

Fordism and scientific management 18107



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FORDISM, SCIENTIFIC MANAGEMENT AND THE LESSONS FOR CONTEMPORARY ORGANISATIONS

Fordism and Scientific Management are terms used to describe management that had application to practical situations with extremely dramatic effects. Fordism takes its name from the mass production units of Henry Ford, and is identified by an involved technical division of labour within companies and their production units. Other characteristics of Fordism include strong hierarchical control, with workers in a production line often restricted to the one single task, usually specialised and unskilled. Scientific management, on the other hand, originated through Fredrick Winslow Taylor in 1911, and in very basic terms described the one best way work could be done and that the best way to improve output was to improve the techniques or methods used by the workers. (Robbins p. 38)

Many comparisons can be made between the two theories, such as the mechanisation, fragmentation and specialisation of work and that a lack of intellectual or skilled content will speed up the work at hand. Fordism's mechanisation of mass production further emphasised many of Taylor's popular beliefs about management being divorced from human affairs and emotions, using humans as instruments or machines to be manipulated by their leaders (Hersey p. 84). Fordism fused and emphasised the scientific methods to get things done by Ford's successful mass-production processes. Contrasts also exist between the two theories. Fordism dehumanised the worker whereas scientific management convinced the workers that their goals could be readily achieved along with their employers goals, therefore they should all work together in this direction. Fordism suited industrial

companies participating in mass production, whereas Scientific Management could be used in many types of organisation. Large companies such as Ford Motors, The Reichskuratorium für Wirtschaftlichkeit (RKW) in Germany examples these theories in practice. These theories of the past are lessons for the way modern organisations are run today. Managers now realise that they should treat their workers more democratically and since the mid-70 s, sweeping changes in markets and technology have encouraged managers and manufacturers to use greater product diversity and more flexible methods of production. Movements towards a more flexible organisation have become apparent. Examples of organisations such as Nissan, NASA and Toyota serve as modern day examples of post-Fordism and depict movement towards a modified Scientific Management.

Comparisons that can be made include Fordism's mechanisation of mass production and Taylor's attempts at using employees as machines. Taylor designed this using his principles of management that included developing a science for each element of work and finding the quickest way the job could be done. Henry Ford's ideal types of Fordist production system included using fixed and dedicated machines in individuals work, rather than turning the employee into a machine. (Hollinshead 1995)

With Taylor attempting to prove to the world that there was a science to management and that the quickest way was the best way, he attacked the incompetence of managers for their inefficiencies in running the railroads and factories. Using time and motion studies, Taylor achieved productivity increases of up to 200 per cent. (Dunphy, 1998, p. 4). His thoughts were echoed by others: during a 1910 Interstate Commerce Commission hearing, <https://assignbuster.com/fordism-and-scientific-management-18107/>

Louis D. Brandeis argued that US railroads could save a million dollars a day if they introduced scientific management into their operations (Oakes, 1996). Taylor showed the world that the methodical and scientific study of work could lead to improved efficiency. He believed that by defining clear guidelines for workers many improvements could be made to the production of goods. Fordism like Scientific Management in the newly mechanised industries of the early 20th century emphasised that efficiency came from precision in job design, clear division of responsibilities and tight policing of implementation (Taylor, 1911). Taylorism and Fordism were consistent with notions of the organisation as a military machine first developed by Frederick the Great of Prussia, and later refined by Henri Fayol . (Taplin, 1995, p. 430)

Scientific Management encouraged firms to improve efficiency by analysing individual processes of industrial production and then recreating them to produce maximum output from any given size labor force. (Hudson, 1997) Ford's production-line innovations compounded scientific management s efficiencies into the economy. Taylor believed it would be best to scientifically select, train, teach and develop the workers. (Robbins, 1997) However, in contrast, Fordism was based on mass production using semi skilled workers who could be easily replaced. Fordism did not care for the workers to work as a team and to Heartily co-operate to ensure that all work is done in accordance with the principles of science like Taylor s ideas of scientific management did (Robbins, 1997, p. 40). Although Fordism borrowed many scientific management ideas, it then advanced upon them to produce a new form of management that included management having hierarchical authority and technical control. Fordism enabled managers to

regulate production and safeguard their own position within firms as well as meeting the efficiency criteria set by owners.

The obvious efficiencies of Fordism and features that were responsible for the economic successes of this system, also caused problems. Fordism proved particularly suitable to manufacturing in a mass consumption economy, required only occasional innovation of new products and used machines that only made specific goods. Often, these were of low-quality, low-value, high-volume nature, and competition was price based. Low quality could easily become poor quality; workers were poorly motivated with resulting high labor turnover and absenteeism; and coordinating the flow of materials through production processes was difficult (Wood, 1993). Fordism led to massive increases in productivity in certain industries, but the human cost was significant. At one point Henry Ford's assembly lines had an annual employee turnover of 380 per cent (Encarta, 1998). Fordism alienated workers and allowed no creativity. Where scientific management looked to divide work and responsibility almost equally between management and workers, Fordism was after minimum discretion between management and workers with fragmented work and minimal tasks for employees.

Examining what happened at the Ford Motor Company supports these facts. In 1913 Ford began using monotonous assembly-line techniques in his plant. Although assembly-line techniques greatly increased productivity, many people soon left their line jobs, because of the unpleasant monotony of the work and the repeated increases in production quotas. This is something that contemporary management techniques have realised; it is beneficial for employees to become involved within their jobs and not expected to be

machines. Ford partly overcame this problem by doubling the daily wage then standard in the industry with his famous offer of \$5 a day to workers who would put up with the alienated, regimented work conditions at Ford Motors (Clark, 1997). One worker said, You've got to work like hell at Ford s... You can't let up. You've got to get out the production and if you can't get it out, you get out (Rupert, 1997, p. 11) His results were increased stability in Ford's labor force and a substantial reduction in operating costs. Then the Model T automobile was introduced in 1908. With the help of this model, Ford became America's largest automobile producer and vendor. Nevertheless throughout the 1930s Ford began losing business to his competitors, mainly because they were slow introducing new models of automobiles every year. (Encarta, 1998)

Scientific Management and Fordism created a new type of revolution. The promise of massive increases in productivity led to the following of Ford's and Taylor's models of management all over the world. Britain never had a scientific management movement like that in America, and the leading British engineering journals in the early 20th century revealed Taylorism receiving attention, much of it positive. Engineering became an unqualified supporter of scientific management, only *The Engineer*, a journal of engineering at the time, maintained sustained hostility to Taylorism declaring it was unfair and inhuman and not "sportsmanlike." *The Engineer* criticised the separation of workers thinking in their jobs from doing their jobs and described Taylorism as "scientific management gone mad. (Whitson, 1997)

Another organisation that followed both the American models of Taylor and Ford, was The Reichskuratorium für Wirtschaftlichkeit (RKW) founded in 1921. This huge Berlin-based electro-technical and machine-constructing conglomerate strove to implement measures of industrial and organisational efficiency in Germany in the inter-war era. RKW's aim was to implement technical and organisational measures of industrial, and economic efficiency, an organization devoted to industry; efficiency, and production standardization. (Shearer, 1997, p. 569)

In modern times, firms have attempted to reconfigure work places and production systems using flat hierarchies and lean production systems in contrast to Scientific and Fordist management. Managers presume that these sorts of changes will enable firms to achieve flexibility, seen by many managers as essential to maintaining competitive advantage into and beyond the 21st Century. Flexible production systems opposing strict Fordist lines, made possible by these organisational changes and new technologies, permit shortened product development time. There is a new way of organising production and a departure from Fordism and all it contains.

However, scientific management was used by Japanese automobile constructors in the 1970s when they began to compete using fundamentally improved manufacturing processes that consistently produced vehicles of higher quality far faster than Detroit (Oakes p. 569). Japan car manufacturers successfully decreased labour and production costs giving American Manufacturers a run for their money, Japan's Toyota is an example that used Fordism as a base of new managerial processes.

Another modern day example, which drew on these two management methods, was in space science. NASA developed a set of measures to assess if they were implementing their own strategies. NASA's strategy, defined by the motto cheaper, faster, better, was to reduce the size and cost of space probes without eliminating any important missions. Figures show that the two missions to Mars launched in late 1996 were each one-fifth the real cost of previous Mars missions (under \$200 million in 1996 dollars, as opposed to an average of \$1 billion each for the previous eleven U. S. spacecraft launched for Mars) . (Oakes, 1996, p. 589)

Post-Fordism has been described as a shift to the new information technologies;[a] more flexible, decentralized form of labour process and of targeting consumers by lifestyle taste and culture rather than by categories of social class [as well as] a rise of the service and white-collar classes and the feminization of the workforce: These are lessons managers have learnt and result in less rigidity and mechanisation and a reduction in the blue-collar masculine workforce. The firms that face the most difficulties in the new globalised marketplace are often those with labor intensive, standardised manufacturing processes. Companies emphasise that these new forms of work provide better jobs. For instance, Nissan projects an image of work as taking place in an empowering environment built around the themes of flexibility, quality and teamwork. (Hall, 1991, p. 58)

In conclusion, both Fordism and Scientific Management share common themes yet also display some significant differences. They both encourage looking at the fastest way work can be completed and impose strict guidelines upon employees and their job descriptions. This has led to a great

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deal of dissatisfaction among employees in production lines with alienation and monotony of workers that encouraged a high turnover of employees at organisations that imposed these techniques. Henry Ford developed much of his conceptions upon Taylor's ideas of scientific management. These theories imply that contemporary organisations and their managers should take into consideration the ideas of employees to avoid division. Managers today often see workers as multi-skilled and more involved in the process of production via teamwork, the reintegration of manual and mental labour, and the empowerment of production workers. Today's mass production has seen technology wiping out many of the jobs once held by these employees. There is a movement towards a more flexible workplace in the wave of this new technology away from strict guidelines imposed upon workers and their job descriptions, they are now encouraged to learn about other areas of the workplace. Fordism and scientific management have greatly influenced our workplace today and their theories will continue to be built upon for years to come.

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