 1, 4-hour shift be used?
  - b. Is a labor force difficult to obtain?

- c. If so, has the possibility of using part-time workers been considered for a 4-hour shift?
8. Will overlapping shifts solve any peaking problems?
- a. Who will be in charge during the overlap period?
  - b. Are facilities sufficient to warrant overlap?
9. Have changes in break time been considered?
- a. Is total break time going to remain the same and spread over a reduced number of days? Or is break time going to be reduced proportionally?
10. Has planning considered:
- a. Holiday problems?
    - (1) Number of days?
    - (2) Daily and yearly compensation?
    - (3) Five national Monday holidays? Should the workweek be set as Tuesday through Friday to minimize the effect of Monday holidays?
    - (4) Holidays that fall on a Saturday and are celebrated on a Friday?
    - (5) Holidays that fall on a Sunday and are celebrated on a Monday?
    - (6) Holidays that fall on a non-working weekday?
    - (7) Holidays that fall on a workday?

- (8) Possible extension of a Monday-Thursday workweek to include a Friday if a holiday falls on a Monday?
  - b. Vacation time and compensation?
  - c. Any changes in personal time off, sick days, jury duty, disability, retirement, and related calculations?
- 11. Has consideration been given to how employee complaints will be handled?
  - a. Will interviews be used to determine if complaints can be alleviated?
- 12. Is phasing-in included in the plan?
  - a. Have unique problems been identified?
  - b. If not, has consideration been given to gradual conversion which would minimize future errors?
- 13. Is a sufficient adjustment period included in the plan?
- 14. Has a sufficient trial period been contemplated for evaluation purposes?
- 15. Has management considered the possibility of recognizing increased block leisure time as an additional fringe benefit that could be used as a basis for obtaining some changes in operations that would be beneficial?

VII. Communication Aspects

1. Have various means of communication been considered?
  - a. How and who will make the announcement?
  - b. Have meetings or informal discussions with employees been scheduled?
  - c. Have booklets been prepared?
  - d. Have provisions been made to communicate the plan so that all employees understand its content?
    - (1) Do all employees read and understand English?
    - (2) If not, have provisions been made to bridge the language barrier?
    - (3) Is a booklet printed in other languages feasible?
  - e. Have employees been told that a possibility exists for a return to the old schedule?
  - f. Has current information, positive and negative, been given to the employees?
2. If all personnel are not to be included has the fact been communicated?
  - a. If not, will a morale problem develop?

3. Has employee convenience been considered?
  - a. Have scheduled starting and quitting times considered travel during off-peak hours?
  - b. Have employees been told that commuting time and related cost are favorably affected?
  - c. Do employees realize that savings occur in conjunction with babysitting and lunch expenditures?
  - d. Has the fact of tax free savings been communicated?
  - e. Have employees been informed of the results of attitudes of workers elsewhere?
    - (1) Were employees told that workers generally like the 3-day leisure period? (It appears that the value of leisure increases as time units are consolidated.)
    - (2) Have employees been told that if a holiday falls on a Thursday a 4-day leisure period becomes available?

#### VIII. Publicity Considerations

1. Has proper publicity been planned?
  - a. Has a press release been prepared?
  - b. Have all personnel been encouraged to speak about the concept?

**IX. Employee Attitudes**

1. Will questionnaires, interviews, or voting be utilized to determine employee attitudes?
2. If so, what standard will be used as a basis for determining action?
  - a. Majority of those voting? Majority in each department? Two-thirds?
3. What action will be taken if all departments do not favor a change?
4. Will any employees quit?
  - a. If so, are their jobs critical?
  - b. Have plans been initiated to replace them?
5. Does the new schedule interfere with the moonlighting that is presently taking place?
  - a. If so, will these individuals quit?
  - b. Has replacement been contemplated?
6. Will installation of the new schedule increase moonlighting and adversely affect the company?

**X. Storage Space Implications**

1. Will additional storage space be required?
  - a. Must warehouse space be expanded?
  - b. Must storage space for work in process be increased?

- c. Is loading and unloading dock space sufficient?
- d. Will additional material handling equipment be required?
- e. Will insurance rates change?
- f. Will additional security measures be required?

XI. Supply Aspects

- 1. How will relations with suppliers be affected?
  - a. Has advance notice been given?
  - b. Is the lead time sufficient?
  - c. Has a buffer stock been considered as a safety factor?
  - d. Have suppliers been contacted for opinions that could identify unique problems?

XII. Customer Awareness

- 1. Have customers been considered?
  - a. Have customers been informed in order to prevent any confusion?

Possible Future Studies

At present, the 4-day movement is not widespread. Whether it gains ground or declines, future investigations should be conducted to determine the reasons. Perhaps a

3-day workweek will be even more desirable than a workweek of 4 days.

As stated in Chapter I, the study was intended to be descriptive in nature and used first and second levels of scientific rigor--namely: uncontrolled experimentation; observation; case study; opinion; and survey techniques. This objective has been accomplished. Also, the results presented herein are factual and intended to serve as a basis for future hypothesis formulation. Some suggested hypotheses could be:

1. Labor productivity increases as a result of employee expectations of increased block leisure time.
2. Employee attitudes toward a restructured workweek change in a favorable direction as the length of time the program has been in effect increases.
3. Employees in the 30-50 age classification favor the rearranged workweek more than those under 30 or above 50.
4. Married female workers initially dislike the rearranged workweek.
5. Indifference to the 4-day workweek is directly associated with females under 50 years of age with less than 31 years of service.
6. All male employees favor the restructured workweek.

It is suggested that future research should comprehend controlled experimentation and quantitative analysis. Multiple and partial correlation techniques could be used. Also, sample size would be critical.

Furthermore, as time passes, the effects on society must be continually re-examined. Is the mental health of the nation adversely affected as a result of longer hours of repetitive work? Does the movement reflect positive attitudes toward leisure, or negative attitudes toward work, or both? Will alienation increase between employees and employers as a result of the longer periods of separation? It is better to attempt to determine the direction in which the movement is taking society and make provisions today for the future, rather than simply react to problems that the movement may create.

Today, worker discontent is an increasingly serious labor relations problem. It appears that repetitive and monotonous work will be a major issue in future labor-management relations. However, the 4-day workweek could alleviate the discontent. Extending the workday could result in an impetus toward restructuring jobs resulting in worker self-esteem. Also, the consolidation of leisure time will permit workers to engage in activities which they deem desirable. Thus, the 4-day movement could foster an

integration of the entire personality of man in both work and leisure activities. Should this occur, a subtle variable--scheduling--could prove to have significant social impact.

APPENDIX A

STRUCTURED INTERVIEW FORM FOR MANAGERS

Questions Relating to General  
Managerial Activities

1. What is your title? Where are you on the organization chart? Whom do you report to? Whom does your boss report to?
2. Describe a typical work day. What do you do? Do you have responsibilities other than your job description?
3. What meetings do you attend? How frequently? Who else attends?
4. How are decisions made? How are they communicated from your boss to your subordinates?
5. How much freedom do you have to do the job the way you want?
6. Would you say your job is routine, monotonous, or different and full of variety?
7. Are you free to express your opinions to your supervisor?
8. To what extent are you able to participate in decisions affecting the performance of your job?

9. What sort of personal satisfactions or rewards can a person obtain from a job like yours?
10. Why do people join this company?
11. How do the employees in your department feel about the pay?
12. What are the requirements for success at Swirk Company?  
How is success evaluated?
13. How frequently are promotions made? How are individuals chosen for promotion?
14. Can you predict in advance how much a raise will be, whether a promotion will be made?
15. Tell me a few things about your boss:
  - Is he friendly?
  - Is he approachable?
  - Does he explain his actions?
  - How does he introduce changes in procedures?
  - Does he act without consulting the group?
  - Does he make the job a little more pleasant?
16. How are disagreements settled?
17. How often do you come in contact with your boss during a typical day? What sort of things do you talk about?
18. Are there any informal or casual contacts among members of management? How frequently? How do you feel about them?
19. How would you describe contacts that you have made with others at work--cooperative, hostile, competitive?

20. Do you have social contacts with fellow employees after work?
21. How would you describe the environment in which Swirk Company operates?
22. Which department do you feel is most critical to the survival of Swirk Company?
23. What are the relationships among departments?
24. Which department(s) has the most influence when inter-departmental decisions are necessary?

Questions Relating to Managerial Activities  
in Introducing the 4-Day Workweek

1. Describe what management did.
2. Who was involved?
3. Was everyone (who you think should be) allowed to enter into the decision process?
4. What were the problem areas?
5. How were they settled?
6. Were employees asked to participate in the decision making process?
7. Why did you consider to change the workweek?
8. Would you do it the same way?
9. Would you do it again?
10. Who recommended the 4-day week?
11. Was there opposition from employees?

12. What wage policies were followed?
13. Were the unions involved?
14. Were there any legal problems?
15. What are the results?
16. What are the disadvantages?
17. What detailed formal planning took place?
18. How were goals established?
19. What criteria were used to judge the project? How were they arrived at?

APPENDIX B

INTERVIEW FORMAT BEFORE UTILIZATION

OF 4-DAY WORKWEEK DEPARTMENT P-7

1. How do you feel about the idea of a 4-day workweek?

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(a) What phrase would best describe your feelings about the 4-day workweek?

---

Very Pleased      2      Pleased      3      Indifferent      4      Displeased      5      Very Displeased      6      No Opinion

2. Please name one or more advantages and disadvantages with the 4-day week:

From the Viewpoint of

	An Employee at Work	A Manager of the Company	Your Personal Home Life Away From Work
Ad-			
van-			
tages:			

## From the Viewpoint of

	An Employee at Work	A Manager of the Company	Your Personal Home Life Away From Work
Dis-			
ad-			
van-			
tages:			

3. If the company decides to utilize the 4-day week, how would you feel towards the company? \_\_\_\_\_

(a) Which statement would best describe your feelings about the company?

\_\_\_\_\_ I would like the company more than I did when we were on 5 days.

\_\_\_\_\_ I would like the company the same as I did when we were on 5 days.

\_\_\_\_\_ I would like the company less than I did when we were on 5 days.

\_\_\_\_\_ No opinion.

4. Did you favor the 4-day week when you first heard about it?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

\_\_\_\_\_ No opinion

(a) At this time, do you favor the 4-day week?

Yes

No

No opinion

5. If you do not favor the 4-day week at this time:

(a) Why do you feel as you do? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(b) Do you feel your weekly salary will be reduced, increased, stay the same, or no opinion. (Circle one.)

(c) Do you feel a layoff will result from utilization of the 4-day week?

Yes

No

No opinion

6. What adjustment problems do you anticipate if the company does utilize the 4-day week? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7. (a) Sex

Male \_\_\_\_\_

Female \_\_\_\_\_

(b) Marital Status

Married \_\_\_\_\_

Other (please specify)

Single \_\_\_\_\_

\_\_\_\_\_

(c) Number of children

and ages \_\_\_\_\_

\_\_\_\_\_

8. Age Group: \_\_\_\_\_ Under 30

\_\_\_\_\_ 30-40

\_\_\_\_\_ 41-50

\_\_\_\_\_ 51-60

\_\_\_\_\_ Over 60

9. Length of Service:

\_\_\_\_\_ Under 1 year

\_\_\_\_\_ 1 year to 5 years

\_\_\_\_\_ 5 years to 10 years

\_\_\_\_\_ 10 years to 15 years

\_\_\_\_\_ 15 years to 20 years

\_\_\_\_\_ 20 years to 25 years

\_\_\_\_\_ 25 years to 30 years

\_\_\_\_\_ 30 years to 35 years

\_\_\_\_\_ 35 years or over

10. Below is a check list of leisure activities. Please check every activity in which you regularly participated during the 5-day workweek.

5-day

\_\_\_\_\_ 1. Work around the house

\_\_\_\_\_ 2. Spend time with family

\_\_\_\_\_ 3. Travel

\_\_\_\_\_ 4. Go to ball games, fights, etc.

\_\_\_\_\_ 5. Fishing and hunting

5-day

- \_\_\_\_\_ 6. Engage in some form of athletics
- \_\_\_\_\_ 7. Other hobbies
- \_\_\_\_\_ 8. Read
- \_\_\_\_\_ 9. Go to school to learn a trade  
or increase knowledge
- \_\_\_\_\_ 10. Active in community affairs
- \_\_\_\_\_ 11. Have another job  
\_\_\_\_\_ Full Time  
\_\_\_\_\_ Part Time
- \_\_\_\_\_ 12. Belong to social club
- \_\_\_\_\_ 13. Engage in political work
- \_\_\_\_\_ 14. Rest, relax, etc.
- \_\_\_\_\_ 15. Swimming, etc.
- \_\_\_\_\_ 16. Work on car
- \_\_\_\_\_ 17. Church activities
- \_\_\_\_\_ 18. Bought or buying vacation home
- \_\_\_\_\_ 19. Bored with free time
- \_\_\_\_\_ 20. Visit relatives
- \_\_\_\_\_ 21. Watch television
- \_\_\_\_\_ 22. Attend movies, theater, etc.
- \_\_\_\_\_ 23. Other (specify) \_\_\_\_\_  
\_\_\_\_\_



## From the Viewpoint of

	An Employee at Work	A Manager of the Company	Your Personal Home Life Away From Work
Dis-			
ad-			
van-			
tages:			

3. NOTE: This question is only for people who were employed by the company when it changed from 5 days to 4 days.

How do you feel towards the company now that the 4-day workweek has been utilized? \_\_\_\_\_

- (a) Which statement would best describe your feelings about the company?

\_\_\_\_\_ I like the company more than I did when we were on 5 days.

\_\_\_\_\_ I like the company the same as I did when we were on 5 days.

\_\_\_\_\_ I like the company less than I did when we were on 5 days.

\_\_\_\_\_ No opinion.

- NOTE: This question is only for people who were hired while the 4-day workweek was being utilized.

(b) Please check the statement which best describes your feelings about your company:

The four-day week was a very important reason for my joining this firm.

The four-day week had little to do with my joining this firm.

The 4-day week was a disadvantage in joining this firm.

No opinion.

4. Did you favor the 4-day week when you first heard about it? (Please check one).

Yes

No

No opinion

(a) At this time, do you favor the 4-day week? (Please check one).

Yes

No

No opinion

(b) How did you vote in reference to trying the 4-day week? (Please check one)

Yes (did want it)

No (did not want it)

Did not vote

5. Only to be answered by those who do not favor the 4-day week at this time;

(a) Why do you feel as you do? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Do you feel that your weekly salary has been reduced, increased, stayed the same, or no opinion as the result of the 4-day week? (Circle one of the above.)

7. Have any layoffs resulted from utilization of the 4-day week?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

\_\_\_\_\_ Do not know

8. What personal adjustment problems did you have as a result of the 4-day week? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. Please check one:

(a) \_\_\_\_\_ Male

\_\_\_\_\_ Female

(b) \_\_\_\_\_ Married

\_\_\_\_\_ Single

\_\_\_\_\_ Other (please specify)

(c) Number of children and

ages \_\_\_\_\_

\_\_\_\_\_

## 10. Please check one:

Age Group:     \_\_\_\_\_ Under 30  
                   \_\_\_\_\_ 30-40  
                   \_\_\_\_\_ 41-50  
                   \_\_\_\_\_ 51-60  
                   \_\_\_\_\_ Over 60

## 11. Please check one:

Length of

Service:       \_\_\_\_\_ Under 1 year  
                   \_\_\_\_\_ 1 year to 5 years  
                   \_\_\_\_\_ 5 years to 10 years  
                   \_\_\_\_\_ 10 years to 15 years  
                   \_\_\_\_\_ 15 years to 20 years  
                   \_\_\_\_\_ 20 years to 25 years  
                   \_\_\_\_\_ 25 years to 30 years  
                   \_\_\_\_\_ 30 years to 35 years  
                   \_\_\_\_\_ 35 years or over

12. Below is a checklist of leisure activities. Please check every activity in which you regularly participated during the 5-day workweek. Then check every activity in which you regularly participate in during the 4-day workweek.

<u>5-day</u>	<u>4-day</u> <sup>a</sup>	
_____	_____	1. Work around the house
_____	_____	2. Spend time with family

<u>5-day</u>	<u>4-day<sup>a</sup></u>	
_____	_____	3. Travel
_____	_____	4. Go to ball games, fights, etc.
_____	_____	5. Fishing and hunting
_____	_____	6. Engage in some form of athletics
_____	_____	7. Other hobbies
_____	_____	8. Read
_____	_____	9. Go to school to learn a trade or increase knowledge
_____	_____	10. Active in community affairs
_____	_____	11. Have another job _____ Full Time _____ Part Time
_____	_____	12. Belong to Social Club
_____	_____	13. Engage in political work
_____	_____	14. Rest, relax, etc.
_____	_____	15. Swimming, etc.
_____	_____	16. Work on car
_____	_____	17. Church activities
_____	_____	18. Bought or buying vacation home
_____	_____	19. Bored with free time
_____	_____	20. Visit relatives
_____	_____	21. Watch television.
_____	_____	22. Attend movies, theater, etc.
_____	_____	23. Other (specify) _____

<sup>a</sup>This is the only column that was used as the after measure in department P-7.

13. Do you find that you spend more money for free time activities since you began the 4-day week? (Please check one.)

Yes

No

Do not know

(a) If "Yes," please state these activities: \_\_\_\_\_

---

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APPENDIX D

EMPLOYEE QUESTIONNAIRE: PREFERENCES

FOR VARIOUS WORKWEEK SCHEDULES

Instructions: Please indicate your preference by placing a check mark (✓) in one of the spaces below. Only one check mark please!

\_\_\_\_\_ I prefer to work the 4-day workweek for the entire year.

\_\_\_\_\_ I prefer to work the 4-day workweek during May, June, July, August, September, and October, and work a 5-day workweek for the other months of the year.

\_\_\_\_\_ I prefer to work the 5-day workweek for the entire year.

\_\_\_\_\_ No opinion.

I chose the above item because

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