

Henry Ford and Scientific Management: The Transformation of Labor in the Early Twentieth Century

Provide this morning a brief overview of a paradigm shift in the nature of work, and the rewards accruing to it, that took place about 100 years ago. Hope it will provide a historical context for some of the issues the seminar is considering 20 minute crash course on early 20th-century labor.

I. The rise of the factory system in second half of the 19th century in the United States came face to face with two issues:

1. The owners' and managers' desire for increased efficiency in production, and hence profits, that reflected the natural impetus of a capitalist economy
2. barrier presented by "premodern work culture" of workers themselves: task-oriented rather than time-oriented, rooted in artisan traditions of craftsmanship, undisciplined and integrated into community sociability eg. "St. Monday"

Gave rise to a decades-long attempt by industrial engineers and factory managers to reshape and rationalize the industrialize the work process

II. Frederick Winslow Taylor (1856-1915)

1. "the father of scientific management"
2. pioneering figure in this movement to eradicate inefficiencies in industrial work
3. using stopwatch as primary tool, conducted "time and motion studies" to examine work, calculate how long each discreet motion took, and then recombined and reformulated to eliminate all waste motion achieved great gains in productivity by the time his great book, *Principles of Scientific Management* (1911) was published.

III. Henry Ford (1863-1947)

1. the next great figure in evolution of scientific management
2. at Highland Park plant outside of Detroit, was determined to streamline and rationalize the work process to make Model T's more quickly and efficiently, thus allowing a cheaper price tag to bring this automobile to ordinary people (Ford's great goal)
3. a time-study department at Ford Motor Company had efficiency experts with stop watches working to studying the work process and eliminate wasteful motion made some advances
4. But then Ford managers came up with a revolutionary idea that represented the quintessential expression of scientific management instead of taking workers to the work, ie. teams of workers going to work spots and building a car sequentially, this new model brought the work to the workers. In addition, this new paradigm broke the work process down into its smallest constituent parts.
5. Referring, of course, to the assembly line, which was inaugurated in 1913. It was a conveyor belt that steadily moved along a piece of the automobile while stationary workers repeatedly did one task adding an element to it. Tremendous gains in efficient labor were achieved. By regularizing and rationalizing the work process, and its minute division of labor, the production of an automobile, which before had taken some 12 hours per vehicle, now took only a bit over 90 minutes to complete.
6. Not only did production skyrocket (FIGURES) but the cost of the Model T fell dramatically because of massive industrial output

IV. Three Broad Issues: raised by the assembly line and interconnected

1. The quality of work experience: While the assembly line eliminated much of the physical demands of factory labor, it increased mental strain from repetition, the drudgery of doing the same minute task hundreds or thousands of times a day (absenteeism and turnover at Ford plants). Ultimately, how does management deal with, or rectify, the element of drudgery in labor?
2. The meaning of work: the assembly eroded the notion of meaningful work, ie. labor as morally rewarding and spiritually fulfilling according to the “calling” of the old Protestant Work Ethic. Ultimately, does work need to have meaning and if so how is it created?
3. The reward for work: So what replaced moral and spiritual fulfillment as the reward for work?? “Consumer abundance” became the great reward with the great accompanying shift toward an economy of consumer capitalism: through lower prices for consumer goods, and higher wages as way to afford them. Ultimately, is material reward an adequate, or an exclusive, compensation for labor?

These questions are still relevant, indeed crucial, in modern thinking about the future of work in the 21st century.