Innovative Workplaces

Lessons Learned Final Report

Evaluation and Data Development Strategic Policy Human Resources Development Canada

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Acknowledgements

This study summarizes lessons learned on innovative workplaces based on information that the Department of Human Resources Development Canada (HRDC) has on the topic, as well as from information available from other sources. In addition, new research was conducted to bring this information up to date. The study is based on a report prepared by Gordon Betcherman of Ekos Research and Associates for, and under, the direction of the Evaluation and Data Development Branch of HRDC. In addition, a series of technical papers, prepared by Norm Leckie and his team at Ekos and Arlene Wortsman of the Canadian Labour Market and Productivity Centre (CLMPC), were used as the basis for this study.

The original work was done in support of the Ministerial Collective Reflection on the Changing Workplace. The results of the study served as an input to the Report of the Advisory Committee on the Changing Workplace published in June of 1997.

The project team also included a working group with members from various HRDC branches; principally people from both Labour and Strategic Policy, in addition to people from Industry Canada (Entrepreneurship Small Business Office).

The technical reports produced for HRDC as part of this study are available upon request.

Series

Canadian governments are trying to achieve the most productive and costeffective results from human resource programs and policies. Professionally-conducted evaluations can help them reach that goal. They document our experiences with policies and programs that have had similar goals. They add to the "corporate memory" that helps us make still better decisions in the future.

At Human Resources Development Canada (HRDC), we have a strong commitment to continuous learning and improvement. Over the past decade, we have invested time and money in evaluating many of our programs and policies covering a wide range of human resources development issues. These have been complemented by our reviews of evaluations conducted by other governments, in Canada and internationally, in the area of human resource initiatives.

HRDC developed the "Lessons Learned" series to make this wealth of information and insight available to more people more easily. The Lessons Learned studies are a series of documents and supporting videos that synthesize what evaluations in Canada and other countries have taught us about a range of high-profile human resource policy priorities. They summarize what we know about the effectiveness of policy initiatives, programs, services and funding mechanisms.

Lessons Learned are of interest to senior managers and policy analysts in Canada's governments. Program managers, public policy researchers and other stakeholders can also benefit from understanding the lessons we have learned from past and present programs.

HRDC is pleased to announce the latest study in this series, which focuses on the lessons learned from experience in innovative workplaces in Canada, and abroad. In the last 10 years, the advent of workplaces which have implemented innovations in various areas, have become ever more common. However, little is known about the effectiveness of these innovations. What makes an innovation successful? What factors are to be considered before embarking on such an exercise? These are some of the questions that this study attempts to address. The information produced for this study was used as an input to the Report of the Advisory Committee on the Changing Workplace published in June 1997.

As a learning organization, HRDC will continue to experiment with new approaches and evaluate their effectiveness. HRDC recognizes the vital importance of the evaluation process and is committed to continuing its work in this area.

Table of Contents

1.	Introduction	1
2.	An Overview of Workplace Change	3
	A Framework for Understanding Workplace Change	
	Where Are We Coming From?	7
3.	Survey Evidence on Worplace Change in Canada	9
	Incidence of Workplace Innovation	
	Outcomes of Workplace Innovation	12
4.	General Lessons Learned	13
5.	Implications for the Stakeholders	23
Re	ferences	25
Aŗ	ppendix A Case Studies	27
Αŗ	opendix B Summary of Case Studies	31

1. Introduction

Workplace change has become a prominent issue for business, labour, and government during the 1990s. Indeed, there seems to be a shared view that organizational innovations have the potential to enhance business performance, to increase the quality of work, and ultimately to contribute to aggregate productivity and income growth. However, beyond this, workplace change raises a number of important "real-world" questions: What do we mean by the concept? Are there certain workplace changes that lead to particularly positive outcomes? Are there ways of implementing workplace change that increase the likelihood of positive outcomes? What steps can be taken to encourage the diffusion of effective organizational innovation? What is the role of government?

What do we mean by workplace change?

This report addresses these questions with an analysis based primarily on case studies of workplace innovation in Canada. These case studies are wide-ranging in a number of ways. They cover a diverse group of innovations involving work reorganization and changes in human resource management and industrial relations. They span a number of industries in both goods and services and in the public as well as the private sector. They include large organizations and small ones, both with unions and without. As well, there is broad national coverage. Case studies cannot offer the representativeness of large random sample surveys; however, by virtue of their flexibility, their capacity to accommodate "different sides to the story," and as a vehicle for assembling qualitative data, case studies can be an invaluable source of information, particularly when they are integrated with the existing literature.

The purpose of this report is to synthesize this case study evidence within the context of the larger body of knowledge that has built up in the area of workplace change. In section 2, we provide an overview of workplace change — defining the concept, presenting a conceptual framework for considering workplace change, and then summarizing traditional workplace systems and the pressures for change. In section 3, we briefly summarize the quantitative survey evidence on the incidence and impacts of workplace change. The intention of this short section is to provide the statistical background for the qualitative case study findings. In the next section, we highlight the significant themes that have emerged from the case studies reviewed for the project. This is essentially done through a "lessons learned" format — by emphasizing key observations that, in our view, are important for understanding workplace change, the innovation process, and its outcomes. The remainder of the report is concerned with providing the context to interpret these themes. In the concluding section, we briefly take up the concept of "best practice," identifying barriers to diffusion, and finally discussing the implications for business, labour, and government. The study also includes an appendix which describes the case study sources that we have drawn on in this paper and then discusses a set of methodological issues related to case study research.

2. An Overview of Workplace Change

We begin this section by briefly discussing the concept of "workplace change." The term itself is widely used, but at times its meaning is not precise. To complicate things further, other labels — "organizational innovation," "flexible organizations," "high-performance workplaces," to offer just a few examples — are often used interchangeably with workplace change.

"Workplace change" refers to a broad concept that encompasses strategic, structural, and behavioural dimensions. In its present manifestation, the major thrust of workplace change is primarily employer-initiated and focused above all on enhancing the flexibility of the organization. As we will see below, this imperative for flexibility is competitiveness-driven and primarily in response to changing markets and new technological opportunities. Organizational flexibility itself can come in many forms. It can relate 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 (i.e., "numerical flexibility"). It can also relate to the establishment's capacity to reorganize how work itself is carried out within the firm (i.e., "functional flexibility"). Flexibility strategies can focus on the internal operations of the firm or on the relationships between the firm and external markets and agents.

A key thing to emphasize, and this is evident from the cases, is that workplace change designed to enhance flexibility (or any other objectives for that matter) can take many forms depending, for example, on a host of industry- and firm-level characteristics.² National factors, including history, culture, and institutions also matter. As the Canadian Labour Market and Productivity Centre (1996b) synthesis of European case studies suggests, the nature of workplace change and the innovation process can differ significantly from the Canadian experience even when the motivators and the types of programs and policies themselves are similar. This largely reflects differences in the traditional organizational paradigms.

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These characterizations of flexibility have been used by the OECD in various publications. See, for example, OECD (1996, Chapter 6).

Although we emphasize flexibility as the major driving force behind workplace change, some readers will also expect that other motivations including cost-reduction and enhancing competitiveness through quality or innovation-based strategies also come into play. These motivations obviously are important but they can be seen to fit under the broad rubric of flexibility.

To illustrate, Canadian firms (and this generally applies to American and British) traditionally have adopted organizational strategies and practices that have emphasized numerical flexibility, relying on labour markets that, by international standards at least, are relatively unregulated. In Europe, where markets have been more regulated but where consensual labour relations systems have accommodated more bipartite negotiation and agreement on workplace issues, 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 in the two regions reflect the traditional strengths and weaknesses of each: many Canadian firms, as we will see, are now trying to become more functionally flexible while much of the innovation reported in the European case studies illustrates a drive to establish more external flexibility, especially in the numerical sense.³

The move to more flexible workplaces (or organizational change more generally) involves three overlapping areas:

- *Work organization*. This involves changes in the production process, how work is organized, job responsibilities, work allocation, and organizational structure. Increasing flexibility (either functional or numerical) is at the core of most work reorganization initiatives. These can be internally-oriented (e.g., more fluid work rules, broader job descriptions, job rotation and multiskilling, work teams, flatter organizational hierarchies, functional integration) or externally-oriented (e.g., sub-contracting, outsourcing).
- *Human resource management practices.* HRM innovations can cover a range of personnel management areas including hiring and firing, compensation, information-sharing and decision-making, training, and scheduling. Changes are internally-oriented and can affect both functional and numerical flexibility.
- *Industrial relations practices*. In unionized environments, industrial relations innovations can also represent workplace or organizational changes. These can be new strategies, practices, or institutional structures that alter processes between labour and management.

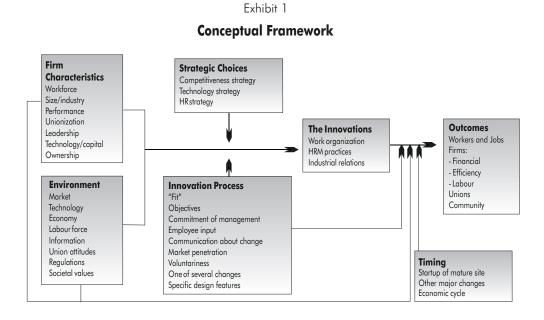
Three points need to be emphasized in this overview of the concept of workplace change. First, there can be considerable overlap between work reorganization, human resource management change, and changes in industrial relations practices; in fact, it is common to see change occurring on all three fronts. Second, workplace change can involve new strategies,

For more detail on these regional differences, see the OECD (1997).

structures, policies and practices, or some combination of these; it is directly observable through tangible innovations in some situations but not in others where, for example, it is purely strategic. Third, there is no uniform model of workplace change that applies across all organizations; there is considerable variation in what is largely an establishment-specific phenomenon.

A Framework for Understanding Workplace Change

A conceptual framework for considering workplace change has been developed.⁴ This is a very generalized framework in order to accommodate the fact that workplace change occurs in diverse settings; that it can encompass a diversity of strategies, structures, and practices; and that it potentially can generate a wide range of outcomes.



An extended version of this framework guided the development of the template for the case studies undertaken by Ekos Research for Human Resources Development Canada (see Ekos Research Associates, 1996). Moreover, in a general sense, its basic structure underlies the logic of most case studies of workplace change.

As the following indicates, a consideration of workplace change involves six elements:

1. The environment

As we have seen, the organizational innovations reported in most of the case studies have been initiated in response to changes in the organizational environment. Without identifying all of the potentially relevant environmental factors, we have chosen to list a few of the key ones here. A major influence has been changes in markets, including both an intensification of competition (from both domestic and foreign sources) and changes in the nature of the competition which increasingly emphasizes product/service innovation, responsiveness to changing tastes, niche products/services, etc.

Technological change, most notably with respect to information and communications technology, has altered production possibilities and, with them, organizational and human resource requirements. The changing nature of the labour force — specifically trends to older, better educated workers and to a greater female presence — has also been a significant environmental factor driving workplace innovation. Regulatory changes also can be important in stimulating organizational change.

2. Firm characteristics

Characteristics of the organization come into play in a variety of ways: by determining how different sorts of environmental change can affect the organization; by influencing the kinds of workplace responses that might be considered; by affecting how the innovation process will unfold; and by affecting the outcomes. Relevant characteristics include both "structural" features — e.g., its size, industry, workforce composition, technology, unionization, ownership — and more intangible ones, such as organizational history and culture.

3. Strategic choices

The environment, conditioned by characteristics of the organization, represents a set of challenges and opportunities for the firm and its employees. How these stakeholders respond in terms of the strategic choices they make plays a key role in determining the nature of workplace change, the innovation process, and the outcomes. In other words, organizational change is not simply determined by the environment. Management makes choices about business strategy and about production and technology strategy. And, management, with employees and their unions, make choices about work organization and human resource and industrial relations strategies.

4. Workplace change

We have already noted that workplace change involves three interrelated facets: work reorganization, changes in human resource management practices and changes in industrial relations practices.

5. The innovation process

While the workplace change element of the framework focuses on specific structural changes and the adoption of new policies and practices, there is also an important *process* dimension to consider. This concerns how decisions to initiate change are actually translated into the introduction and implementation of the change. As the case studies demonstrate, this is generally a critical determinant of the outcomes of the innovation.

6. Outcomes

Workplace change can have significant positive outcomes for the firm, its employees and union(s), and for the community. At a more macro level, the cumulative effect of organizational innovation can have impacts on the labour market and society. Thus, a complete assessment requires that various perspectives be incorporated and that the long-run effects are considered. With respect to the first, it is important to acknowledge that the criteria for success are often different for the various stakeholders. For example, employers typically evaluate change in terms of its effect on performance and competitiveness; employees judge change more often in terms of its impact on job security, on job quality including health and safety and access to learning opportunities, and on earnings. It is difficult to empirically incorporate all of these dimensions. There are other reasons, as well, why it is difficult to identify outcomes of workplace change. ⁵ The direction of causality is not always clear; for example, are performance improvements the result of workplace changes or do firms performing well simply have the resources to introduce innovations? It is often problematic to isolate the effects of workplace innovation from other changes (e.g., technology) that often occur at the same time. And finally, aggregate effects, while clearly important especially for governments, are very difficult to empirically identify.

Where Are We Coming From?

Understanding where we are coming from provides an important backdrop to interpreting current workplace changes. Over the first half of the 20th century, two employment systems became the standards in Canadian workplaces (and North American workplaces more broadly).

Workplace change involves three interrelated facets: work reorganization, changes in human resource management practices and changes in industrial relations practices.

For overviews of methodological issues associated with measuring outcomes, see Ichniowski et al. (1996), Huselid (1995), and Betcherman (1997).

Over the first half of the 20th century, two employment systems became the standards in Canadian workplaces. One described "bluecollar" work while the other described "white-collar" work. It is these systems that have come under challenge in the past 10 to 15 years.

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The "industrial" model was typical to blue-collar employment in unionized settings, although the essential features were mimicked in many non-union establishments as well. This model was characterized by strict work rules, rigid job definitions, seniority-based labour deployment (i.e., pertaining to hiring, promotion, layoffs), and wages attached to jobs (as opposed to workers). In this system, management had the prerogative to unilaterally make production and hiring/layoff decisions within constraints imposed by rules on work organization and staffing that were negotiated with labour. The result of this arrangement was organizations that were flexible in the numerical sense but that were limited in terms of functional flexibility.

The "salaried" model applied to white-collar employees, generally in non-union settings. In comparison to the industrial system, this model offered management much more functional flexibility as job definitions, work rules, and deployment policies were less restrictive. However, the salaried model involved a stronger notion of job security (to employees who had progressed beyond a probationary stage) which imposed some constraints on numerical flexibility (although much less than that experienced by European managers).

These employment systems characterized many Canadian workplaces during the first few decades after World War Two. They fit well with the business environment in this period, offering the stability required in an era of expanding markets, limited foreign competition, and mass-production technology. However, beginning in the late 1970s, that environment underwent dramatic change as competition intensified and as microelectronic technologies created a new "logic" of production. These developments affected establishments in all industrialized countries and, as they accelerated in the 1980s and 1990s, the pressures for organizational change increased everywhere. As we have noted, the thrust of the organizational changes was to enhance flexibility, with the particular innovations in different countries typically reflecting the characteristic rigidities of the traditional systems.

⁶ This is drawn from Osterman (1988).

⁷ The features of the "industrial" model could also be found in certain white-collar settings where unions represented clerical and administrative staff.

3. Survey Evidence on Workplace Change in Canada

While the main purpose of this report is to draw key lessons from the case studies, a summary of quantitative survey evidence on the diffusion and impacts of workplace change is important for situating the cases. It should be noted that surveys cannot offer the detail or interpretive power of more "intensive" case studies. As well, there are various methodological difficulties in gathering precise statistics on organizational change.⁸ Nevertheless, it is possible to sketch out a general profile of workplace practices in Canada and the extent to which organizational change has moved that profile from the traditional systems described above.

We draw primarily on two establishment surveys to describe the incidence and impacts of different workplace strategies and practices in Canadian industry in the 1990s. The first is the Human Resource Practices Survey (HRPS), a 1993 survey of four major Canadian sectors. The strength of this database is its detailed information on a large number of human resource practices. The second is the Workplace Training Survey (WTS), a 1995 survey that covered virtually all industries in the private sector. This survey has a large sample and weighted results that permit us to estimate the incidence of individual practices in Canadian industry.⁹

Incidence of Workplace Innovation The Human Resource Practices Survey (HRPS)

The Human Resource Practices Survey (HRPS) gathered data from 714 Canadian establishments on their "environment," business strategy,

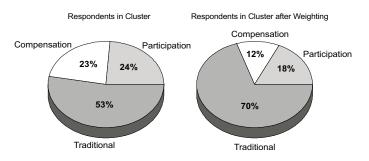
In the first place, it is difficult to define and measure the concept of "organizational change," especially in ways that are appropriate across different types of workplace settings. Measurement is particularly problematic in small firms where strategy and practices tend to be informal and not codified. Also, as might be expected, there are often differences across surveys in terms of sampling and other aspects of methodology. And, as we have already noted, collecting quantitative data on outcomes raises special challenges for a number of reasons including difficulties involved in isolating impacts of workplace change from other (often related) factors, such as technological change.

The HRPS was part of a national project on human resource innovation conducted by Queen's University. The results are reported in Betcherman et al. (1994). The WTS was undertaken as part of a project undertaken by Ekos Research Associates for the Canadian Policy Research Networks. Results are published in Betcherman, Leckie, and McMullen (1997).

various performance measures, and detailed evidence on their practices in a number of human resource areas. The sample included establishments with 40 or more employees in wood products, fabricated metal products, electrical and electronic products, and a range of business services. The survey collected data on a large number of practices which enabled the analysis to focus on HRM *systems*, or bundles of practices. The study identified three dominant HRM systems, with their (weighted) establishment distribution shown in Exhibit 2:¹¹

Exhibit 2

Distribution of HRM Cluster



Source: Human Resource Practices Survey, 1993

- *The traditional system*. Establishments fitting into this model have undergone very little workplace change, with their traditional system more or less intact. The study estimated that this cluster included 70 per cent of all establishments with 40 or more employees in the four sectors covered. Firms reporting traditional systems tended to be small, with business strategies based primarily on cost reduction.
- *The participation-based system.* Just under 20 per cent of the firms reported organizational and human resource changes that were designed above all to increase the direct contribution of employees in the workplace. These organizations emphasized some combination of job redesign, team work, employee involvement, and information sharing. Firms in this group tended to have competitive strategies based on innovation and quality.

While the HRPS sample frame did not cover all industries, it does represent a selection from resources, manufacturing, and services.

¹¹ The weighting procedure was undertaken to establish an establishment size distribution that reflected the actual size distribution in each sector.

• The compensation-based system. This system described about 13 per cent of the sample. While the direction of workplace change in the previous group stressed intrinsic rewards associated with job quality and involvement, this group focused on increasing extrinsic rewards largely through compensation innovations (e.g., pay-for-skill/knowledge, gainsharing, profit-sharing). These firms were disproportionately large and in business services.

The Workplace Training Survey (WTS)

Although the Workplace Training Survey (WTS) did not gather as much detail on work organization and human resource practices as the HRPS, it offers the benefits of a large sample of establishments (n=2,584) in all industries except agriculture and government. The sampling frame included establishments with two employees or more, so it is one of the few surveys that has covered micro and small firms. The sample was weighted to reflect the regional, size, and industrial composition of the economy.

Evidence from the WTS on the incidence of four types of organizational/human resource innovations is shown in Exhibit 3. The data indicate that two-thirds of establishments report formal communication or information-sharing policies; just over half indicated that they had team-based systems in place; slightly less than half had formal employee involvement programs (e.g., labour-management committees, quality circles); and just over one-quarter reported variable compensation plans (e.g., profit sharing). The WTS data showed that the incidence of these workplace changes was positively correlated with size, technological change, competing in international markets, and "people-centred" business strategies.

Exhibit 3 **Incidence of Selected Human Resource Practices** Formal communication Team-based 55.5 systems **Employee** 46.7 involvement Variable 28 compensation 10 20 30 40 50 70

Source: Workplace Training Survey, 1995

Outcomes of Workplace Innovation

A limited research base now exists, consisting mainly of U.S. studies, that suggests that firms introducing workplace changes involving intangible investments and flexible work practices do experience positive payoffs.

These surveys also addressed the issue of workplace change outcomes, although only from the perspective of the firm.¹² Before turning to the results, recall that in the preceding section we identified a number of methodological difficulties involved in accurately identifying these relationships. Nonetheless, a limited research base now exists, consisting mainly of U.S. studies, that suggests that firms introducing workplace changes involving intangible investments (e.g., in human capital) and flexible work practices do experience positive payoffs (e.g., Macy, Bliese, and Norton 1991; MacDuffie and Krafcik 1992; Ichniowski, Shaw, and Prennushi 1993; for a Swedish example, see NUTEK 1996).¹³

The HRPS and WTS data offer support for this conclusion. In the former survey, establishments that had adopted non-traditional workplace systems — i.e., the compensation- and participation-based practices — were more likely to report improved performance trends than respondents with traditional systems (Betcherman et al. 1994). A similar analysis based on the WTS data found that establishments that had introduced innovations such as those included in Exhibit 3 reported significantly better revenue and performance trends than other establishments (Betcherman, Leckie, and McMullen 1997).

Effective workplace change depends, above all, on the social context within the firm, especially the culture, the trust, and the commitment to genuine innovation.

One other important point regarding the link between workplace innovation and firm performance comes from Wagar's (1994) survey of organizations in Atlantic Canada. In this analysis, qualitative variables capturing the degree of social responsibility and the sharing of decision-making and information were more powerful determinants of performance than any concrete programs or practices. This result underlines the fact that effective workplace change depends, above all, on the social context within the firm, especially the culture, the trust, and the commitment to genuine innovation.

Most of the research on outcomes has had this focus. Very few studies, particularly in Canada, have examined outcomes for workers or the community. For a synopsis of what has been found on employee impacts in the international literature, see Betcherman (1997).

A consistent finding emerging from this research is that positive outcomes are more apparent where organizations have adopted a bundle of complementary practices — i.e., a high performance system — as opposed to individual practices. See Ichniowski et al. (1996), and Huselid (1995).

Econometric analysis confirmed this relationship for a number of performance indicators with the advantages most clearly identified for firms fitting into the participation-based model. However, the analysis did not identify any significant differences in financial performance across the three HRM clusters. This could mean either that there is no discernible financial payoff to innovative workplace practices or that payoffs do exist but that these could not be captured with the data and methodology. Without being definitive, the latter explanation seems plausible because one would expect that the observed positive impacts on outcomes such as productivity and turnover would eventually translate into financial gains as well.

4. General Lessons Learned

This section attempts to identify a set of important conclusions flowing from the case studies of workplace innovation in Canada.¹⁵ Its intent is to add value to the body of case reports themselves (which are available separately)¹⁶ by seeking common threads and relevant themes. This synthesis has been prepared in the form of seven key observations that we believe are helpful in understanding the prevailing patterns of workplace change, the nature of the changes, the innovation process, and successful change outcomes.

While these observations can be interpreted as "lessons learned," they should not be taken as a manual for implementing successful organizational innovation. In the first place, some obviously critical elements have not been included because their importance has been routinely noted elsewhere. An example is the importance of mutual trust between the parties. And, in the second place, organizational innovation, by its very nature, defies the notion of "best practice," at least in its more specific sense. There may be "best principles" that are broadly applicable (although even here there could be debate) but particular strategies and approaches that are successful will vary across workplaces because of differences in organizational history, culture, markets, and so on. The case studies discussed below support the existing research literature in demonstrating that organizational innovation can lead to significant benefits for firms and for workers; however, innovations that work can take a variety of forms.

One final point to make before turning to the conclusions is to note that the case studies have not been randomly selected and, as such, they are not representative of the collective experience with workplace change. In fact, they almost exclusively reflect change processes that can be characterized as generally successful.

Although, as many observers have pointed out, an examination of failures would be, in certain ways, equally revealing, it is difficult to document

The importance of mutual trust between the parties is crucial.

¹⁵ The sources for the case studies considered here are described in the appendix to this report. In addition, the appendix also contains a brief summary of some of the case studies that were used to illustrate this report. All case studies have been well publicized.

All of the case studies updated by Ekos Research Associates have been vetted by either management, union or both. Only when we have obtained full approval do we disclose the company's name. The names of some other companies are also disclosed. This is so only when the information on the company is already available publicly. In those cases, they have already been the object of case studies in other publications.

such experiences. However, despite the fact that case study researchers (and consumers of their research) often have an interest in documenting "successes" versus "failures," in reality the line between the two is often blurry. Indeed, many of the cases reviewed for this project have elements of both.

This final issue aside, it is important to recognize that the cases do represent a wide range of organizations and diverse workplace innovation experiences. We have chosen to highlight the following observations that emerge from these stories which have been selected to advance our understanding of what constitutes successful workplace change and how it can be achieved. These observations address a number of aspects including the drivers of innovation, the role of strategic choice, the innovation process, and outcomes.¹⁷

1. Workplace change can be driven by a variety of forces. The particular source does not necessarily determine whether the change process will be successful or not.

It has become well established that a crisis of some sort often triggers workplace change.¹⁸ These crises can be of a number of types. Most common are "competitive crises" that threaten the very existence of the organization. The restructuring of a large steel company is a classic example of this.¹⁹ The changes at Great Western Brewery (employee buyout and subsequent workplace innovations) were taken in response to such pressures. Strictly speaking, government organizations may not be vulnerable to competitive crises; however, as the Canadian Forces Base (CFB) case illustrates, in the 1990s public sector establishments have been vulnerable to an analogous force stemming from major government cutbacks.

While competitive crises may have driven a substantial amount of workplace change (and some of the most high-profile examples), the cases also show that a range of factors can lead to organizational innovation. For example, some initiatives were motivated by a difficult and potentially destructive labour relations climate, or by public guidelines relating to employment equity. In other cases, the innovations were really not predicated by any environmental threat, but rather by a corporate culture and managerial ideology that emphasized "people" values and workplace

¹⁷ These issues flow from the conceptual framework presented in Exhibit 1 in section 2.

See, for example, the summary provided by the CLMPC (1996a) on the workplace change cases presented at their seminars. A number of examples were triggered by crises that left the parties with little choice but to embark on fundamental change.

¹⁹ For a brief description of the innovation see Appendix B.

democracy. Finally, in the flexible work arrangement examples of the Royal Bank, the City of Winnipeg, and the Toronto Star,²⁰ changes were made in response to morale, recruitment, and retention concerns that had been raised by work-family pressures.

So a range of factors can drive significant workplace change. The important question for researchers, policy-makers, and decision-makers in business and labour is whether innovation in response to a crisis situation is any less (or more) likely to be successful than innovation arising from other drivers. While arguments can and have been made both ways, the cases reviewed for this project provide little evidence that the initial context for change necessarily has a significant impact on ultimate outcomes.²¹ There are other things that seem to matter more.

A range of factors can drive workplace change.

2. Senior management commitment is absolutely essential for implementing a sustainable change process.

These case studies underline the critical role of senior management. Regardless of what the mission statement or the personnel policy book say, sustained efforts at creating an innovative human resource climate are not possible without an unwavering belief on the part of the person or people at the top. In some situations, this belief may be one held by the highest level of management, in others they may have been persuaded by champions within the organization. But either way, it has to be there.

While we could illustrate this through a number of the cases, the case of an international automotive parts company is a clear example. The high-profile CEO of this company has exerted a huge influence on the culture of the organization, including recognition of the value of its people to the long-run performance of the firm. This is done through a variety of means but the major instrument is a profit-sharing scheme that creates incentive and reward and commitment and partnership. This choice of innovative behaviour and its sustainability — as opposed to formal employee participation mechanisms, for example, that come and go in so many other firms — also reflect the CEO-led corporate philosophy.

The CFB innovation was also driven by a strong belief on the part of a senior manager. Even in a military environment where traditional management and labour practices were deeply embedded, a leader at the base, in this case a colonel, was able to generate support for a

²⁰ See, CLMPC 1997b, Case Studies of Alternative Working Arrangements and Changes in Working Time.

These arguments hinge on one of two contentions: that changes introduced in crisis settings are unlikely to be durable or that a crisis creates the will on the part of the parties to seriously consider and commit themselves to change.

fundamental (non-traditional) restructuring in the form of a sociotechnical redesign. While leadership and commitment at the top can be a big plus, this case also reveals the flip side — i.e., that a change in senior personnel can very quickly lead to the unravelling of the innovative process. Ideally, with time the values of the senior leadership can be diffused through the organization, thereby making the innovation more durable. However, these cases, and others, have shown that diffusion can be a difficult and protracted process.

Other cases highlight the importance of commitment at the top, not so much through a single dominant personality, but through a commitment shared by the management team.²² This is illustrated in the Gennum case where strong value is placed on employee contribution and empowerment. As a quote in the Gennum case puts it, "Gennum describes itself as a company of partners where the newest recruit and the most senior executive know each makes a contribution to the corporate success."

On the other hand, where management commitment to the change process is either wavering or absent, the likelihood of successful innovation is slim. This is clearly illustrated, as already discussed, by the CFB case following a change in leadership. It is also evident from a scrap metal company where a series of change initiatives have been largely unsuccessful in changing the underlying climate in the firm. As the case report reveals, workers tend to discount management's commitment with the result that there has been mistrust and scepticism surrounding both the "interaction management" dialogue that is the subject of the case report, as well as earlier attempts at organizational change.

...supervisors and first-level managers are absolutely essential to the effectiveness and sustainability of a meaningful change process.

As a footnote to this point, supervisors and first-level managers are absolutely essential to the effectiveness and sustainability of a meaningful change process. In the City of Winnipeg flexible work arrangements program, some managers and supervisors were more supportive than others, which apparently had a significant impact on determining the effects. Indeed, work by Duxbury and Higgins (1994) underlines the importance of supervisor attitudes in establishing truly flexible work arrangements; they argue that this is a more important factor than the existence of any program. While none of the cases directly addresses the role of the supervisor in other types of innovations, researchers elsewhere have highlighted this factor.

The example of the automotive parts company involving one dominant leader is somewhat unusual for a major corporation; it is, however, more typical of smaller firms. Some relevant examples in the small-firm sector are discussed in Betcherman, Leckie, and McMullen (1997) within the specific context of commitment to a training culture.

3. There are different interests among the stakeholders in terms of workplace change. One key is to acknowledge these differences and identify workable tradeoffs.

Labour's concerns regarding organizational change obviously overlap with those of management but it is important to recognize that its priorities may include job security, training opportunities, protecting collective rights and other issues that may not be high on management's list. Change processes that do not recognize this diversity of interests are unlikely to succeed over the long term. This story has been repeated frequently in recent years, especially where change has been introduced by management, without any prior consultation with the union.

The existing literature indicates that organizational innovations are most often introduced in this way (e.g., Betcherman et al. 1994). To some extent, then, the case studies considered in this project are atypical in that many of the workplace change processes have been initiated in a truly joint fashion. This largely reflects the bias inherent in the case selection process. It is more difficult and often viewed as less interesting to collect cases where the workplace change process has been initiated by management.²³

The case of a scrap metal company where a number of change attempts have been introduced by management in "top-down" fashion, frankly is more representative than most of the cases collected in this project. And this type of process can create dilemmas for unions. In many cases, union locals have not been prepared for addressing workplace change initiatives which usually involve issues beyond their traditional experience and expertise. That frequently has left them with choosing between two difficult options. On the one hand, they can accept management initiatives and the associated risk that these might not be in the interests of the membership or the union itself. Or, they can oppose them and face the potential hazard of blocking changes that might be necessary to ensure the survival and competitiveness of the organization.

The cases illustrate a number of arrangements that can work for unions in solving their dilemmas around workplace innovation. Indeed, a number of these are highlighted in the CLMPC (1996a) seminar report.²⁴ These include initiating a process to air old grievances before embarking on a

Change processes that do not recognize this diversity of interests are unlikely to succeed over the long term.

More difficult because in unionized environments case study researchers need access to the union as well as management and where the process has been management-initiated and driven, the probability of getting this access is reduced. Less interesting because case researchers, as already noted, are often looking for "successes" and a joint process is usually seen as a principal indicator of success.

²⁴ See, CLMPC: Building a Joint Workplace Change Process: Observations from the Canadian Labour Market and Productivity Centre Seminars on Workplace Change, Unpublished Paper, Ottawa 1996.

new change process (e.g., Ford Electronics/Canadian Auto Workers); using third-party assistance (something we will turn to shortly); and formalizing arrangements through written agreements (e.g., New Brunswick Telephone/Communications, Energy, and Paperworkers).

Ultimately for unions, there are two keys to making workplace change work for their members. One is to develop their own agenda on workplace change, identifying the ingredients that will be necessary for the change to benefit the membership. Some locals have been able to get support from regional or national offices; the United Steelworkers of America and the Communications, Energy, and Paperworkers offer the best examples of this.²⁵ But in most cases, locals have simply had to work through the issues themselves and identify the conditions that are necessary for their endorsement and participation in the change process. Obviously, this is easier to do in settings like CFB where there is already a climate of trust between the parties.

In the end, labour and management must be able to identify a "community of interests". The second key, which involves not only unions but management as well, is for the parties to take a long-run view of both core issues involved in most change initiatives: competitiveness and security. In the long-run and in many organizational situations, notions of security, job quality, and income distribution become closely linked with competitiveness. But, if the parties cannot get beyond a short-term time horizon and identify a community of interests, the tradeoffs may be too stark to forge a satisfactory and sustainable workplace agreement.

4. There are no "magic recipes" and successful workplace change can look very different in different organizations. "Fit" is a critical consideration.

The diversity inherent in organizational innovation has already been emphasized in this report. That is, there are many routes to success and what works will be dictated by the nature of the organization and the environment around it. In the literature, growing emphasis is being placed on the notion of "fit" which has both an internal and an external dimension. The former involves a consistency between work reorganization initiatives and other aspects and activities of the organization while the latter refers to the economic, social, and institutional framework in which it operates.

A number of the cases highlight the importance of fit. For example, human resource management initiatives described in the automotive parts company and Gennum cases have been successful because they have been

²⁵ For a discussion of the development of workplace change agendas by these and other unions in Canada, see Kumar (1995).

implemented as "bundles" of interrelated practices that are internally coherent and that logically follow from the overall approach and philosophy of the firm. And, tellingly, while each initiative aims to strengthen the value to, and commitment of employees, and to enhance their ability to contribute, each is different — note the automotive parts company emphasis on incentives through extrinsic rewards and the Gennum orientation toward intrinsic rewards through employee participation and training. The case of the scrap metal company, on the other hand, offers an illustration of the pitfalls of attempting to graft participatory human resource innovations onto an organization that has neither a participatory corporate culture nor complementary practices and strategies in other areas.

Fit with the external environment also comes through as a theme in a number of cases. Or, more precisely, the consequences of a lack of external fit are revealed. The CFB case illustrates the precariousness of introducing non-traditional human resource and industrial relations practices in a sector (i.e., the military) where there is a deep tradition of command-and-control, hierarchy, and formal accountability. One of the findings emerging from the case of the scrap metal company was the inappropriateness of an innovation developed primarily for U.S. non-union workplace settings. And, finally, the innovation efforts in a computer systems company, a unionized firm that was formerly a crown corporation, reveal stresses associated with fitting into the corporate environment of its new parent, a large American computer systems firm.

5. The participation of "third parties," which can include various players, can have a significant influence in either direction on a change initiative.

The cases illustrate the role of a variety of "third parties" in the workplace change process. These include mediators and facilitators, consultants, industry groups, and government and the involvement of each can take various forms. While third party intervention can occur at different points in the process, it seems to be most frequent in the early stages.

The involvement of third parties had a range of impacts in the cases covered during this project. In some situations, the effects were ambiguous or even problematic. The case of the scrap metal company clearly fits into the latter category, with the unsuccessful use of a consultant to guide the implementation of an interaction management program that appears to have been unsuitable for the company. Although, for reasons similar to those discussed earlier, the collection of cases

Human resource management initiatives have been successful because they have been implemented as "bundles" of interrelated practices that are internally coherent and that logically follow from the overall approach and philosophy of the firm.

reviewed for this project has few such examples, a more critical literature has identified this as a recurring problem.²⁶

Third parties can play a useful role in transmitting useful knowledge into the organization.

They can also be effective in mediating differing interests and helping stakeholders build the trust necessary to establish workable tradeoffs.

However, the cases also demonstrate that third parties, including consultants but others as well, can play a useful role. They can, for example, play an important part in transmitting useful knowledge into the organization. For example, at CFB, organizational consultants were important in the implementation of the socio-technical redesign. They can also be effective in mediating differing interests and helping stakeholders build the trust necessary to establish workable tradeoffs. This was evident in the Newfoundland and Labrador Hydro case, in the case of the steel company, and also in the Westin Hotel example. Third party intervention, in the form of industry associations or government programs, can also provide necessary resources, often through "pooling" resources; can help parties overcome externality problems (such as concerns about losing intangible investments); and can broker different interests. The Ontario government played a number of these roles in the restructuring of the large steel company. Finally, as the case of the Royal Bank's flexible work programs demonstrate, third parties (in this case, a consultant) can offer specialized expertise, for example in the evaluation stage.

6. Information represents an important dimension at all stages of organizational innovation, from introduction through implementation to evaluation. The lack of information impedes successful innovation and its sustainability.

The importance of information does not tend to be recognized in discussions about workplace innovation. Yet the case studies highlight the relevance of information for diagnostic, implementation, monitoring, and evaluation purposes. Despite its usefulness, information shortcomings were apparent in virtually all of the cases.

Various studies have identified the difficulties associated with the diffusion of useful innovation principles across organizations (Gunderson and Riddell, 1997). Although an apparently successful change in one setting may not be easily transplanted elsewhere, too many organizations (employers and unions) have incomplete or inaccurate information about workplace change; indeed, this may have led to the frequently discussed "flavour of the month" syndrome. As we will see in the conclusion, governments may have a useful role to play here in generating and disseminating such information.

Our cases are more explicit in documenting the absence of information for monitoring and evaluation purposes. There are some examples where

²⁶ See, for example, a review article in The Economist (January 25, 1997) which documents the failures associated with "fad management," often imported by consultants.

organizations have communicated relevant data throughout; the clear dissemination by the automotive parts company of the financial information related to the profit-sharing program is a case in point. However, even here there is little information that can be brought to bear on the impacts of the program. And similar problems can be found with most of the initiatives. The case of the scrap metal company points to the jeopardy of not having appropriate information for monitoring and evaluation; as the case report describes, this perpetuates differences in how the parties have assessed the usefulness of the change process. Thus, good information can affect the sustainability of innovations.

There are naturally difficulties involved in collecting and interpreting the required data. (This is a big enough problem for specialized researchers as our literature review indicated.) Nevertheless, while issues around causality are bound to be troublesome, the cases together do identify various indicators that might be relevant, depending on the nature of the innovation. These include turnover and worker compensation claims (the steel company), grievances (Newfoundland and Labrador Hydro), job satisfaction (the automotive parts company), and productivity (Gennum). As well, the CFB example illustrates the possibility of analyzing the costs associated with workplace innovations.

7. Expectations about workplace change must be realistic in terms of goals, timeframes, and the impact of unplanned events.

This final point concerns questions around what can be achieved from workplace change. There is a growing body of evidence, as we discussed earlier, suggesting that firm objectives regarding productivity, quality, and overall performance can be positively affected by workplace innovations designed to increase flexibility and employee contributions. There is less research, however, on the outcomes for employees and their unions. It does appear that "high-performance" style innovations can improve human capital investment opportunities (and, by extension, future employability and earnings potential), can enhance job quality, and in certain forms, can offer employees more flexible work arrangements.

However, as many of the cases illustrate, even successful change processes are unlikely to be panaceas for all that ails an organization. It is true that there can be positive spillovers in terms of organizational "learning", building trust between the parties, and developing workplace institutions that can be more broadly applicable. A few of the cases suggest potential spin-offs. But most don't: the Newfoundland and Labrador Hydro case, while reasonably successful against the objectives it was meant to pursue, is an example of an innovation story where there are boundaries on what has and can be achieved.

Even successful change processes are unlikely to be panaceas for all that ails an organization.

A second qualification concerns organizational "patience". It has been frequently articulated in the research literature that the sorts of investments involved in organizational innovation are investments that require a long time to generate returns. In a business environment (and increasingly a political one too) where markets (constituencies) are "impatient", there are a lot of pressures to demonstrate benefits immediately. To have time to be successful then, change initiatives generally need to be in settings where the context is a long-run one. The automotive parts company, the International Forest Products, and the Royal Bank cases all underline the salutary effects of this recognition.

Organizational change is only one small part of the restructuring of business, government, and the economy more generally and it is often not among the most important parts.

Finally, there is an important element of chance involved. The cases illustrate various occasions where larger forces beyond the establishment determine the outcomes of a change process regardless of what has been going on inside. In the example of the CFB, a change in leadership had a definitive impact. In another case, corporate restructuring led to a shutdown even though the internal innovations appeared to have been very successful. On the other side of the coin, workplace change and its perceived outcomes at Gennum have benefited from strong market conditions. And, at the steel company, it is likely that the massive restructuring would have been unsuccessful in the sense of helping keep the company alive if steel markets had not turned up in the mid-1990s.²⁷ In other words, organizational change is only one small part of the restructuring of business, government, and the economy more generally, and it is often not among the most important parts.

²⁷ Two other high profile examples not included in the background studies have been Sarnia Shell and Inglis in Cambridge. Both plants had implemented profound change processes that by all accounts were very successful. However, a change in management at Shell reversed the organizational strategy in Sarnia and continental restructuring at Inglis led to a closure of the Cambridge plant.

5. Implications for the Stakeholders

One major common thread of the case studies has been the diversity inherent in organizational innovation. This has been noted on various occasions in this report and need only be summarized in the conclusion. There are no guaranteed formulas for implementing successful change. What works in one setting may be inappropriate in another. In this vein, a number of cases have demonstrated the importance of "fit," both internally with the firm's culture and what it is doing in other functional areas and externally with the economic and institutional environment.

In the final analysis, although "best practice" is common parlance in the area of organizational change, it is, in fact, a somewhat inappropriate concept. So it is more realistic to acknowledge the diversity and to consider "best principles" in a more generic sense. This involves a focus on the particular goals the changes were intended to affect and a consideration of the impacts on all of the stakeholders. As we have argued on the basis of these cases, a key element in sustainable organizational innovation is that the stakeholders maintain a long-run perspective with a strong orientation towards "intangible" investments. Without that, it will be very difficult to work out the divergent interests involved, especially those between management and labour.

The body of survey literature suggests that the incidence of workplace change (especially with these characteristics) remains quite low. This literature also highlights the accumulating evidence that organizational innovation can have positive payoffs in terms of improved firm performance and a range of benefits for employees. These favourable outcomes have also been illustrated through many of the case studies reviewed for this project.

However, the case studies also underline the difficulty of sustaining effective innovation, even once the process has been launched. There are many obstacles that come into play — for example, information barriers, externalities associated with intangible investments, pressures for immediate benefits, various institutional barriers, and the different interests of the stakeholders. The degree to which these obstacles are overcome will dictate the diffusion of effective organizational innovation in the future.

Clearly, management and labour must be the primary actors in workplace changes. Government and other third parties can play a role as we have In implementing workplace changes, management and labour must be the primary actors.

seen, but it cannot be the central one. We have already emphasized the importance of both business and labour lengthening their strategic horizons and actively seeking out organizational ideas that will have positive payoffs in their particular organizations.

While governments are not necessarily concerned about what is happening within individual workplaces, they do have a legitimate concern about how they can encourage the diffusion of effective organizational practices in order to support macro objectives such as productivity and employment growth and income distribution. There are both "market failure" (around intangible investments) and "public good" aspects to the governments' role here. This involves a wide range of policy areas including education and training, industrial partnerships, research and information, and ultimately labour and social policy. These are the various considerations that public policy should be addressing in order to support the sorts of organizational innovation that encourage investments in people, that offer individuals the opportunity to enhance their employability, and that contribute to economic performance.

References

Betcherman, Gordon. 1997. Changing Workplace Strategies: Achieving Better Outcomes for Enterprises, Workers and Society. Ottawa: Government of Canada and OECD.

Betcherman, Gordon, Norm Leckie, and Kathryn McMullen. 1997. *Developing Skills for the Canadian Workplace: The Results of the Ekos Workplace Training Survey.* Ottawa: Canadian Policy Research Networks.

Betcherman, Gordon, Kathryn McMullen, Norm Leckie and Christina Caron. 1994. *The Canadian Workplace in Transition*. Kingston, ON: IRC Press.

Canadian Labour Market and Productivity Centre (CLMPC). 1996a. Building a Joint Workplace Change Process: Observations from the Canadian Labour Market and Productivity Centre Seminars on Workplace Change. Unpublished paper, Ottawa (Available at HRDC evaluation website at: http://hrdc-drhc.gc.ca/edd)

Canadian Labour Market and Productivity Centre (CLMPC). 1996b. *Workplace Innovation in Europe: A Review of the Literature and Findings of Case Studies*. Unpublished paper, Ottawa.

(Available at HRDC evaluation website at: http://hrdc-drhc.gc.ca/edd)

Canadian Labour Market and Productivity Centre (CLMPC). 1997a. *Quebec Labour and Management Experiences with Workplace Innovation*. Unpublished paper, Ottawa.

(Available at HRDC evaluation website at: http://hrdc-drhc.gc.ca/edd)

Canadian Labour Market and Productivity Centre (CLMPC). 1997b. Case Studies of Alternative Working Arrangements and Changes in Working Time. Unpublished paper, Ottawa.

(Available at HRDC evaluation website at: http://hrdc-drhc.gc.ca/edd)

Duxbury, Linda and Chris Higgins. 1994. *Part-Time Work for Women: Its Effects and Effectiveness*. Unpublished background paper, Industrial Relations Centre, Queen's University, Kingston, ON.

Ekos Research Associates. 1996. Lessons Learned from Workplace Innovation: Draft Progress Report. Submitted to HRDC, Unpublished, Ottawa.

Gunderson, Morley and Craig Riddell. 1997. *The Changing Nature of Work: Implications for Public Policy*. Paper presented at "Adapting Public Policy to a Labour Market in Transition" conference, IRPP, Montreal.

Huselid, Mark. 1995. The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance, Academy Of Management Journal. Vol. 38, No. 3: 635-672.

Ichniowski, Casey, Kathryn Shaw, and Giovanna Prennushi. 1993. *The Effects of Human Resource Management Practices on Productivity*. Unpublished paper, Graduate School of Business, Columbia University, New York.

Kumar, Pradeep. 1995. *Unions and Workplace Change in Canada*. Kingston, ON: IRC Press.

MacDuffie, J.P. and J. Krafcik. 1992. *Integrating Technology and Human Resources for High-Performance Manufacturing*, in Tom Kochan and Michael Useem (eds.), *Transforming Organizations*. New York: Oxford University Press.

Macy, B.A., P.D. Bliese, and J.J. Norton. 1991. *Organizational Change and Work Innovation: A Meta-Analysis of 131 North American Field Experiments* — 1961-1990. Paper presented at the National Academy of Management meetings, Miami.

NUTEK. 1996. *Towards Flexible Organisations*. Stockholm: Swedish National Board for Industrial and Technical Development.

OECD. 1996. Technology, Productivity, and Job Creation. Paris.

OECD. 1997. Flexible Enterprises. Paris.

Osterman, Paul. 1988. *Employment Futures: Reorganization, Dislocation, and Public Policy*. New York: Oxford University Press.

Wagar, Terry. 1995. Human Resource Management Practices and Organizational Performance. Kingston, ON: IRC Press.

Appendix A

Sources of Case Studies

In this appendix, we describe the sources for the case studies used in this project, identify the subjects covered, and then raise some methodological considerations associated with research based on case studies. We also provide, in Appendix B, a brief summary of each case study updated for the purpose of this report.

The research that provides the analytical basis for this project comes from case studies of workplace change. No new cases have actually been carried out. Rather, we have reviewed and, in some situations, updated case studies that had already been undertaken.

Ekos Case Studies

The case studies reviewed by Ekos Research were selected from the existing literature dealing with workplace and organizational change. At the start of the project, a search was undertaken to identify potentially relevant case studies (both published and unpublished) that were in the public domain. This search was assisted by a series of discussions with experts in the field. The process generated a large list of case studies that served as the basis for the final group of studies reviewed by Ekos.²⁸ That final selection was based on a number of factors: capturing diversity in terms of the type of innovation, and degree of success/failure; getting variation with respect to industry, establishment size, union status, and region; the currency of the available study; the extensiveness of the available documentation; and a willingness to cooperate in updating the case since the time of last reporting.²⁹

Once cases had been selected, reports were prepared summarizing the relevant aspects of the already reported material plus more recently available information obtained through phone follow-up interviews with key informants. These reports generally adhere to the structure of the case study template prepared for this report. This template essentially follows the conceptual framework reproduced in Exhibit 1 and discussed in section 2 of this report.³⁰

The list of existing case studies and the list of experts contacted in the search process is available upon request, or on our internet website at http://hrdc-drhc.gc.ca/edd

Another criterion involved not overlapping with other case reports being prepared for HRDC under various research initiatives.

The case study template, and the interview guide which is based on it, is available upon request or on our internet website at http://hrdc-drhc.gc.ca/edd

Canadian Labour Market and Productivity Centre Cases

The Canadian Labour Market and Productivity Centre (CLMPC) cases come from a number of sources:

- Case studies of about 15 workplaces that were presented to CLMPC seminars held in different regions between 1994 and 1996. These cases had been selected on the basis of two criteria: being innovative workplace responses to the challenges of change and involving joint processes between management and the union. Key observations from these cases were drawn out in a synthesis report (CLMPC 1996a).
- Five case studies involving alternative working arrangements that were undertaken by the CLMPC for the Task Force on Alternative Working Arrangements and Changes in Working Time. These cases involve a range of flexible work arrangements including job sharing, various working time innovations, and home-based work and are reported in CLMPC (1997b).
- Brief summaries of 19 Quebec-based cases that were reported in an overview of workplace innovations in that province (CLMPC 1997a).
- Summaries of 19 cases of workplace change in Europe that were reported in an overview of workplace innovation in the European context (CLMPC 1996b).

Case Methodology Considerations

Case studies, by their very nature, cannot offer a valid profile of the adoption of organizational changes nor can they provide a statistical base for undertaking representative analysis of related questions such as the driving forces, barriers and obstacles, or outcomes of workplace innovation. This is because samples tend to be small due to the intensiveness of this research method and because they typically are not "random" In fact, a willingness to participate in case studies may, in itself, signal something atypical about the organization. That is, despite attempts by some research studies (including this one) to get "failures" as well as "successes," the reality is that the latter type of organization will usually be more forthcoming in terms of participating. Indeed, in some instances, cases are selected on the basis of a particular feature such as success; note, for example, the "joint" and "innovative" criteria used for the CLMPC seminar cases. Where representative, quantitative measurement is required; then, surveys and other databases are necessary.

Nevertheless, case studies have been an important tool for advancing our understanding of workplace innovation.³¹ In fact, because of its complexity and the intangible nature of many of its features, organizational change poses special challenges for collecting and analyzing quantitative data through surveys. The key issue driving this project — linking workplace strategies, practices, and processes to positive outcomes — cannot easily be addressed through quantitative data and, in many respects, is more amenable to the qualitative analysis which is afforded by case studies. Case studies can accommodate complex phenomena which may differ from the perspective of various stakeholders. They represent a flexible research method and one which is well suited to the "best practices" style of this project.

³¹ For a listing of some influential workplace case studies over the years, see Ichniowski et al. (1996).

Appendix B

Summary of Case Studies

As part of this study, Ekos Research Associates selected a series of firms for which there was information on innovation and workplace changes that they had already published. Ekos updated the information that already existed on those firms by contacting each firm. Once the information was updated and written in a case study format, each case study was vetted with the company's management and its union when there was one. Only the case studies that have received full agreement are presented below with their names. As for the cases when we did not obtain approval or we only obtained partial approval, the information is still presented but without disclosing the company's name.

Gennum Corporation: Gennum Corporation is a successful electronics company and active participant in the Sectoral Skills Council of the Electrical/Electronics Industry. The particular innovation examined here is their participation in the Sectoral Skills Training Fund and the establishment of a Skills Development Committee in 1990. The goal of the innovation was to provide high quality, consistent and focused training to Gennum employees, and to closely link this training to corporate objectives and individual employee goals.

Gennum distinguishes among three types of training: corporate, functional, and personal development. The focus of the training under the Sectoral Skills Training Fund is personal development training. Skills Development Committees were to undertake a needs analysis to provide responsive assistance to employees and to administer the Sectoral Skills Training Fund budget. The training funds are disbursed and training priorities are established based on a needs analysis.

Through their participation in the Sectoral Training Fund and the establishment of a Skills Development Committee, Gennum has provided employees with more and better opportunities for training. These opportunities for training have led to an increase in morale and job satisfaction, increase in the overall skill level of employees and the greater portability of employee skills. Gennum also attributes the decreased turnover rate and increase in productivity at least in part to the new approach to training and development.

Tafelmusik Baroque Orchestra: Tafelmusik is an internationally acclaimed, 19 member orchestra specializing in the performance of baroque and classical music on period instruments. This case report does not concern the implementation of a particular intervention at a specified point in time. Rather, this case study focuses on an innovative and

successful approach to management which Tafelmusik has been using for most of its history – an approach which features a flat, horizontal organization structure, participative management, teamwork, and a shared, consensus-building approach to decision-making. This approach began to evolve in 1981 at which time the current Music Director and Managing Director joined the organization.

The innovation was introduced by top management, but all orchestra members participated actively in all decisions and genuinely "bought in" to the managerial style of the orchestra. No assistance has been sought from outside, and the entire organization is affected by the innovation.

Newfoundland and Labrador Hydro: Adversarial labour relations led union and management representatives in two Newfoundland and Labrador hydro plants to set up labour-management committees to build new bridges between parties. With the help of a facilitator from the Ministry of Labour, the parties implemented the committees to smooth out their differences on many issues, including health and safety, work and maintenance practices, technological change, temporary appointments and other topics. Special training for committee members, top management support, and the presence of an outside mediator explain why the experience has been successful at solving many problems at these plants.

The committees were successful in rehabilitating the general working relations between local management and labour representatives, and the most immediate and observable impact of the committee was on the annual number of grievances, that fell from 51 in 1991 to 26 in 1996.

No other impacts were directly observed, but informal observations support the view that the committees' work has raised productivity levels through the improvements in the physical working environment.

A scrap metal company: In an effort to improve labour-management relations and improve performance, this firm implemented Interaction Management (IM), which is designed to help develop and maintain dialogue between managers and their employees and thereby encourage a more collaborative working environment. The program was developed by Development Dimensions International (DDI) in the United States.

The implementation of IM did not yield the expected results, though management assessment of the program is more positive than that of employees. The program was intended to improve communication and involvement to increase performance. The company abandoned the program after two years. Uneven and selective implementation of IM at least partially explains the inauspicious results. As well, poor labour-

management relations and a corporate culture at odds with the principles of IM undermined the potential effects of the program.

A computer systems firm: The innovation described in this case report is a labour management dialogue process, instituted in the early years of this successful computer systems firm. The innovation aims to create lines of communication between labour and management outside of the formal collective bargaining process. First introduced in 1988, the innovation has survived numerous changes in the company. The labour management Dialogue Process has now achieved maturity as an institutionalized, if not necessarily highly effective, feature of human resource management in the firm. While it has in the past achieved many benefits for workers and the firm, and has survived major upheavals in the firm as a whole, it is now in a period of relative quiescence. As the firm adjusts to its new corporate context and as changes occur in both union leadership and management, the role that this innovation can continue to play in labour-management relations will likely undergo reflection and adaptation.

Great Western Brewery Co. Ltd.: Facing a shrinking market and a plant closure, several employees at the Great Western Brewery bought the company from its owner (the merged O'Keefe and Molson breweries). Employee ownership has had significant impacts on human resources, industrial relations and work organization at the firm. The ownership transition has led to greater consultation and information sharing and increased employee involvement in decision making. This has demanded dedication and commitment from all.

The key challenges of the innovation have been to find an appropriate role for employee-owners within the firm and to manage divisions between employee-owners and employees. The key factors which have affected the outcome of this innovation are: efforts to shape the culture of the organization to focus on a "community of common interest" and downplaying differences between employee-owners and employees; goodwill and commitment of employees; and open and frequent communication between management and employees.

An international packaging company: This case report focuses on one of its plants. The plant is a greenfield* operation, hence this case study does not address the implementation of a specific innovation. Rather, the case study presents an example of a self-regulating, self-designing SMT (self-managing teams) concept. Employees are given the authority and responsibility for running the plant. They are also directly involved in

^{*} A "greenfield" is a new plant, or a new location for a company. This means that there was no established culture or way of doing the work.

their performance evaluation and their compensation review. All employees at the plant are members of the self-managing teams.

A number of changes in the work organization were evidenced under the innovation. The organization is flat, the teams report to an operations manager who reports to the plant manager. There are no supervisors in the plant. Team members perform supervisory functions. Two to three levels of traditional plant hierarchy are not present in the plant. The organizational structure encourages initiative-taking and entrepreneurship among team members. The plant structure also allows employees to carry out a range of additional activities beyond producing the aluminium end products. Production teams are involved in, among other things, safety issues, communications and report writing. They also address human resource issues such as training, developing leadership skills, and motivational skills. Production team members assume a number of other roles (on a rotating basis) such as team coordinator, work scheduler, and health and safety representative.

City of Vancouver Fire Department: The workplace innovation undertaken by the City of Vancouver Fire Department was the establishment of a task force in 1993 designed to increase the representation of women and visible minorities in the department. At a minimum, the task force was charged with developing new hiring standards and selection processes that complied with the City's Equal Opportunity guidelines. The task force was composed of both management and union representatives and was the first joint endeavour undertaken by management and the union. The task force was considered to be successful in meeting its primary objective. The task force demonstrated that management and labour are able to work together productively to accomplish specified objectives and to be involved in decisions regarding selection. It remains to be seen whether there will be any longer term impacts of the task force. The important factors of success of the task force included: clearly identified goals and objectives of the task force; joint labour and management representation; communication/ transparency and involvement of workers; patience and tolerance on the part of task force members; and use of an outside consultant to facilitate and mediate the process.

Zehr's Markets/Clifford Evans Training Centre: The human resource innovation described in this case study is the participation of Zehr's markets in a jointly-managed training centre. Zehr's Markets is a successful retail grocery chain in southern Ontario. In 1981, the union persuaded the company to contribute \$0.01 per employee per hour to a union-run education fund for steward training. Four years later, a negotiated agreement was reached to create a joint Training Trust Fund and the Clifford Evans Training Centre.

Zehr's participation in the Clifford Evans Training Centre has developed from an innovation to an institutionalized feature of human resources management. During the 10 years since this initiative was started, the program has evolved constantly, not only in terms of the content offered but also in terms of how training is planned and structured. There is little doubt that the creation of a permanent training fund and management structure has afforded Zehr's a solid foundation on which to build a flexible and comprehensive approach to human resource development. The continued success of the Training Centre has been aided by an excellent relationship between union and management that is surely partly cause and partly effect of the Centre.

A steel company: This company is an integrated steelmaker that produces structural steel (used for buildings, bridges and steel rails) as well as oil and gas tubular products. In response to major labour and financial problems, in April 1992 the union representing the workers and the company negotiated a *Joint Workplace Restructuring and Employee Participation Process*, which featured: a reduction in the number of supervisors (relative to hourly employees) and a redefinition of their role and function to emphasize coaching and coordination; a flattening of the organizational structure, resulting in fewer layers of management/ administration and a reduction of overhead costs; employee ownership of 60 percent of the company by 1996; and enhanced employee participation through voting shares and through involvement in joint labour-management committees.

At the time of the innovation (negotiated in April 1992), the steel industry was experiencing a downturn, which was followed by an upturn. It has not experienced another major downturn since then. In this sense, the timing of the innovation was ideal for observing positive post-innovation outcomes.

A small manufacturer in New Brunswick: Following a serious drop in sales, a small manufacturer in New Brunswick was taken over by a new management team that implemented a number of workplace innovations to improve the company's market share and capital base. The changes consisted of capital-sharing and profit-sharing mechanisms, as well as quality improvement actions that included training and other measures that led to a 9002 certification. Most of these innovations reached their goals: the new workplace arrangements proved to be challenging for middle-management, the capital-sharing mechanism topped-up the company's capital, the labour relations have improved, and the quality improvement measures were a success.

The capital-sharing arrangement and quality improvement strategies gave good results in general. The quality of the products have significantly increased over the last six years. Since 1997, the number of clients that have returned products because of quality defects has significantly diminished. The improvement is attributed to workplace training which has increased the skills as well as the workers' pride in their work.

Since 1995, the profit-sharing arrangement only applies to management and middle management. In 1994 the workers preferred to bargain a wage increase through their trade union representatives. Management would prefer, however, to include the employees in the profit-sharing scheme and will probably submit this to their union counterparts during the next round of collective bargaining.

Most of the workplace innovations were introduced as planned. There were, however, a few obstacles to change. The middle-management resisted some of the workplace transformations because the new workplace relations and the quality control procedures are very demanding for the foremen and middle-managers. Despite these obstacles, most of the changes were successful and the firm became profitable again only twelve months after the workplace innovations were introduced.

A Canadian Forces Base (CFB): The innovation described in this case study report is a trial of Socio-Technical Systems (STS) work re-design conducted in the Construction Engineering section of a CFB. Although the base has since been amalgamated with another unit and changes made during the trial have been reverted to the previous work design, there are significant lessons to be learned from this ambitious, participative project.

The innovation involved major changes in human resource management practices, stemming from the decentralization and consequent increases in: autonomy; the participative processes of the worker-management committees; and the emphasis on quality of work life.

This ambitious sociotechnical systems job re-design was initially highly successful. Its design and implementation were extremely participative, and resulted in streamlined work, increases in productivity, and increases in client satisfaction.

However, it did not survive changes to the organizational structure, because of incompatibilities between the new management style and the joint, STS process. Whether such labour-management innovations can flourish within highly hierarchical management structures is thus still an open question.

An automotive parts company: The innovation presented in this case report is the Employee Equity and Profit Participation Program of this company with particular reference to its Canadian operations. It should be kept in mind that the financial participation program is but one aspect of an overall innovative human resource management strategy which is very well-entrenched in this highly successful firm.

The company's greatest competitive advantage is the provision of management and employees with a tangible financial stake in the success of the business. Its competitiveness strategy is clearly evident in its Corporate Constitution, which beyond profit-sharing emphasizes both technological innovation and employee commitment. Employees are thus supported in seeking out and adapting to technological change and fostering a climate of innovation and commitment to the organization.

The overall human resources strategy at this company seems to value commitment to the organization and shop-acquired experience over high degrees of specialization. The overriding principle behind this strategic choice is a belief that employees should participate directly in both the successes and the orientations of the company.