PART I

Introduction

CHAPTER 1

The New Workplace: An Introduction

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Modern working practices and technologies are typically implemented because they have a significant capacity to shape the nature of work and its effect on individuals' behaviour. They include, for example, lean manufacturing, advanced manufacturing technology, total quality management (TQM), call centres, supply-chain partnering (SCP), knowledge management and e-business. Furthermore, surveys show that these practices are increasingly prevalent in organisations in advanced industrial societies (Lawler, Mohrman & Ledford, 1995; Osterman, 1994; Waterson *et al*., 1999). Yet when modern working practices are implemented they can sometimes alter work in unintended ways, have deleterious effects on employees and not produce the hoped for improvements in employee and organisational performance (Clegg *et al*., 1997; Parker & Wall, 1998; Waterson *et al*., 1999). Indeed, the design, implementation and management of modern working practices often create problems for employees at all levels in the organisation. It therefore seems essential that we understand the nature of modern working practices, the effects that they have on employees, the extent of their use, their effect on organisational performance, and how they can be more effectively designed, implemented, evaluated and managed.

Needless to say, considerable research has already been conducted on these issues in disciplines such as human resource management, occupational psychology, strategic management, operations management and sociology; and one of the strongest messages to come out of this research is that the social, psychological and organisational aspects of working practices and technologies must be considered in order to understand, design and manage them effectively (Cherns, 1987; McLoughlin & Harris, 1997; Salvendy, 1997; Storey, 1994; Wall, Clegg & Kemp, 1987). As such, the main premise of this book is that the human side of workplace practices and technologies must be addressed. To do this, the book has the following five aims:

1. To examine the nature and extent of modern working practices and technologies.
2. To review and evaluate the impact modern working practices have on how people work and their experience of work.
3. To examine the human resource management implications of such practices.
4. To examine the effect that these practices have on productivity and firm performance.

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Table 1.1 Definition of the modern working practices covered in this book

Modern working practice	Definition
Lean manufacturing	An integrated system of production with a single production flow that is pulled by the customer. Emphasis on small batch manufacture, just-in-time, team-based work and participation to eliminate non-value-adding activities and variabilities
Total quality management	A comprehensive, organisation-wide effort that is an integrated and interfunctional means of improving the quality of products and services and of sustaining competitive advantage
Advanced manufacturing technology	The application of computer-based technology to automate and integrate the different functions in the manufacturing system
Supply-chain partnering	Developing long-term, cooperative relationships with suppliers and customers
Team work	A collection of individuals who are interdependent in their tasks and outcomes, who see themselves and are seen by others as a distinct social entity within a larger social unit
Call centres	A work environment in which the main business is mediated by computer and telephone-based technologies that enable the efficient distribution of calls (or allocation of outgoing calls) to available staff, and permits customer–employee interaction to occur simultaneously with the use of display screen equipment and the instant access to, and inputting of, information
Knowledge management	The use of practices, particularly IT-based technologies and community- and network-based practices, to centralise, collectivise and create knowledge so that it can be exploited to increase the organisational performance and to develop new opportunities
Employee involvement and empowerment	The use of practices to increase employee control, participation and involvement, and the supply of personal and organisational resources necessary to do the job
Teleworking	Working remotely from the home, remote offices or other sites for all or most of the working week, and connected to the main organisation by telephone and computer technologies
Performance management	A range of practices an organisation engages in to enhance the performance of a target person or group, with the ultimate purpose of improving organisational performance
e-business	The conduct of business transactions and activities using, in large part, electronic means, and typically involving use of the internet and world wide web

5. To review different methods, tools and principles that can be used to guide the design, implementation and evaluation of modern working practices.

These aims are covered throughout the book. But Part II, Modern Working Practices in the Workplace, focuses particularly on the first three aims. The practices examined in Part II are defined in Table 1.1. They were chosen for a variety of reasons and these include being relatively new, being widely practised and having the potential to significantly impact upon the nature of work. The chapters cover the most important issues and debates pertinent to the human side of modern working practices today. Part III is primarily concerned with

the fourth aim of the book, the relationship between modern working practices, human resource management and organisational performance. The first two chapters in Part III examine the impact of modern working practices in the manufacturing and service sectors, while the third considers the impact of human resource practices.

Part IV meets the fifth aim of the book by illustrating some of the tools and methods that can be used to contribute to the effective design, implementation and evaluation of new working practices. The tools and methods outlined all attempt to give explicit attention to the social, human and organisational aspects of the new ways of working, areas of concern often neglected by managers and technologists. Finally, the concluding section, Part V, looks to the future. It does this first by considering how future economic conditions and organisational forms might affect employee behaviour and human resource practice; second, by critically evaluating the research, including that covered in this book, from a Critical perspective; and third, by identifying fruitful avenues for future research.

The rest of this chapter is devoted to setting out the context in which modern working practices have been implemented, and some of the main debates and issues that have concerned researchers when examining them.

CHANGE AND CONTINUITY IN THE WORKPLACE

Most of us are now fairly well versed in the changes occurring in the economic, political and social landscape. These include: the internationalisation of the economy; a reduction in trade barriers between countries; the deregulation of markets; privatisation and the ending of state monopolies; increasing demands for greater accountability and efficiency in the public sector; demographic changes in the workforce (e.g. increased female participation, better educated workforce); and changing consumer demand (e.g. a desire for more customised products, for better quality) (Doganis, 2000; Gabriel & Lang, 1998; Katz, 1997; Pollitt, 1993). These changes have intensified competition. They have also meant that much competition has become based on cost *and* quality, innovation and customisation (Appelbaum & Batt, 1994; Piore & Sabel, 1984). Similar demands for cost efficiencies, quality and customized services are evident in the public and not-for-profit sectors (Peters, 1992). In addition, knowledge is increasingly recognised as a basis for competition and it is thought that, in many industrial sectors, competitive advantage will primarily flow from the creation, ownership and management of knowledge-based assets (see Scarbrough, Chapter 8, on Knowledge Management).

In response to these changes and the expectation of these changes (Sparrow & Cooper, 1998), it is claimed that many organisations have sought to move away from Fordist, large-scale, hierarchical bureaucracies of mass production and mass service, and towards flexible organisations that can respond quickly and efficiently to rapidly changing market and consumer demands (Amin, 1994; Kumar, 1992; Schneider & Bowen, 1995). Flexibility is seen as a key component of organisational effectiveness. Managers have sought to achieve organisational flexibility by experimenting with new organisational forms and new working practices. There are a number of flexibilities that organisations have sought (Sparrow & Marchington, 1998):

- *Structural flexibility*, by introducing, either together or in isolation, flatter hierarchies and horizontal coordination between units; modular structures that can be reconfigured as new

projects or problems arise; joint ventures; temporary alliances; and inter-organisational networks (McPhee & Poole, 2000). Team working (e.g. cross-functional teams, project-based teams, virtual teams) (Chapter 6), supply-chain partnering (Chapter 5) and e-business (Chapter 13) are working practices that can help achieve structural flexibility.

- *Functional flexibility*, by introducing working practices that enable effective responses to changes in demand, supply and work load. Advanced manufacturing technology (AMT) (Chapter 4), lean manufacturing (Chapter 2) and multi-skilled teams (Chapter 6) would help achieve this aim.
- *Numerical flexibility*, through the use of part-time and temporary employees, outsourcing and various relationships with outside partners. Supply-chain partnering (SCP) would aid the achievement of this.
- *Geographical flexibility*, so that work may be dispersed to where it can be carried out most effectively, e.g. by introducing telework and virtual teams (Chapters 6 and 11).
- *Jobs-based flexibility*, by creating jobs with greater control, broader responsibility and higher skill requirements, so that employees can control variances as they arise. This could be achieved, for example, by implementing employee empowerment and involvement initiatives (Chapter 9).

In addition to greater flexibility, different structures and practices also been used to improve quality (e.g. through TQM, SCP, call centres), to manage and exploit knowledge (e.g. through knowledge management programmes, TQM, lean manufacturing, job empowerment) and to contain and manage costs (e.g. through TQM, lean manufacturing, call centres). Management have therefore been seeking to improve organisational effectiveness on a number of fronts through the introduction of a range of working practices.

Yet the introduction of new working practices may not be sufficient to ensure success. It has often been argued that modern working practices are most effective, indeed, can only be effective, when underpinned by a highly skilled and committed workforce and when accompanied by appropriate human resource management practices (Becker & Huselid, 1998; Lawler, Mohrman & Ledford, 1995; Steedman & Wagner, 1987; Walton, 1985). Furthermore, as new technologies and practices become more widely used, the value added by the human resource becomes critical to competitive success, as the skills of the human resource may not be copied readily (Boxall, 1996; Klein, Edge & Kass, 1989; Porter, 1985).

There are a number of reasons for believing that a highly skilled and committed workforce is essential to the effective running of modern working practices. First, as modern working practices and technologies are often complex and can present the user with difficult problems, there is a need for a high level of technical skill as well as higher-order cognitive abilities, such as problem solving, critical thinking and analytical skills. Second, practices such as advanced manufacturing technology, teamwork, supply-chain partnering and job empowerment increase intra- and inter-organisational interdependencies, while social and relational networks are now viewed as crucial to the generation and sharing of knowledge (see Scarbrough, Chapter 8). This implies that interpersonal relationships must be managed effectively and that trust be developed (Hosmer, 1995; see also Chapter 5 on supply-chain partnering). To achieve this, high levels of communication and interpersonal skills are required. Third, the requirement to continuously improve processes, products and services that is embedded in much modern management (e.g. TQM) means that employees need

to be creative and innovative (see Chapter 10; Amabile, 1988; West & Farr, 1990; Wolfe, 1994). Fourth, as new practices can increase the degree of discretion and responsibility, employees must be able to regulate their own behaviour (i.e. to act without close supervision and management control), respond to variances in the work process as they occur and exhibit discretionary behaviours (Susman & Chase, 1986). This means that employees need to be proactive (see Chapter 10), have the skills to deal with variances in the work process and have the skills necessary to engage in discretionary behaviour.

Given the proposed importance of a skilled and committed workforce, human resource management practices are now viewed as playing a necessarily crucial role in securing, maintaining and developing an organisation's skill base through well-resourced selection and recruitment procedures, high levels of initial and continued training, and performance management practices (see Chapter 12). The use of human resource management to secure, maintain and develop a highly skilled and committed workforce has been labelled a "high commitment" or "high involvement" approach (see Chapters 9, 14, 15, 16; Lawler, 1986; Walton, 1985). A number of surveys have documented the increasing use of human resource practices that are associated with this and the way these may be linked to modern working practices and operational management methods.

Organisational change is undoubtedly taking place but the jury is still out on the extent to which this represents a radical change across the whole economy (see Fincham & Rhodes, 1992). First, the continued influence of Taylorist and Fordist ideas would challenge such a view, e.g. in the service sector, some call centres represent an advanced form of Taylorism (Taylor & Bain, 1999) and the "McDonaldization" of service work has been well documented (Ritzer, 1998). Likewise, just-in-time (JIT), an essential component of lean manufacturing, can be viewed as an extension and revitalisation of Fordist principles, rather than a break from them (Tomaney, 1994; Wood, 1989). The "new workplace" is, so the argument would go, a mixture of "old" and "new" working practices (Blyton & Turnbull, 1994). Second, even where new practices are being introduced, this may not always be done as a package. Modern flexible working practices, in particular, may not necessarily be accompanied by high-commitment human resource practices, or vice versa. However, it is precisely the integration of these two facets that fundamentally transforms workplaces (Lawler *et al.*, 1995; Storey, 1994; see also Wood, Chapter 14). Just as there are questions about the extent and nature of workplace change, questions are also being asked about whether the effects of change are as beneficial as many imply (Philimore, 1989). Modern working practices and high commitment human resource practices are often portrayed as leading to a win–win situation for the employee and the organisation. But while there are accounts demonstrating that the introduction of modern working practices can lead to more interesting work, more highly skilled work and lower levels of stress, there is also research showing that the introduction of modern working practices can intensify work, de-skill employees and lower their well-being (Adler & Borys, 1996; Braverman, 1974; Klein, 1989; Knights, Willmott & Collinson, 1985; Parker & Wall, 1998; Sturdy, Knights & Willmott, 1992). A modern working practice can have different effects. The effects of a flexible working practice are dependent on how it is implemented, designed and managed and are not solely dependent on some intrinsic feature of the working practice itself.

In summary, as organisations have sought to adapt to changing economic and social circumstances, they have become a patchwork of "new" working practices, "old" working

practices, "new" working practices that are extensions of old principles and ideas, and different types of human resource management practice. In addition, there appears to be no straightforward relationship between a working practice and its effects.

Two perspectives that have helped in understanding this complex picture are (a) job design theory and (b) research that has examined the link between human resource management and organisational performance. Job design theory is important, as the effects of a working practice are significantly affected by the job design of the working practice in question (Parker & Wall, 1998). This means that, for a full understanding of why working practices have varying effects in different contexts, it is necessary to establish the job characteristics present in a particular working practice and the processes by which job characteristics are related to specific outcomes. Job and work design is also an important factor in research examining the human resource (HR)–organisational performance link. This research is important, as it draws together two key characteristics of organisational change over the last 30 years (i.e. the movement towards flexible working practices and high-commitment HR practices), and seeks to explain their separate and joint effects on firm performance.

The following sections outline the main issues and theories in job design theory and focus on research examining the HR–organisational performance link. The issues and themes within them run throughout many of the chapters in Parts II and III. In particular, job design theory is central to many of the debates in Part II, while the issues and debates regarding the HR–performance link are central to Part III. An appreciation of these areas is therefore crucial to understanding many of the chapters in this book.

JOB AND WORK DESIGN THEORY

Historically, the main focus of job design research has been on the psychological consequences of work simplification brought about through the pervasive adoption of Taylorist and Fordist approaches to work organization. Two approaches, job characteristics and sociotechnical theories, have been particularly influential (for fuller discussion of the main job design traditions, their limitations and future prospects, see Holman *et al.*, 2002; Parker *et al.*, 2001).

The job characteristics approach to job design has been strongly influenced by Hackman & Oldham's (1976) Job Characteristics Model (JCM). They proposed five core job dimensions (autonomy, feedback, skill variety, task identity, task significance) and these are seen to be determinants of three "critical psychological states": autonomy to experienced responsibility; feedback to knowledge of results; and skill variety, task identity and task significance to experienced meaningfulness. Collectively, these critical psychological states are seen to affect work satisfaction, internal work motivation, performance, absence and turnover. Research has generally demonstrated the effect of core job characteristics on affective outcomes (satisfaction, motivation) but the effects on employee behaviour (performance, turnover, absence) are less consistent (Parker & Wall, 1998). The motivating potential of job design has been an central issue within this research tradition (Campion & McClelland, 1993; Wall & Martin, 1987), as it also has been within debates on modern working practices and high-commitment human resource practices. Pritchard & Payne address this important issue in Chapter 12. In particular, they examine how modern working practices and human resource practices affect employee motivation.

Karaseck & Theorell's (1990) control-demands model is another job characteristic approach that has been influential[1]. It predicts that "high-strain jobs" are those characterised by high work demands and low control. Although the evidence for a proposed interactive effect of control and demand is inconclusive (Van Der Doef & Maes, 1999), numerous studies have confirmed that the absence of control and the presence of high job demands are consistent predictors of job-related strain (O'Driscoll & Cooper, 1996).

The second main approach to job design has been socio-technical theory. Socio-technical theory is concerned with the design of work systems and posits that it is comprised of a technical system and a social system. These subsystems are seen as interdependent and should therefore be jointly designed in such a way that the overall system is optimal (de Sitter, den Hertog & Dankbaar, 1997). Socio-technical theory has made a number of contributions to our understanding of job design. It is best known for its articulation of a set of design principles (Cherns, 1987; Clegg, 2000); for a set of criteria of what comprises a well designed job; and for the innovation of autonomous work groups (Emery, 1964). Its design principles include: methods of working should be minimally specified; variances in work processes should be handled at source; and boundaries should not be drawn to impede the sharing of information, learning and knowledge. Desirable job characteristics are thus assumed to be a reasonable level of demand, opportunities for learning, an area of decision-making owned by the operator, and social support and recognition. These principles of design and desirable job characteristics are seen to be best expressed in autonomous work groups (AWGs), and much socio-technical research and practice has been focused at a group level. Although it has been suggested that an 'underlying lack of specificity about the nature and effects of such initiatives (i.e. AWGs) makes a coherent assessment of their outcomes difficult' (Parker, Wall & Cordery, 2001, p. 416), research demonstrates that AWGs can have positive effects on well-being and productivity (Parker & Wall, 1998).

An important focus of the job characteristic and socio-technical approaches has been job redesign (e.g. enlargement, job enrichment, AWGs) and the tools necessary to do this. Mumford & Axtell in Chapter 17 explore tools that can be used for job redesign. It can also be noted here that organisations often fail to properly evaluate the effect of interventions, and thus valuable information about how the practice could be improved may be lost. To address this, Sonnentag in Chapter 18 examines the different ways that organisations and researchers can evaluate the effectiveness of new working practices.

Another notable feature of job design research is that it has reflected many of the debates and issues concerned with the changing nature of work. For example, the recent interest in cognition and knowledge at work has focused attention on:

- Cognitive and knowledge-based job characteristics, such as problem-solving demands, attention demand, (Jackson *et al*., 1993), non-routine knowledge work (Mohrman, Cohen & Mohrman, 1995), knowledge intensity (see Lamond, Daniels & Standen, Chapter 11) and the opportunity to develop and utilise skills (O'Brien, 1986).
- Knowledge-based job outcomes, e.g. skill, self-efficacy (Parker & Wall, 1998).
- Knowledge based-mechanisms that link job characteristics to job outcomes, i.e. jobs with high control and challenging demands promote the development of skills and knowledge

[1] Other job characteristic approaches include social information processing theory (Salanick & Pfeffer, 1978) and the multi-disciplinary approach of Campion and colleagues (Campion & McClelland, 1993; Medsker & Campion, 1997). The latter approach categorises job characteristics into "mechanistic" (e.g. specialisation of tools and procedures, skill simplification, repetition), "motivational" (e.g. autonomy, job feedback, social interaction, task clarity, participation), "perceptual/motor" (e.g. lighting, displays, workplace layout, information requirements), and "biological" (e.g. strength, seating, noise, wrist movement).

(Wall *et al*., 1990). Better knowledge enhances performance, as employees are better able to deal with variances in the work process (Miller & Monge, 1986) and choose the most appropriate strategies to deal with a situation (Frese & Zapf, 1994).

In summary, job design research has coalesced around some key questions and these will be addressed throughout the book:

- What are the impacts of new technologies and new working practices on job content?
- What are the core job characteristics of modern working practices?
- What effects do the particular job designs of working practices have on psychological well-being and performance?
- Through what mechanisms do job characteristics effect job outcomes in modern working practices?
- What methods, tools and principles can be used to design and evaluate new technologies and working practices?

HUMAN RESOURCE MANAGEMENT AND ORGANISATIONAL PERFORMANCE

Key concepts in human resource management (HRM) theory are fit and synergy (Wood, 1999). Three types of fit can be identified: (a) the internal fit between human resource (HR) practices; (b) the organisational fit between HR systems—coherent sets of HR practices—and other systems within the organisations; and (c) the strategic fit between HR systems and organisational strategy.

The discussion of internal fit centred on the idea that some HR practices combine better than others, and that coherent bundles of practice will have synergistic effects. A corollary of this is that part of the explained variance in observed differences in organisational performance will be caused by the differential usage of synergistic bundles of practice. When the terms "high-commitment" and "high-involvement" have been used, authors have differed as to their precise content. But they are generally seen to include many of the following: teamwork, high control or empowered job designs; employee participation schemes; job flexibility; high quality and continued training; performance appraisal; well-resourced selection and recruitment procedures; performance-contingent incentive payment systems (including group-based pay and profit sharing); and minimal status differences (Wood, 1999). In this book, we have decided to let individual authors use their own preferred terms and constructs rather than impose a view.

A key debate is whether high commitment/involvement HR systems are universally relevant or whether their effectiveness is contingent upon its alignment with other organisational practices, i.e. an organisational fit, and whether their effectiveness is contingent upon its alignment with the organisation's strategy, i.e. the strategic fit. Universalist approaches tend to assume that high-commitment HR systems reverse features of past Tayloristic, bureaucratic and low-commitment approaches to organisation and will generally have positive effects on organisational performance. A variant of the universalist argument is that a high-commitment HR system is a necessary but not sufficient basis for high performance. Rather, there needs to be a fit or alignment between high-commitment HR systems and modern working practices, such as TQM and lean manufacturing (Kochan & Osterman,

1995; Beaumont, 1995). This "high road" approach is universalistic, as it suggests that high performance will only be attained through the synergy created by these two factors. A contingency-based approach proposes that performance will be superior when there is an organisational and strategic fit, and that the HR system chosen should flow from the organisation's strategy. It is argued that a Tayloristic/low-commitment HR system will fit a cost-minimisation strategy and that a high commitment HR system will fit an innovation/quality strategy (Batt, 2000; Hoque, 1999; Schuler & Jackson, 1987). These different approaches are presented and discussed in more depth in Part III, and also in Chapter 9, Employee Involvement.

SOCIAL AND POLITICAL PROCESSES IN THE DESIGN AND MANAGEMENT OF MODERN WORKING PRACTICES

A basic assumption of this book is that job design and human resource management are fundamental to an understanding of modern working practices. However, while much job design and HRM research accepts that modern manufacturing practices may differ in form, they have little to offer on why or how a particular practice has taken the form it has. Neither do they have much to say on the active role that employees play in shaping them. For example, interpretivist research has illuminated how the political and social assumptions of those involved in the design and introduction of new technology become embedded within the technology, in the form of prescriptive design rationales which automate a particular view of how work is undertaken (Moran & Carroll, 1996). The "final" configuration of a technology and the social practices that surround it can be seen as an outcome of social and political negotiation between various groups over time (Barley, 1990; Buchanan & Boddy, 1983; Mueller *et al*., 1986; Orlikowski, 1992). Technologies can therefore be understood as "a frozen assemblage of practices, assumptions, beliefs [and] language" that have become "fixed" in a material form (Cooper & Woolgar, 1993, p. 2). In this way, the design and configuration process can have lasting effects on job design, productivity and the quality of working life.

Critical research within the labour process tradition has drawn attention to how management attempt to instil within workers the belief that organisational objectives are their own and to ensure that these objectives are considered when making judgements at work. Modern working practices are thus mechanisms through which the worker becomes "self-disciplined" into making "positive" productive responses (Grenier, 1988; Knights & Sturdy, 1990). Sakolosky (1992, p. 246) has concluded that control becomes "embedded not just in the machinery of production or surveillance, but in the worker's psyche". But workers are not seen as passive reactors to management initiatives. Rather, labour process theory treats workers as active agents who resist, consent and comply with managerial efforts to control them and that these resistance practices shape working conditions and working practices (Burawoy, 1979; Collinson, 1994; Knights, 1990; Sturdy, Knights & Willmott, 1992).

These two areas of research reveal the social and political processes involved in the design, introduction and management of modern working practices. They paint a more dynamic picture of organisational life, in which employees actively shape working practices and one in which there may be conflicting interests over the use and aims of modern working practices. In doing so they offer different perspectives and ask different questions about modern working practices. They include: How do the designs of modern working practices

arise? How are they shaped and configured by the various actors in the process? What are the values and goals of the actors? Do these values conflict, and, if they do, how is this expressed?

CONCLUSION

The main purpose of this chapter has been to set the scene for the rest of the book by articulating the changing economic conditions, the working practices that organisations are using to respond to this changing landscape, and to cover the main issues, debates and theoretical approaches to the human side of modern working practices. Four factors are crucial for an understanding of this discussion. They are:

- The knowledge, skills and abilities of the human resource.
- The job and work design of the modern working practice.
- The human resource practices that are used in conjunction with the modern working practice.
- The social and political processes involved in the design and use of modern working practices.

These factors are recurrent themes throughout the book. Taken together, the chapters in this book present a comprehensive overview of the study of working practices, an area with a long history, whilst introducing the reader to emerging new forms of work and the perspectives that these are engendering.

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