THE PROFESSIONALISATION OF FEMALE-DOMINATED OCCUPATIONS IN THE SERVICE SECTOR

ORGANIZATIONAL CHANGE AND ITS IMPLICATIONS FOR EMPLOYMENT AND HUMAN RESOURCE DEVELOPMENT: AN OVERVIEW PAPER


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The views expressed are those of the author and do not commit either the Organisation or the national authorities concerned.
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SUMMARY

Organizational change has become an important phenomenon throughout the OECD area over the past decade. This involves new strategies, structures, and practices that, for the most part, have been introduced by employers to become more flexible in an environment that is increasingly competitive, fast-paced, and uncertain. Together, these changes have the potential to affect significantly the way economic activity is undertaken and the nature of the work experience.

Organizational change, which began in manufacturing, has been spreading to service industries and the public sector where much of the female workforce is employed. By addressing issues related to the flexible workplace, the paper provides the backdrop for a wider discussion of employment and career development prospects for women in an era of organizational change.

This paper begins with the key conceptual elements of new organizational systems, reviews differences across OECD countries, and summarizes the available evidence on the diffusion of flexible practices. It then turns to the implications of organizational change for workers, focusing in particular on two issues that are central to the transformation of the workplace and that have critical implications for the labour market situation of women. The first relates to the implications of organizational change for skill requirements and human capital accumulation. The second pertains to the proliferation of nonstandard work arrangements and its links to organizational change. The paper concludes with public policy considerations, with particular attention placed on three policy issues that are closely related to the transformation of the workplace: education and training over the lifecycle, promoting flexible work arrangements, and providing economic security.
OVERVIEW PAPER ON ORGANIZATIONAL CHANGE AND ITS IMPLICATIONS FOR EMPLOYMENT AND HUMAN RESOURCE DEVELOPMENT

1. Introduction

1. Organizational change has become an important phenomenon throughout the OECD area over the past decade. This phenomenon involves changing strategies, structures, and practices that together have the potential to significantly affect the nature of work, the way economic activity is undertaken, and even the links between work, family, community, and society. Some social scientists have argued that this transformation of organizations is part of a broader shift to a new "technoeconomic paradigm" associated with the information and communication technology (ICT) revolution and the emergence of the knowledge-based economy.¹

2. The motivation behind organizational change has most often been a desire on the part of employers to become more adaptable to an environment that is increasingly competitive, fast-paced, and uncertain. This shift in the external environment is primarily due to the interaction of competitiveness pressures intensified by the liberalization of markets (both global and domestic) and the product and process innovations made possible by the new technologies. In this environment, *flexibility* has replaced *stability* as the underlying imperative for more and more organizations. However, how organizations are trying to achieve this flexibility differs across sectors and across countries. Strategies can emphasize internal operations or they can focus on the interaction between the organization and its external markets and agents. They can be directed primarily toward reorganizing how work is carried out within the establishment or enhancing the establishment’s ability to vary production inputs as required. Or they can involve all of these things.

3. Knowledge is accumulating as researchers in different countries study the patterns and outcomes of organizational change. They are finding that organizational innovations that enhance flexibility and encourage investment in intangible assets can lead to improvements in firm performance. However, while flexible systems are spreading over time, their diffusion remains uneven across different types of firms. The reach of organizational change is also uneven in the sense that labour demand in flexible systems is increasingly shifting to skilled workers and, thus, reducing overall employment opportunities for the less skilled.

4. These research results have directed the attention of governments to organizational change. This is not due to any particular interest on the part of policy-makers in what happens within individual workplaces. However, governments are increasingly recognizing the connections between organizational change and more traditional policy goals such as productivity growth, employment creation, and income distribution. This is evident in the work of the OECD which has converged on the conclusion that such macroeconomic objectives can be served by micro policies that ultimately play out at the level of the enterprise or workplace (OECD 1996a, 1997 forthcoming).

5. At a fundamental level, organizational change raises two policy issues for government:

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¹ See Freeman and Perez (1988) for a discussion of the technoeconomic paradigm.
Given the links between flexible organizational systems and economic efficiency gains, how can governments encourage the further diffusion of these innovations?

Given the uneven impacts of organizational change on the workforce, how can governments encourage the diffusion of innovations that contribute to equity-related objectives including broad economic participation and a socially sustainable income distribution?

6. In December 1996, the OECD and the Canadian Government co-hosted an international conference in Ottawa to consider the concept of organizational change, its impacts, and policy implications. The conference report identified four major themes:

- While the diversity within the OECD region makes it unrealistic to identify “best practices,” it is possible to identify “best principles” that can jointly serve efficiency and equity objectives.

- Until now, organizational change that truly supports these objectives has not been widely diffused. First, many establishments still follow traditional organizational models and, second, where changes have been adopted, they have not always achieved these goals. In fact, in some instances organizational change likely has contributed to economic insecurity and polarization.

- There are a number of obstacles to the diffusion of workplaces changes that support both efficiency and equity goals and overcoming these will require a multi-stakeholder approach, including business and labour.

- Governments also have an important role to play in terms of fostering “best practices,” supporting the “learning society,” providing economic security, and refashioning the “social contract.”

7. This paper pursues a number of the themes emerging from the Ottawa conference. However, while the proceedings in Ottawa were concerned with the broad implications of organizational change for enterprises, workers, and society, the focus is sharpened somewhat in this paper to consider the implications for workers, particularly female workers. By addressing issues related to the flexible workplace, it is meant to provide the backdrop for a wider discussion of employment and career development prospects for women in an era of organizational change.

8. This backdrop is becoming increasingly relevant as organizational change, which began in manufacturing, has been spreading to service industries and the public sector where much of the female workforce is employed. Accordingly, women are more and more affected by the labour demand impacts of organizational change. Moreover, flexible workplaces alter the employment relationship in a number of respects, including the terms of the (implicit) work contract, employment conditions, and the commitment placed on employees. These labour market developments are taking place at the same time that the social and economic roles of women and men are in transition. Thus, the innovation process has implications not only for the work experiences of women, but for the personal and family sphere as well.

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2 The conference volume includes a review essay summarizing the proceedings within the context of the existing literature and appendices that report on the proceedings of the workshops and focus groups. See Government of Canada/OECD (1997).
9. In the next section, the key elements of workplace change will be reviewed including how the nature of the changes varies across the OECD area. Evidence on diffusion and impacts on enterprise performance will also be summarized. This discussion will be based largely on recent OECD work including the report of the Ottawa conference.

10. The third section turns to the consequences of organizational change for workers. It will consider two issues in particular that are central to the transformation of the workplace and that have critical implications for the labour market situation of women. The first relates to the implications of organizational change for skill requirements and human capital accumulation. The second pertains to the proliferation of nonstandard work arrangements and its links to organizational change. A key theme of this section will be the two sides of the flexible organization – the opportunities for challenging work and genuinely flexible work arrangements, on the one hand, and concerns about marginalization and polarization, on the other.

11. The final section will turn to public policy considerations. It will begin with a general discussion of the role of government in shaping workplace change and supporting better outcomes for workers. It will then focus on the policy issues that have emerged from the preceding section, specifically education and training over the lifecycle, promoting flexible work arrangements, and providing economic security.

2. Organizational Change: The Concept, Its Diffusion, and Its Impacts

12. The nature of work, including the employment relationship, job content, and workplace realities, is undergoing fundamental changes during the 1990s. Certainly, evidence from public opinion surveys suggests that workers throughout the OECD area are experiencing uncertainty both in the narrower sense of job insecurity and in the broader sense of a generalized economic uncertainty.

13. In a recent review of job insecurity, the OECD (1997), however, noted a number of paradoxes associated with job insecurity. Two are relevant here. First, reported levels of insecurity have been high even in countries that have low levels of unemployment, such as Japan and the United States. Second, the qualitative sense of rising insecurity is not easily explained by objective labour market measures such as job tenure or retention rates which have tended to remain fairly stable. Thus, the OECD and others have concluded that an important element of the overall story is institutional in nature. This includes a weakening of unemployment insurance, in some cases a decline in the coverage of collective bargaining or its ability to protect workers from insecurity, and changes in organizational and managerial strategies.

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3 There are conceptual problems with using tenure and retention rates as indicators of job stability. Some of these issues are discussed in OECD (1997). However, in most countries these have been most frequently used as empirical measures of job stability because they make intuitive sense and appropriate data tend to be available.

4 See, for example, the High Level Expert Group on the Social and Societal Aspects of the Information Society (1996), Carnoy and Castells (1996), and Betcherman and Lowe (1997).
14. It is the last of these that is the particular focus of this paper (although, as we will see, organizational change has important implications for both public policy and industrial relations.) In this section, we review the concept of organizational change, and then summarize the available evidence on its diffusion and on its impacts on enterprise outcomes.

The concept of organizational change

15. “Organizational change” is a broad concept that encompasses strategic, structural, and behavioural dimensions. While the term is not always used precisely, it typically refers to changes affecting one or both of the following two interconnected areas:

- Work organization, which involves the process of production or service delivery. This can include how work is organized, job responsibilities, work allocation, and organizational structure. Work organization can extend beyond the boundaries of the enterprise to include contracting out arrangements.

- Human resource management practices, which can cover a range of personnel management areas including the terms and conditions of employment, hiring and firing, compensation, information-sharing and decision-making, training, and scheduling.

16. Figure 1 presents a simple framework for considering the key issues associated with organizational change. The starting point is the environment in which the organization exists. Much of the organizational change that has occurred throughout the OECD area has been initiated by employers in response to changes in that environment. One key factor has been changes in competitive patterns, both in terms of intensified competition and an increased emphasis on gaining market advantage through innovation. A second has been new technology, especially information and communication technology, which has created unprecedented opportunities for both product and process innovation and, thus, has been central to how organizations have responded to the challenges of competition.

17. Market and production pressures have been behind much of the initiative for organizational change coming from the employer community. However, shifting employee preferences have played a role as well. As the labour force throughout the OECD area has become increasingly well educated, there has been an evolution in the attitudes of workers regarding authority and supervision, what they want from their jobs and their colleagues, and how they interpret the meaning of work and its relationship to other aspects of life. But undoubtedly the most significant development on the employee side has been the dramatic increase in the labour force participation of women in virtually all countries over the past quarter century. This has had a dramatic impact in a number of ways including its upward effect on aggregate labour supply, particularly in the supply of “flexible,” nonstandard labour. It has also forced a blurring of the once separate realms of work and family, thus forcing significant changes in the culture of the workplace, human resource practices, and public policy.

18. While all of these changes have placed pressure on traditional organizational systems, the responses of employers (and other stakeholders) are not necessarily dictated in a mechanical sense by their

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5 We are interested here as well in organizational change within the public sector. Although competition does not exist per se in this sector, the fiscal crisis and the attendant downward pressures on expenditures in most countries, plus the possibilities for alternative service delivery (e.g., through privatization, special operating agencies, etc.), are now having impacts in the public sector that are analogous to the competition factor in industry.
environment. There are choices involved – managers formulate business strategies, choose technologies, and (in some cases with employees or their representatives) establish the underlying principles of work organization and human resource management.

19. Having said this, however, it is important to recognize the role that “path dependency” and “fad management” play in shaping these choices. The former refers to the constraints on future options that are created by past choices; for example, technology decisions often depend to a significant degree on past investments and systems that are currently in place. The latter refers to the tendency toward “flavours of the month,” whereby currently fashionable tactics and strategies -- reengineering and TQM programs are good examples -- seem to disproportionately influence managerial choices at any point in time. Nevertheless, even with these constraints, the role of choice, which reflects a variety of societal, sectoral, and corporate influences, does explain the diversity of responses that we observe across the OECD area in terms of how enterprises and other organizations have responded to the changing environment.

20. Indeed, an important conclusion emerging from the research on organizational change is that there is no single model or system that works best in all settings. This has led to theorists to talk about “fit” which refers to the complementarity of organizational changes with, on the one hand, the enterprise’s culture, workforce, technology, etc. (internal fit) and, on the other, its competitive strategy, markets, regulatory environment, etc. (external fit).

21. Notwithstanding the considerable diversity in the specific patterns of organizational change, the fundamental thrust everywhere has been to enhance organizational flexibility and adaptability to the rapidly changing environment. Following the characterization adopted by the OECD (1986) a number of years ago, flexibility strategies can be pursue two general lines. Numerical flexibility relates to the establishment’s ability to vary its workforce by hiring and firing, by altering hours of work, by using nonstandard employees, or by subcontracting or outsourcing. Functional flexibility relates to the establishment’s capacity to reorganize how work itself is carried out and how the different production inputs contribute to the work process. Flexibility strategies can be oriented towards either on the internal operations of the firm or on the relationships between the firm and external markets and agents, or both.

22. As we have emphasized already, workplace change designed to enhance flexibility can take many forms depending on a host of national and even industry- and firm-level characteristics. Certainly at a national level, there are differences in terms of how enterprises are pursuing flexibility strategies. In fact, the OECD (1997 forthcoming) has identified four dominant “regional” approaches to organizational change. The differences in these approaches largely reflect differences in traditional organizational paradigms and their attendant strengths and weaknesses. There is path dependency here in the sense that the thrust of organizational change in each of the regions involves firms building on or reconfiguring these traditional systems.

23. The four dominant regional approaches represent countries with Anglo-Saxon traditions, the Northern European countries, Japan, and the “intermediate/catch-up” countries. To illustrate some of these differences, firms in the Anglo-Saxon countries traditionally have adopted organizational strategies that have emphasized numerical flexibility, relying on labour markets that have been relatively unregulated. In Northern Europe, where markets have been more regulated but where consensual labour

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6 For a brief summary and some citations, see *The Economist* (1997).
7 See Baird and Meshoulam (1988) for a discussion. Many researchers have since tested the importance of fit and the result has been an acculation of supporting evidence. Huselid (1995) has a discussion and a short literature review.
relations systems have accommodated more bipartite negotiation and agreement, organizational systems traditionally have been based much more on well-developed internal employment systems that provided considerable functional flexibility. The differences in the current direction of innovation reflect this history. Many firms in the former group are now trying to become more functionally flexible while much of the innovation in Europe depicts a drive to establish more external flexibility, especially in the numerical sense. In all regions, though, it seems fair to say that enterprises are pursuing flexibility strategies along more dimensions than in the past.

24. Acknowledging this diversity, the OECD (1997 forthcoming) does distinguish a “loosely defined ‘model’” of an emerging organizational system which incorporates some of the following strategic, structural, or behavioural features:

- more job complexity, multi-tasking, and multi-skilling;
- increased employee qualifications;
- ongoing skill formation through enterprise training;
- a minimization of hierarchy;
- greater horizontal communication and distribution of responsibility (often through teams);
- compensation incentives for performance and skills acquisition;
- increased focus on “core activities; and
- more horizontal inter-firm links for subcontracting and outsourcing.

25. While flexibility is at the core of the emerging systems, then, organizational change in some forms also involves investments in “intangible” assets. These assets include human and organizational capital (through training and work organization, for example), management structures, technology, software, links with other organizations, and market development (OECD, 1996a).

Patterns of diffusion

26. Measuring the diffusion of these organizational changes is complicated by a number of methodological issues. The key elements -- strategy, work organization, and human resource management practices -- are largely intangible and not easily subject to quantitative measurement. This is particularly true in smaller enterprises where strategy and workplace practices tend to be informally determined and applied. Some aspects of change are more readily captured in labour force or household surveys, while others are obtainable only from employer or establishment surveys. Also, different studies have used various definitions of “organizational change” and different data-collection methodologies, with the result that comparisons can be difficult. This problem becomes further complicated in the international context because of significant variations across countries due to cultural, historical, and institutional factors.

27. Nevertheless, in recent years there have been a number of surveys in different countries that allow us to paint a general picture of organizational change. Most of these have been enterprise surveys in the private sector. Now research and statistical agencies are exploring the use of linked surveys which
collect data both from employers and from employees. This latest development should contribute substantially to our understanding of both organizational changes and their impacts on firms and workers.

28. Findings from a selection of surveys covering issues related to organizational change are summarized in Table 1. This is not a definitive list but, rather, a sampling which covers a number of countries. The table highlights the variation which characterizes the existing research. For example, there is no uniformity in terms of the sample frames. As well, the sorts of conclusions that can be made differ in terms of whether the data yield “stock” measures, such as the incidence of “flexible work organizations” or “high performance systems,” or “flow” measures, such as organizational change.

29. Although the nature of organizational change can differ from country to country, some generalizations can be made about its diffusion. The OECD (1997 forthcoming) estimates that about one-quarter of all enterprises have adopted flexible organizational or workplace systems of one form or another. The examples from Sweden, the United States, and Canada included in Table 1 are all broadly consistent with this conclusion. The empirical evidence, then, reinforces the point that in all countries, there is considerable diversity not only in terms of the types of workplace changes being diffused but, also, the coexistence of flexible organizational systems along with more traditional systems.

30. Patterns of diffusion are also roughly similar across countries. Most notably, incidence is higher among larger firms than among medium-size and especially small firms. This is illustrated in Table 1 by the low incidence rates in surveys where there are no enterprise size floors (e.g., Frazis et al. 1995; Workplace and Employee Survey). Virtually all studies have found high correlations between organizational and technological change. Organizational changes, both in terms of internal processes and relations with external markets, often have been initiated as new technology has been introduced and has penetrated deeply within enterprises.

31. The incidence of organizational innovation also tends to be highest in industries exposed to international competition. As one would expect, then, many studies have found that the diffusion of flexible work systems to be relatively high in manufacturing, especially where competitiveness is largely determined by quality and innovation (OECD, 1997 forthcoming).

32. Organizational change in the service sector is particularly relevant to the experience of female workers. Overall, less information is available on organizational change in the service sector. However, as researchers have started to shift their attention to services, it has become evident that changes analogous to those in manufacturing have been occurring in this sector as well. This is especially the case in communications, business services, and banking and other financial services where competitive and technological forces are rapidly transforming the nature of service production. In fact, as Table 2 shows, recent surveys in Sweden and Canada have found the incidence of flexible work systems and organizational change in parts of the service sector to be as high or higher than in manufacturing.

33. Unfortunately, there is very little empirical evidence on the diffusion of organizational change within the public sector and how the incidence and nature of change compare to what has been observed

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8 In 1996, Statistics Canada, with support from Human Resources Development Canada, carried out a pilot survey, the Workplace and Employee Survey, which collected data from about 700 establishments and 2,000 of their employees. In 1998, a full production survey will be undertaken.

9 It should be recognized that most data instruments are better suited to capturing organizational changes in larger firms where the process is more likely to be formalized and codified than in small firms.
in the private sector.\textsuperscript{10} As restructuring continues to affect the role of governments and how they deliver services, we can expect that issues related to flexible work organization will increase in prominence.

**Impacts of organizational change on enterprise performance**

34. The information problems noted earlier also come into play in identifying the impacts of organizational change on firms and on workers.\textsuperscript{11} However, outcomes research has been accumulating, especially on the enterprise side. This body of analysis generally shows a positive association between organizational systems built on flexibility and intangible asset investments and enterprise performance measures such as productivity and sales. The supporting evidence includes both qualitative data from case studies of firms that have introduced these types of organizational innovations and quantitative data from surveys.\textsuperscript{12}

35. However, the precise mechanisms underlying this link to performance are only imperfectly understood. (Levine 1995). Research does show that changes appear to be more effective for firms when they occur as a “bundle” of complementary practices. Another key to successful innovation is input on the part of labour (both in terms of individual employees and unions); this can both strengthen support for change and allows the change process to benefit from the tacit knowledge embodied in workers.

36. While it is the evidence associating flexible organizational systems with improved firm performance that can be expected to drive their further diffusion within industry, public policy-makers are concerned most about macro impacts. In this regard, to the extent that organizational change does improve enterprise performance, it can be assumed to contribute to aggregate economic performance as well. Indeed, some economists believe that organizational innovation is the key to unlocking the “productivity paradox” associated with the low rates of productivity growth despite the massive investments in new technology (OECD, 1996a).

3. Implications for Workers

37. In this section, we turn to the impacts of organizational change on employment and on employees. There are a number of potential implications, some of which are briefly noted below. Then we will focus on two specific issues that are central to the process of organizational change and that have important implications for female workers and, indeed, all workers -- skills and the accumulation of human capital and the changing nature of the employment relationship.

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\textsuperscript{10} One recent survey on workplace innovation in the Dutch civil service did find a very high incidence of flexible practices; for example, one-half of the establishments reported numerical flexibility practices (Wagenaar, 1997).

\textsuperscript{11} Actually, there are additional issues involved in unambiguously identifying linkages between organizational change and outcomes. Identification of causality can be especially problematic and outcomes can vary depending on the cultural and institutional context.

\textsuperscript{12} See Ichniowski et al. (1996) for a review of the qualitative and quantitative evidence from the U.S. which does account for much of the existing research. Some of the survey-based evidence from other countries is reviewed in OECD (1996a). The OECD and the Swedish Government sponsored a seminar in Stockholm in February 1997 where examples of European companies with innovative organizational systems were described.
38. As was the case with enterprise outcomes, the impacts of organizational change on workers are not completely understood. In part, this is due to methodological difficulties involved in disentangling the effects of what is happening within organizations from more general economic and social developments. It is also due to some of the data limitations discussed earlier; certainly, the increasing use of linked employer-employee data offers considerable potential on this front. At the present time, though, researchers can generally only go as far as identifying labour market trends that it seems plausible are being shaped by organizational changes.

39. Much more research, then, is needed to empirically specify the relationships between flexible organizational systems and various employment outcomes. There are a number of implications that are important to understand, including the following three:

- **Employment levels.** The impact of flexible organizational systems on employment levels represents an important and controversial issue. On balance, the limited evidence, while not conclusive, suggests a positive relationship between the adoption of flexible organizational practices and establishment employment levels. This is the conclusion of studies in various countries, including Australia, New Zealand, Denmark, and France (OECD, 1996a). However, the effect clearly depends on how improved enterprise performance is translated into employment via price and quantity effects. There is also the related question of what impact organizational changes are having on job security. On the one hand, the commitment and investment involved under some flexible workplace systems (e.g., extensive training to increase functional flexibility) would suggest improved security both in terms of employment in the current firm and perhaps even more importantly in terms of a more generalized employment security. However, downsizing and other strategies designed to enhance numerical flexibility would be expected to reduce job security (if not the more general employment security) for some workers.

- **Quality of work.** The introduction of flexible workplace strategies can have a variety of impacts on the quality of work. In most cases, jobs seem to become more complex, involving diverse tasks, more personal interaction, and usually greater discretion (OECD, 1997 forthcoming). Workplace innovation, then, clearly has the potential to make work challenging and rewarding. However, it appears that changes are sometimes implemented in ways that create stressful environments because of a wider range of demands on employees and because of speed-ups and other forms of work intensification. The nature of the organizational changes and the support provided through communication, training, and employee assistance policies can affect the outcome.13

- **Distribution of earnings.** In some OECD countries, most notably the United States and the United Kingdom, the wage distribution has become more unequal during the 1980s and 1990s (OECD 1996b). Very few studies have empirically tested whether organizational change contributes to widening wage dispersions. One exception is the Swedish NUTEK (1996) study which found that wage spreads have increased more frequently in enterprises with flexible work systems than in traditional work organizations. There are various ways in which flexible strategies could be expected to have this result. Variable pay practices are often a component of flexible work systems and these tend to widen intra-firm distributions by linking compensation more closely to skills and performance which can be very unevenly

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13 To cite just one example, a Canadian survey found that female employees with flexible work schedules were less likely to report being "time stressed" than women without flextime (Fast and Frederick 1996).
Indeed, Betcherman et al. (1994) found that Canadian establishments with variable pay systems had wider within- and between-occupation wage differentials than establishments with straight compensation systems. Two other factors also may come into play in linking organizational change to earnings distributions. One is the upward skill bias in labour demand in flexible organizations which would be expected to widen differentials. The other is the “individualization” of contracts which can lead to a polarization of working time (e.g., relying on overtime and using nonstandard employment contracts) and, thus, earnings.

These two latter issues – skills and the nature of employment contract – provide the focus for the remainder of this section. Both are central to organizational change and its implications for workers and each raises important issues for policy-makers.

Skill requirements and human capital accumulation

While the impacts of flexible organizational systems on the overall level of labour demand may be uncertain, it is clear that they change the composition of that demand. Various studies have shown that organizational changes designed to enhance flexibility tend to increase skill requirements. This skill bias involves not only technical or vocational competencies but also foundation or employability skills. These impacts are especially significant where flexible organizational practices are combined with flexible information technology and, indeed, researchers cannot easily disentangle these two factors. However, the net effect is reduced employment opportunities for less skilled workers and higher stakes for human capital accumulation.

The skill impacts of organizational and technological change occur via two channels: through effects on the occupational composition of employment and through its effects on job content.

The shift in the occupational composition of employment towards white-collar jobs has been well documented. Certainly, the growth of services has been an important factor but it is also becoming clear within individual industries that this change is also taking place. Moreover, even within the white-collar group, employment growth has generally been most rapid in highly-skilled “knowledge” work in managerial, professional, and technical categories that are involved with the development and interpretation of information. Lavoie and Roy (1997) have calculated that over the 1971-96 period, the employment of knowledge workers in Canada grew at an average annual rate of 5.2 per cent, compared to 2.1 per cent for overall employment. In another Canadian study, McMullen (1996) found that establishments where computer-based technologies had penetrated deeply had occupational structures with significantly higher shares of knowledge workers than did establishments that were not major users (Table 3).

The other way in which skill requirements are being affected is through changes in the content of work. It has already been noted that multi-tasking, a wide web of relationships, and decision-making autonomy are more likely to be found in flexible than in traditional work systems. These characteristics, along with the advanced technology, call for a workforce with strong employability skills. A number of employee surveys in different countries have shown that these foundations skills are, in fact, most frequently identified by employers as the key factors in making hiring decisions. Lynch and Zemsky

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14 Variable pay includes a number of practices including individual or team performance pay, profit-sharing, productivity gain-sharing, employee ownership plans, and pay for skills/competence.
(1995), for example, found that U.S. employers ranked attitudes and communication skills as the two most important hiring criteria.

45. Thus the diffusion of flexible systems increases the importance of human capital investment. This includes both education and training. Surveys in Sweden and Denmark have shown that the educational qualifications of workers in flexible organizations and establishments using information technology, respectively, were higher than in traditional enterprises (NUTEK 1996; Nyholm 1995). But, given the multi-skilling and the continuous changes in flexible organizations, ongoing training is also essential for workers to maintain and improve their employability. Indeed, research consistently shows that training and a culture of continuous learning tend to accompany organizational innovation. Swedish firms with flexible work systems were almost twice as likely as other firms to report skills development plans for production workers (NUTEK 1996). The link between flexible organizational systems and training activity has also been established by researchers in the U.S., Canada, and France (OECD 1996a).

46. However, much of this research also suggests that enterprises concentrate their training investments much more on employees who already have a lot of human capital. Table 4 provides an illustration of this point using data from American and Canadian training surveys on the percentage of employees who received training from their employer over the preceding 12 months. Indices are used to compare participation rates within each country for different educational attainment and employment status categories. The indices are in no way comparable between the two countries because of differences in how training is defined, the unit of analysis, and in the sample frames.

47. As Table 4 shows, the relationships are very similar. In both countries, access to workplace training increases significantly with educational attainment. It is also substantially greater for full-time employees than for part-time workers. Although not reported, similar differentials exist when training participation is disaggregated by other variables such as earnings and occupation. There appear to be three reasons why these patterns exist. First, the organizations with the most active training programs tend to be establishments with flexible work systems and deep penetration of information technologies and, as we have seen, these organizations have workforces with high levels of human capital. Second, measures of human capital such as education and full-time status are signals to employers that they are likely to get a return on their investments. And, third, the interest of employees in receiving training rises with education and skill levels. In other words, human capital investments have a “seeding” effect.

The nature of the employment contract

48. The typical job of the postwar period – a full-time position of indeterminate length with a single employer – still remains the most common work form. However, this employment relationship increasingly shares the stage with a host of alternative arrangements that depart from the old standard in one way or another. These “nonstandard” work forms include part-time employment, temporary or fixed-term work, and self-employment. While the specifics differ from country to country, it is generally the case that nonstandard employment arrangements have increased as a share of total employment over the past decade or so. In general, women are more likely than men to be employed under one of these arrangements.

49. Changes in the form of the employment contract have been caused by both social and economic forces. There has been an increase virtually everywhere in the number of people interested in combining work with other activities. The most important development here, of course, has been the increased participation of women in the paid labour force. At the same time, the growth of services and the changing nature of economic activity, more generally, have also played an important role.
50. Thus, both supply and demand factors have contributed to the proliferation of work forms by altering the composition of both the types of jobs that workers want and the sorts of positions that employers offer. The growth of nonstandard employment arrangements is compatible with the organizational changes that are the focus of this paper. Part-time and temporary work and outsourcing which supports self-employment can offer employers enhanced flexibility in both numerical and functional senses.\(^\text{15}\)

51. Table 5 summarizes the trends of these nonstandard work forms in a selection of OECD countries. These data show the generally increasing prevalence of these employment arrangements over the 1980s and 1990s. However, there have been differences across countries in how this diversity has been increasing. For example, Australia, France, and the Netherlands have experienced substantial growth in part-time and temporary employment. Canada, Germany, Sweden, and the United Kingdom have had moderate gains in each of the work forms.

52. The second point illustrated in the table is the high incidence of part-time and temporary employment among women. This is undoubtedly due to differences in the labour supply preferences of men and women. However, it is also due to the greater prevalence of female workers in “contingent” labour markets. In terms of self-employment, men still outnumber women but, in many countries, the growth rate for female entrepreneurs is now higher.

53. The growth of employment in nonstandard work forms has attracted a lot of attention in many countries. There are clearly positive aspects to this development. These include the flexibility nonstandard work forms offer enterprises. And the flexibility can also benefit workers who wish to combine employment with other responsibilities or activities. These benefits can be particularly large for women because they tend to shoulder the bulk of household duties regardless of employment status and thus face higher rates of “time crunch.”\(^\text{16}\) Canadian research has found that part-time female professional workers report lower levels of stress associated with balancing work and family and higher job satisfaction than their full-time counterparts (e.g., Duxbury and Higgins, 1994).\(^\text{17}\) Finally, nonstandard work arrangements like part-time or temporary positions can be an effective screening device for both employers and employees, before more permanent attachments are established.

54. However, at the same time, the proliferation of different work forms raises a number of issues. Part-time and temporary employees tend to receive lower wages than full-time, permanent workers even when individual characteristics are taken into account. This is exacerbated by the lower coverage among nonstandard workers in company benefit and insurance plans. Thus, nonstandard employment, especially in its more contingent forms, can raise concerns about economic security, both in the short- and long-run.

55. Finally, policy-makers must consider the interrelationships between the two implications of organizational change which have provided the focus in this section – a shifting demand to skilled labour and the growth of nonstandard, flexible work forms. The first calls for increased attention to training and lifelong learning and the heightened role of (continuous) human capital investment in determining

\(^{15}\) A development related to the growth in self-employment because of outsourcing has been the increasing share of total employment in small firms. This is discussed in OECD (1994).

\(^{16}\) For example, a British time-use study has found that full-time female employees spend two hours more per week doing household chores and three hours more caring for children than do full-time males (Tyrrell, 1995).

\(^{17}\) This effect was not as clear with lower-paid non-professional workers. Family income issues and job insecurity presumably were key factors here.
employability. However, the second raises serious questions about how this investment will take place for the growing number of “flexible” workers.

56. Some types of nonstandard work, particularly part-time and temporary employment, may not be conducive to investments in human capital on the part of employers and often even employees. This is largely due to the temporary or low-commitment nature of these employment relationships which minimizes the extent to which returns from such investments can be anticipated. For the self-employed, problems stem from limited access to financing, potentially serious opportunity costs (associated with training-related downtime), and financial uncertainty which makes it difficult to estimate expected returns from investing human capital. Thus, in a labour market where lifelong learning and skills upgrading are becoming more and more important, growing numbers of workers find themselves without the attachments to employers that are likely to lead to employer-sponsored training. As a consequence, individual responsibility for job-related skills training increases.

4. Public Policy Implications

57. Changes in organizational strategies, structures, and behaviours are affecting business performance and a range of labour market outcomes. While the nature of these changes varies across countries and across industries because of differences in institutions and markets, the common thread is a desire on the part of enterprises to enhance their flexibility, thereby improving their capacity to adapt to a shifting environment. It should be understood that this flexibility objective is not a universal one and, in fact, the empirical evidence indicates that throughout the OECD region, about one in four firms has implemented a flexible organizational system of one form or other. However, the impact of this development on workers is greater than this number would suggest, partly because larger enterprises have been more likely to adopt flexible strategies and partly because these systems have ripple effects in the sense of altering the interactions between organizations and within markets. In light of the growing body of evidence indicating that flexible organizational systems can have positive performance effects, we can expect their diffusion to continue in the future.

58. Changing organizational strategies, then, are important for understanding the labour market experiences of employees in OECD countries. For this reason, governments need to factor in organizational change trends and their implications in shaping policies that will achieve public objectives in the new environment. For the human resource policy-maker, there are both efficiency and equity issues involved. For example:

- What education, training, and other labour market strategies will encourage the further diffusion of organizational innovations that contribute to macro objectives such as productivity growth and employment creation?

- And, how can governments encourage the diffusion of workplace innovations that contribute to broad economic participation and a socially sustainable income distribution?

59. This latter issue is a particularly important concern given the apparently uneven impacts of flexible workplace innovations on the workforce. While there is still much to learn about the effects of organizational change, one consistent observation has been the upward skill bias of flexible organizational systems which has skewed labour demand towards workers with high levels of human capital. And, given the further possibilities for training and learning on the job that typically exist in flexible organizations (as compared to their more traditional counterparts), this has the potential for widening human capital disparities and, thus, exacerbating economic polarization. Organizational change offers the promise, then,
of rewarding work and human capital accumulation but its labour demand bias raises concerns about whether the less skilled will have access to these benefits.

60. For policy-makers concerned about women’s employment issues in particular, there are two other aspects of flexible organizational systems that are important to consider. The first is the extent to which they can offer genuinely flexible work arrangements that ease the stresses associated with balancing work and family. This is a relevant concern for all workers. However, while roles are evolving in various ways in different societies, in general it is still women who bear much of the domestic responsibility and thus the most severe pressures. Second, to the extent that organizational change has contributed to the growth of nonstandard work especially in its more contingent forms, it has important implications for economic security. Because of their disproportionate representation in these types of employment, this security question is most relevant for women. These concerns are likely to intensify as flexible organizational innovations continue to spread through the service sector and into the public sector.

61. The issues I have chosen to highlight in this conclusion do not exhaust the list of potentially relevant policy implications stemming from the diffusion of flexible work systems. However, education and training, promoting flexible work arrangements, and providing economic security must be high on the agenda of departments responsible for human resources and for employment policies relating to women. Within each issue, certain priorities can be identified in a general sense; however, how they are addressed will naturally vary throughout the OECD area.

62. **Education and training.** Because of the skill bias of organizational change and the central role of human capital in the emerging work systems, the clearest priority is education and training. The starting point must be the foundation skills which are the key to entry into flexible organizations and the knowledge-based economy more generally. This foundation is not only increasingly required to find employment but it also provides the starting point for a virtuous circle of challenging job requirements, additional development of general skills, and employer sponsorship of further, more occupationall-specific human capital investment. For those without basic skills, there are risks of a more vicious circle resulting in a skills deficit and possibly marginalization. Basic education, then, must be a priority for governments, all the more so because it is unlikely to be funded from non-public sources. In the later phases of the lifelong learning system, governments can also support efficient human capital markets through information, counseling, and standard-setting. Another policy priority must be to guarantee that selective access problems are confronted.

63. **Promoting flexible work arrangements.** This is an important issue for many workers, especially women, and will continue to grow for a number of reasons including the growing elder care responsibilities. How governments pursue this priority will differ throughout the OECD area. However, there are various policy levers that can be considered to encourage real flexibility for workers. Some of these involve working time, such as setting of the standard work week and assessing possibilities for encouraging work sharing. The regulatory and benefit framework affecting part-time and other forms of nonstandard work also is important. A sensible goal would be to encourage the proliferation of different work forms, try to make the institutional framework as neutral as possible, and effectively encourage choice. Leave policies and saving instruments for family reasons, education, or other purposes can also support flexible working lives.

64. **Providing economic security.** Governments must address the question of how economic security can be provided in an economy where flexibility is becoming so important. Workers everywhere are concerned about downsizing, outsourcing, and the growth of contingent employment. These concerns are heightened by the fact that, in many countries, traditional sources of security such as unions and the social safety net have become less effective so that the economic risk has increasingly shifted onto the shoulders
of individuals and their families. Ultimately, high levels of economic insecurity have the potential to erode popular support for growth-oriented economic agendas founded on innovation, flexibility, and the efficiency of markets. At the same time, a failure to confront the security issue could potentially threaten social cohesion.
REFERENCES


# TABLES AND FIGURES

Table 1:  
Examples of Survey Evidence on Organizational Change, Selected Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample</th>
<th>Findings (% of establishments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden (NUTEK, 1996)</td>
<td>- private sector</td>
<td>- “flexible” work organization - 27%</td>
</tr>
<tr>
<td></td>
<td>- 50+ employees</td>
<td>- major organizational change in 1990s - 77%</td>
</tr>
<tr>
<td>France (Fréchou and Greenan, 1995)</td>
<td>- manufacturing</td>
<td>- production reorganization, 1988-93 - 40%</td>
</tr>
<tr>
<td></td>
<td>- 50+ employees</td>
<td></td>
</tr>
<tr>
<td>Germany (ISI, 1995)</td>
<td>- metal/machinery</td>
<td>- work groups - 14%</td>
</tr>
<tr>
<td>United States (Osterman, 1994)</td>
<td>- private sector</td>
<td>Penetration of “flexible” practices(^1) - 37%</td>
</tr>
<tr>
<td></td>
<td>- 50+ employees</td>
<td>- teams - 41%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- job rotation - 27%</td>
</tr>
<tr>
<td>United States (Frazis et al., 1995)</td>
<td>- all private sector</td>
<td>- teams - 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- pay for knowledge - 7%</td>
</tr>
<tr>
<td>Canada (Betcherman et al., 1994)</td>
<td>- 4 sectors(^2)</td>
<td>“high performance” system - 30%</td>
</tr>
<tr>
<td></td>
<td>- 40+ employees</td>
<td></td>
</tr>
<tr>
<td>Canada (Workplace and Employee Survey)</td>
<td>- selected industries</td>
<td>- multiple organizational changes, 1994-96 - 10%</td>
</tr>
</tbody>
</table>

1. Includes establishments where practice involves at least 50 per cent of employees.  
2. Industries selected from resource, manufacturing, and service sectors.
<table>
<thead>
<tr>
<th>Panel A: Sweden (NUTEK, 1996)</th>
<th>incidence of “flexible work organizations” (% of enterprises)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and manufacturing</td>
<td>27</td>
</tr>
<tr>
<td>Construction</td>
<td>16</td>
</tr>
<tr>
<td>Trade</td>
<td>31</td>
</tr>
<tr>
<td>Communications</td>
<td>19</td>
</tr>
<tr>
<td>Finance and real estate</td>
<td>34</td>
</tr>
<tr>
<td>All industries</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Canada (Workplace and Employee Survey)</th>
<th>incidence of multiple organizational changes, 1994-96 (% of enterprises)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-agricultural primary</td>
<td>1</td>
</tr>
<tr>
<td>Scientific-based manufacturing</td>
<td>14</td>
</tr>
<tr>
<td>Scale-based manufacturing</td>
<td>6</td>
</tr>
<tr>
<td>Product-differentiated manufacturing</td>
<td>14</td>
</tr>
<tr>
<td>Construction</td>
<td>15</td>
</tr>
<tr>
<td>Communications and utilities</td>
<td>20</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>2</td>
</tr>
<tr>
<td>Retail trade</td>
<td>17</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>6</td>
</tr>
<tr>
<td>Business services</td>
<td>6</td>
</tr>
<tr>
<td>All industries</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 3:

Employment Structure, Low- Versus High-Intensity CBT Users, Canada, 1994

<table>
<thead>
<tr>
<th>Occupation</th>
<th>High-Intensity Users</th>
<th>Low-Intensity Users</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Mean % share of establishment employment)</td>
<td></td>
</tr>
<tr>
<td>Managers</td>
<td>13.6</td>
<td>7.3</td>
</tr>
<tr>
<td>Professional/technical</td>
<td>17.6</td>
<td>7.9</td>
</tr>
<tr>
<td>First-line supervisory</td>
<td>7.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Skilled production</td>
<td>25.3</td>
<td>28.2</td>
</tr>
<tr>
<td>Unskilled</td>
<td>10.5</td>
<td>36.4</td>
</tr>
<tr>
<td>Sales/marketing</td>
<td>10.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Other office</td>
<td>16.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1. Establishments with percentage of employees working with technology at or below sample median.
2. Establishments with percentage of employees working with technology above sample median.

*Source: McMullen (1996)*
Table 4:

Participation Rate Indices for Employer-Sponsored Training During Previous Year, United States and Canada

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>United States (based on % receiving employer training -- in firms with 50+ employees)</th>
<th>Canada (based on % receiving employer training -- all employees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8 years</td>
<td>100</td>
<td>23</td>
</tr>
<tr>
<td>Some high school</td>
<td>54</td>
<td>140</td>
</tr>
<tr>
<td>High school graduation</td>
<td>100</td>
<td>140</td>
</tr>
<tr>
<td>Some postsecondary schooling</td>
<td>113</td>
<td>140</td>
</tr>
<tr>
<td>Postsecondary certificate/diploma</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>University/college degree</td>
<td>149</td>
<td>208</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Full-time</td>
<td>128</td>
<td>202</td>
</tr>
</tbody>
</table>

1. The actual rates are not comparable between the two countries because of differences in how “training” is defined, the unit of analysis, and especially in the sample frames. The U.S. sample includes only employees in firms with at least 50 workers. The Canadian sample is based on a household survey and includes all employees. For the U.S., the base for the index is high school graduation or less. For Canada, it is high school graduation.

Sources: U.S. Department of Labor (1996); de Broucker (1997)
### Table 5:

**Trends in Part-Time Employment, Temporary Work, and Self-Employment, Selected Countries**

<table>
<thead>
<tr>
<th></th>
<th>Part-time employment¹</th>
<th>Temporary employment²</th>
<th>Self-employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of total employment</td>
<td>female % of all part- time</td>
<td>% of total employment</td>
</tr>
<tr>
<td>Australia</td>
<td>17.5</td>
<td>25.0</td>
<td>73.4</td>
</tr>
<tr>
<td>Canada</td>
<td>16.8</td>
<td>18.9</td>
<td>69.1</td>
</tr>
<tr>
<td>France</td>
<td>9.6</td>
<td>16.0</td>
<td>81.7</td>
</tr>
<tr>
<td>Germany</td>
<td>12.6</td>
<td>16.3a</td>
<td>87.4a</td>
</tr>
<tr>
<td>Italy</td>
<td>4.6</td>
<td>6.6</td>
<td>69.4</td>
</tr>
<tr>
<td>Japan</td>
<td>15.8</td>
<td>21.4</td>
<td>68.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>21.0</td>
<td>36.5</td>
<td>73.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>24.8</td>
<td>23.6</td>
<td>79.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>18.9</td>
<td>22.1</td>
<td>86.0</td>
</tr>
<tr>
<td>United States</td>
<td>18.4</td>
<td>18.3</td>
<td>67.9</td>
</tr>
</tbody>
</table>

1. According to national definitions.
2. According to national definitions, which can differ considerably.
a. 1995; b. 1994; c. 1984

*Source: OECD (various publications)*
FIGURE 1: FRAMEWORK FOR CONSIDERING ORGANIZATIONAL/WORKPLACE CHANGE

Environment
- Markets
- Technology
- Labour force
- Socio-cultural context

Strategic Choices by:
- Enterprise re:
  - Competition
  - Technology
  - HR/IR
  - Union

Structures and Behaviours
- Work organization
- HR practices
- IR practices

Outcomes for:
- Enterprises
- Workers
- Labour market
- Society

PUBLIC POLICY AND INSTITUTIONAL FRAMEWORK