Chapter 21 - New systems of work organization

Answers to end of chapter questions

1. What is Fordism and why are Fordist production systems inflexible?

These systems are inflexible as they assign narrow roles and skills to individuals which means that any kind of job rotation or transfer is difficult due to the fact that skills are limited.

2. What has brought about the so-called crisis of Fordism?

The Fordist system has been challenged more recently by new kinds of work organization. Fordist principles—fragmented work, dedicated machinery, and serial rather than parallel task-sequence—create massive economies of scale but have one crucial weakness, namely inflexibility. The presence of a secondary market of small suppliers introduces important flexibilities, but line-based operations can cope only with a certain amount of fluctuation in output. Sabel refers to Fordism as ‘a method for the efficient production of one thing’ (1982, p. 210) and Fordism is totally dependent on stable mass markets that can absorb huge volumes of such standardized output. However, the mass markets that stabilized the Fordist system have now largely broken up and disappeared. This has come about because of a number of global changes, but the chief factor is the changing nature of consumer tastes. The suggestion is that the latter part of the twentieth century witnessed a structural shift in the nature of markets; they fragmented and became increasingly specialized. This was partly due to the success of Fordism itself. Markets became saturated with manufactured goods. The enormous impact on social tastes and expectations of placing motor vehicles and other products within the reach of the mass of people meant that consumers have become much more sophisticated; they are no longer satisfied with standard products. The demand for customized products that incorporate quality and design features now defines the nature of mass markets. These social, technological, and market changes in the global environment of firms left Fordism high and dry.

3. Piore and Sabel’s ‘industrial divide’ presented a set of stark choices as regards future industrial and social developments. What were they?

Piore and Sabel hypothesized two main scenarios out of Fordism: an innovative and a reformist scenario, both of which have considerable uncertainties attached to them. Faced with crisis, firms could attempt to meet the demands to innovate, and shift to high-quality specialized products (which we shall explore more fully below). However, this innovative strategy means abandoning the production principles of Fordism, and it is uncertain whether firms could be so adaptive. Instead, firms might hedge their bets and develop types of ‘neo-Fordism’ which attempt to meet the demand for varied products while maintaining the basic Fordist principles of production. Piore and Sabel’s thesis was that world economies was at a crossroads or, as they put it, a ‘second industrial divide’. The innovative and the reformist paths both represent viable
ways out of crisis, and embryonic forms of each can be detected in industrial systems in various countries. If we consider the path of reform first, the neo-Fordist strategy involves piecemeal changes to improve efficiency by cutting costs, using labour more strategically, and new technologies which allow more flexibility. Sabel remains clear that these only reproduce Fordist forms of low-trust, intensified work. When reorganization involves the introduction of new, computer-based technologies such as numerically controlled machine tools or computer-aided design of parts, managers perceive it as a bold step towards the Fordist ideal of the rationalized factory. It would be mistaken to dismiss such changes totally. Firms are extremely enthusiastic about these kinds of programme, which provide remodelled reproduction and a degree of flexible automation. Indeed, some neo-Fordist approaches are further along the spectrum towards innovative production than others.

4. Describe the flexible firm model. Does it accurately describe British industrial patterns?

The changes to business models highlight two distinct faces of flexibility: functional and numerical.

- Functional flexibility is a work process factor that refers to flexibility across different kinds of production technology and to workers' capacity to overlap technical, maintenance, and production work.
- Numerical flexibility is a labour market factor, and refers to employers' capacity to shed or take on the types of labour they require as market changes dictate.

Both forms of flexibility were combined in a new organizational model called the flexible firm.

5. How is flexible specialization a superior model to its neo-Fordist alternatives?

Originally developed by Atkinson (1984; 1985; 1988), the flexible firm is essentially an attempt to combine the control and efficiency of the factory with flexibility. A ‘core’ of workers, who are well rewarded and secure, possess the integrated skills that the firm needs to perform its central tasks. they provide functional flexibility. Numerical flexibility is provided by a ‘periphery’ of workers in less secure jobs who can be hired and fired easily. These workers perform less important tasks and comprise different types of labour—temporary, part-time, agency employees, subcontractors, self-employed, and so on. The flexible firm is, therefore, adaptable to market expansion and contraction (via numerical flexibility), and to qualitative changes in the demand for new types of product (via functional flexibility).

6. What threatens the German version of flexible specialization?

Piore and Sabel acknowledge a much wider movement there toward flexible specialization across major industries like steel, chemicals, machine tools and cars. But they still classify Germany with countries (like Italy and Japan) where ‘the success
stories are not so exceptional’. However, others (notably Lane, 1988) claim that Germany is one country where innovative production has been established economy-wide. The German industrial system, as we have said, may represent more than a short-lived or small-scale triumph over Fordism. The modell Deutschland has been built on co-operative relations between trade unions and employers, and a deeply embedded ethic of social partnership. It is recognized as a unique form of social and economic stability, and held up as a model that other national industrial relations systems might pattern themselves on (Koch, 1999).

7. Are there any differences between just-in-time and lean production?

JIT manages to combine flexibility and volume by ideally producing only the amount at each stage of production necessary to complete the next stage. A simple definition of JIT might be that it is a system for delivering the exact quantity and defect-free quality of parts just in time for each stage of production. While just-in-time is a type of production design technique, alternative interpretations of the Japanese influence have stressed a broader process of incremental improvement. In their book, The Machine that Changed the World, Womack, Jones, and Roos (1990) published the results of an influential study carried out at the Massachusetts Institute of Technology. In this they popularize the management system they call ‘lean production’. This, they assert, is an unparalleled means of producing improved products at low cost and with fulfilling work, and is destined to become the new model for world-class manufacturing. At the heart of the new system was the elimination of waste. With just-in-time methods, kaizen could be regarded as an element of Japanese production philosophy. But in lean production it becomes the driving principle. Womack et al. stress that the giant Toyota company was the birthplace of lean production and historically the most important agent for developing and disseminating the new style of management. In the early growth of Toyota an obsessive attention to shop-floor detail and worker responsibility for quality became the starting-point of the revolution.

8. What are the main criticisms of the Japanese production methods?

While there is no doubting the success of Japan’s production strategies, there have also been some highly critical evaluations of who has borne the cost. Questions have been asked about the limits to the application of these methods outside Japan, as well as inside the country, and the query has been raised about whether these are genuine innovations in the sense of a radical break with Fordism.

9. Why has the Japanese economic miracle attracted so much more attention than the German one?

The main discussion then centred on production systems found in the leading economies of Germany, Japan, and the United States. In Germany flexible specialization rested on skilled traditions, stable industrial relations, and a high social settlement—all upheld by a remarkably successful product market strategy (all the world wants a Mercedes). Japanese methods, which are much more famous and widely discussed, have led to a mass of new jargon, though the systems known as
just-in-time and lean production are most widely applied. Both refer to the same mix of redesigned assembly methods, supply-chain management, and continuous improvement. The United States, still of course the world’s largest economy, cannot claim a distinctive new system of its own, yet the popularization of Japanese methods has come about as a result of their impact in the USA—particularly lean production as the latest global paradigm.