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The Convergence of the Quality of Working Life and Competitiveness

A Current Swedish Literature Review

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Summary

This book investigates the relationship between the quality of working life (QWL) and competitiveness in the specific context of organisational innovations in Sweden. It proceeds by way of reviewing the literature of both a general theoretical nature on innovations, including Swedish research, and then looks more closely at the empirical evidence on the QWL-competitiveness relationship at the micro-level from the 1990s. The various studies referred to in the survey show that where innovations are motivated primarily by an improvement in QWL, such improvement can lead to improved performance. Despite the evidence that firms can reap considerable performance advantages through attempts at increasing the quality of working life through greater job enlargement, job enrichment, competence development and delegated participation, there is also considerable evidence that some firms are actually eschewing such approaches in deference to short-run pressure for immediate results on the 'bottom-line' of the profit and loss account and rapid increases in stock market valuation. Moreover, pressures for public expenditure cuts and new, market-based solutions are leading to major personnel cutbacks in the public sector. We can thus conclude that the price of competitiveness in Sweden has been an intensification in the pace and complexity of work. The challenge, therefore, is to design research activities with the aim of generating actionable knowledge for the development of sustainable work systems.

Sammanfattning

Denna bok är en studie av relationen mellan bra jobb ('quality of working life' – QWL) och konkurrenskraftiga företag som satsat på arbetsorganisatoriska innovationer. Boken innehåller en bred undersökning av både den teoretiska litteraturen kring innovationer, inklusive svensk forskning. Den innehåller också empirisk forskning kring relationen mellan QWL och konkurrenskraft på den mikro-organisatoriska nivån i Sverige från och med början av 1990-talet. Boken beskriver ett antal studier som visar att när innovationerna motiveras av QWL, då kan resultatet bli ökad konkurrenskraft. Trots att det finns bevis för att företag kan dra nytta av att öka QWL genom arbetsutvidgning, arbetsberikning, kompetens-utveckling och delegering, förbiser en del företag sådana insatser. De söker efter kortsiktiga vinster och snabbt ökande börsvärden istället. Dessutom, har saneringen av statsfinanserna och nya marknadsbaserade lösningar fört med sig stora personalnedskärningar i den offentliga sektorn. Både den privata sektorn och den offentliga har samtidigt präglats av ökad arbetstakt och mer komplicerade arbetsuppgifter. Utmaningen därmed är mot denna bakgrund att utforma forskningsinsatser för att generera aktionsorienterad kunskap med syfte att utveckla uthålliga arbetssystem.

Preface

This book investigates the relationship between the quality of working life (QWL) and competitiveness in the specific context of organisational innovations in Sweden. The text was originally written as a platform for the Swedish contribution to the Innoflex Project funded by the EU fifth framework programme (project no. PL-SERD-1999-000158). The initial work package of the project called for literature reviews by researchers from the seven participating EU countries to facilitate cross-country comparisons on 'state-of-the-art' organisational innovations in each. The empirical core of the project, undertaken subsequently to the writing of the text, comprised action research efforts facilitating transnational exchanges of experience between companies and inter-organisational learning through net-working activities. This work is not reported on here.

The book thus does not contain new empirical material. Rather, it proceeds by way of reviewing the literature of both a general theoretical nature on innovations, including Swedish research, and then looks more closely at the empirical evidence on the QWL-competitiveness relationship at the micro-level. Following a historical overview, the tensions are discussed between humanistic approaches to management and workplace design on the one hand and organisational performance on the other. The most significant definitions in the literature of the quality of working life and competition are then identified and a conceptual framework is set out to guide the literature review. The text continues by discussing the main innovative concepts that have impacted on work organisations during the 1990s and beyond. These include 'new' organisational models and ideas, changes in the control and organisation of work and technological change. This discussion is then summarised by contextualising it in the current debate on intensive and sustainable work systems.

The extent of convergence between QWL and competitiveness in Sweden is explored by evaluating the various findings from research in the 1990s. The studies referred to in the survey show that where innovations are motivated primarily by an improvement in QWL, such improvement can lead to improved performance and competitiveness thereby supporting the basic stance of those advocating a 'soft' approach to strategic human resource management. In contrast, however, 'low road' innovations that are primarily motivated by the need to improve performance and competitiveness through cost cutting and 'leanness' have a tendency to impact negatively on QWL or have no relationship. Some evidence is also discernible of innovations motivated by 'high road' concerns that seek performance improvements through increasing the innovative capacity of the work system by allowing greater autonomy and unlocking the creative potential of

employees. These suggest a positive relationship between QWL and competitiveness.

Despite the evidence that firms can reap considerable performance advantages through attempts at increasing the quality of working life through greater job enlargement, job enrichment, competence development and participation, there is also considerable evidence that some firms are actually eschewing such approaches in deference to short-run pressure for immediate results on the 'bottom-line' of the profit and loss account and rapid increases in stock market valuation. Moreover, pressures for public expenditure cuts and new, market-based solutions are leading to major personnel cutbacks in the public sector.

Both private and public sectors have therefore seen a considerable increase in the pace and complexity of work. The recent period has been characterised by a paradoxical trend whereby increased work intensity has occurred concurrently with favourable macroeconomic developments. The question, therefore, is the extent to which such positive economic developments are in fact sustainable. By way of conclusion we can state that the price of competitiveness in Sweden has been an intensification in the pace and complexity of work. The challenge, therefore, is to design research activities with the aim of generating actionable knowledge for the development of sustainable work systems.

Stockholm, August 2003

Acknowledgement

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1. Introduction and historical overview

1.1 Aims and outline

In 1993, Volvo Automobiles closed its experimental car assembly plant at Uddevalla in south-western Sweden. The plant was revolutionary in that when opening four years earlier it was arguably the most ambitious attempt at introducing mass vehicle manufacture according to sociotechnical design principles. A form of group-work based on holistic notions of work, autonomy and job closure held out the prospect of genuine improvements in the quality of working life (QWL) for the Uddevalla employees. The plant had enormous symbolic significance: for the company it represented an evolution from earlier attempts at departing from the assembly line and providing attractive work to employees in a tight labour market; for employees it epitomised union visions of 'good work'; and for work-life researchers sympathetic to sociotechnical ideas it represented the practical implementation of progressive organisational design (Sandberg, 1995). Such symbolism stretched beyond the narrow confines of the vehicle construction sector and encompassed the issue of work organisation generally.

One inference from the demise of the plant was that it demonstrated the existence of a trade-off between progressive work design that enhanced the quality of working life on the one hand and organisational performance and thereby competitiveness on the other. This reading of events was forcefully promoted by certain researchers outside Sweden who maintained, even before the plant closed, that designs such as that experimented with at Uddevalla may well be desirable in terms of QWL, but were doomed to underperform compared to other designs such as the Japanese inspired models of teamworking and lean production (Womack et al, 1990; Adler and Cole, 1993). Researchers in Sweden who question whether the plant underperformed as alleged (Berggren, 1994, 1995), however, have contested such a view.

At the heart of the debate over Uddevalla is the fundamental question of whether improvements in the quality of working life are compatible with competitiveness. This issue is also the main focus of the current book, which investigates the relationship between the quality of working life (QWL) and competitiveness in the specific context of organisational innovations in Sweden. It proceeds by way of reviewing the literature of both a general theoretical nature on innovations, including Swedish research, and then looks more closely at the empirical evidence on the QWL-competitiveness relationship. Before proceeding with these tasks, however, a short background of the key events of the latter half of

the twentieth century is included to put the various change initiatives into their historical context.

An earlier version of the text was drafted as a contribution to the Innoflex Project funded by the EU fifth framework programme (project no. PL-SERD-1999-000158) wherein it was intended to gather contributions by researchers from the seven EU countries participating in the project to facilitate cross-country comparisons on 'state-of-the-art' organisational innovations in each. The Project results from the 1997 Green Paper of the EU (COM 97: 128) which was founded on the belief that forms of work organisation that promote humanistic values may contribute positively to firm performance and thereby enhance competitive advantage. New initiatives at the workplace developed in such a spirit would also develop the skills and thereby employability of individuals at a time of structural upheaval and enduring unemployment.

Something akin to a stakeholder approach (Donaldson and Preston, 1995; Hutton, 1996) was being advocated in the Green Paper where, in the new business environment, a balance between flexibility and security was needed. Above all, the initiative advocated a dovetailing of the well being and developmental potential of employees with organisational productivity and competitiveness. The ideas contained in the Green Paper, however, never progressed towards legislation, foundering on employer scepticism about state involvement in such matters. Leaving aside the rights and wrongs of Europe's employers asserting managerial prerogative on work organisation, it would be incorrect to dismiss the ideas of the Green Paper as a dead letter. Within the research community, at least, attempts have been made to develop the discourse on work organisation laid out in the Green Paper, and this book is intended as just such a contribution.

The objectives of the original funding proposal for Innoflex included an examination of the empirical and theoretical evidence for models of work organisation which lead to convergence between enhanced competitiveness and the improved quality of working and individual life. This book, based on findings reported in Swedish research, is intended as a contribution to such objectives. Following the historical overview referred to above, it proceeds by means of a general discussion on the tensions between humanistic approaches to management and workplace design on the one hand and organisational performance on the other. In some cases these are seen as complementary whereas in others they are seen as in conflict. The text then continues by identifying the most significant definitions in the literature of the quality of working life and competition and setting out the conceptual framework adopted to guide the literature review in the book. An analysis is then undertaken of the various concepts of innovation in the literature that have been impacting generally on contemporary work organisations. The next section of the book briefly identifies the main drivers of change in the

Swedish context and summarises the empirical research conducted in Sweden, largely at the micro level, on innovations involving changes in QWL and changes in performance that could plausibly be said to enhance competitive advantage.

The concept of the quality of working life is not new in Swedish research. Some twenty years ago Stjernberg and Philips (1984) embarked on a similar exercise to that undertaken in this book. Their work, case study based, sought to review QWL developments arising from organisational innovations launched in the 1970s. They considered what remained of the 'alternative' forms of work organisation by the mid 1980s in terms of stabilisation, progression or regression. They also sought to examine the extent (and how) the experiences (good and bad) and learning from the cases taken up had diffused within the companies concerned. The current study can be seen as complementary to Stjernberg and Philips' work. However, it differs in two key respects. First, it operationalises QWL in sufficiently broad ways for a wider spectrum of literature to be encompassed rather than a limited number of cases, and, secondly, a more explicit emphasis is made on the convergence of QWL with performance.

Stakeholder approaches to organisational analysis such as that undertaken in this book generally entail a positioning of the analyst in terms of values. Choices can be made as to whether the study is undertaken through the privileging of a particular stakeholder perspective over others. The aim in the current book is, however, to approach the analysis from a position of stakeholder parity. From a research perspective, however, such a view does not preclude a view on organisational politics whereby there are nevertheless inherent power asymmetries between stakeholders in a context of capitalist relations of production (Fox, 1974).

1.2 A Swedish time line, 1938-2000

This section attempts to provide a brief historical account of organisational and workplace innovations in order to contextualise the literature review. It shows that both sides of industry – the employers and the trade unions – have sought proactively to engage in issues of organisational development. Starting out from the 'historical compromise' reached between the parties at Saltsjöbaden in 1938, the time line shows a varied history whereby certain initiatives have been sought by either side unilaterally, others have been pursued on a joint basis and in certain instances the support of the state has been enlisted despite the espoused wishes of both sides in 1938 for the state not to interfere in corporate life.

1.2.1 Saltsjöbaden and after

Following a decade of intense industrial conflict, a harmonious if tough spirit emerged from the Saltsjöbaden agreement between the blue-collar union confederation (LO) and the employers (SAF) in 1938. This established two principles. First, both sides accepted the non-desirability of direct government intervention in collective bargaining, and second, the LO accepted Clause 32 of the SAF's statutes that management had 'a right to manage' (Mahon, 1991: 302; Thompson and Sederblad, 1994: 244). At Saltsjöbaden in 1938, the employers, faced with the prospect of protracted social-democratic rule, became less sanguine about the use of their principle weapon, the mass lockout. In this situation, the employers were persuaded by government pressure to accept the commitment of the unions to 'social responsibility' and a capitalistic economy (Kjellberg, 1992: 99). The industrial and political wings of the labour movement were sufficiently close for organised labour to deliver its side of the bargain.

The years after 1938 saw a centralisation of union activity to curb the exercise of shop floor power: the LO in effect took control of the right to strike in 1941. Moreover, a lack of internal cohesion was evident on the employers' side (Kjellberg, 1992: 96). These developments led to the evolution of a centralised collective bargaining system in 1956 and union pursuit of the solidaristic wage policy that sought to ensure similar rewards for similar jobs within sectors regardless of firm performance (Olsen, 1996: 3).

The new arrangements involved a series of agreements between employers and unions that, on being signed, became legally binding for a fixed time period. In the case of pay settlements this was normally one or three years. A number of representatives from both the LO and the SAF discussed wage claims in relation to what the economy could afford, and a further committee of six, with three representatives from both sides thrashed out the details of the collective agreement. Following this, meetings were held with representatives at the sector levels, and following acceptance, all documents were signed simultaneously. Subsequently, some small elements of wage drift were accepted as local bargaining units agreed extra supplements. This 'historic compromise' thus came to be characterised by centralisation, co-ordination and self-regulation. It was agreed that governments would bring about economic growth so as to guarantee full employment, and that organised labour would not challenge the capitalist nature of production (Kjellberg, 1992: 89). Traditionally, therefore, the representatives of capital and labour in Sweden have shared a consensus that they themselves are best able to regulate their mutual activities without recourse to legislation. Such a spirit also generated a series of joint initiatives in the development of work organisation.

1.2.2 The establishment of the Swedish model

The explicit setting of the collective bargaining process in a political and macroeconomic context, and the instruments for achieving this, were sharpened in the early 1950s (Meidner, 1986). In a fundamental report published as early as 1951, the LO warmly embraced the logic of new technologies and rationalisation. Here, union economists accepted the argument of the employers that flexibility was required to facilitate structural adjustment. Rationalisation had to be accepted by the labour movement, but not without measures to retain high levels of employment. In practice this meant an active and well-resourced manpower policy which promoted geographical and occupational mobility enabling expanding industries to take on workers from declining regions and industries (Kjellberg, 1992: 96-97). Labour market policy, according to Gösta Rehn and Rudolph Meidner, the authors of the model:

> '...should no longer be simply a matter of establishing labour exchanges ... it should be developed into a policy instrument: part of an integrated model of economic, pay and labour market policy' (quoted in Ahlen, 1989: 85).

The 1950s and 1960s were years of considerable success for LO negotiators in realising their goals in wage negotiations (Jones, 1987: 68). However, this success was not echoed in other items on the collective bargaining agenda, namely, working conditions. This prompted a series of joint initiatives on workplace development drawing on the ideas of the then influential sociotechnical systems theory. Moreover, the period 1973-1979 saw a series of experimental projects led by the employers' confederation, SAF, at improving working conditions in manufacturing industry. These projects, conducted under the rubric of 'New Factories', explicitly started out from a critique of the assembly line and proposed experiments with group-based working involving worker participation, job redesign and new forms of supervision (SAF, 1975).

SAF's 'New Factories' initiative drew its inspiration from the sociotechnical ideas concurrently being developed in Norway by aiming to redesign jobs around the idea of semi-autonomous group work (Emery and Thorsrud, 1969). The view held by the employers at the beginning of the 1970s was that given the benefits to employees of such changes, the unions would be keen to participate in joint activity. Such hopes were dashed, however. Despite the sympathetic attitudes of the unions towards job restructuring expressed in the 1950s (see above), an increasingly militant stance saw a change of tack two decades later as the LO unions, instead, sought to exploit the apparent political hegemony of the Social

Democratic Party (SAP) in government by seeking a legislative strategy for making advances on various aspects of industrial democracy.

At the workplace, despite the attempts of SAF at moving away from Taylorism, rising discontent amongst workers by the end of the 1960s culminated in a series of wildcat strikes. From the union perspective, employer resistance to union demands in areas other than wages thus prompted a rethink by the unions as to whether the system of self-regulation through collective bargaining was adequate. The consequent political strategy of pursuing an extensive programme of labour legislation included laws on worker directors on company boards (1973), job security (1974, revised in 1982), the status of union workplace representatives (1974) and environmental improvements (1975) (Jones, 1987: 70; Kjellberg, 1992: 99).

A significamt programme set up in 1969 was the Delegation for Administrative Democracy (FÖDD). This was initiated by the SAP and channelled through the government (Department of Industry) as part of an active industrial policy. Its aim was to analyse the issue of corporate democracy in state-owned industries, particularly the extension of participation in decisions affecting one's living and work environments. The unions in particular, through LO, initially became a central actor on this programme. The programme, however, with its emphasis on participation and influence rather than self-governing groups was less weakly anchored with the employers. SAF's technical department sought to evaluate the programme through investigating the convergence of productivity and job satisfaction rather than convergence between productivity and influence (Bäckström, 1999).

In 1977 the Swedish parliament enacted the law on co-determination, the practical implementation of which was undertaken subsequently on a joint basis through company-level agreements, although this was not without initial opposition from the employers. This included the practice of employee representatives sitting on company boards, an expansion of negotiation rights to include business decisions on major issues as well as new rights on information disclosure. This had been preceded by the setting up of the work of URAF, the Swedish Development Council Research Commission that aimed, through research, to promote co-operation between management and employees. It included union and employer participation and produced a number of studies on co-determination with a strongly sociotechnical flavour seeking win-win outcomes.

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1.2.3 Breakdown: from collaboration to unilateralism?

Despite the co-operation evident in the URAF activities as well as parallel work on the robotisation of factories, it was clear towards the end of the 1970s that the consensus established from Saltsjöbaden onwards had all but broken down. Levels of trust between the parties evaporated as the employers were seen to be dragging their feet on making bargaining concessions and the unions were seen to be walking away from Saltsjöbaden by unilaterally seeking state intervention in a wide range of areas.

In the 1980s centralised bargaining came under increasing pressure and eventually ended (Lash and Urry, 1987: 236ff; Kjellberg, 1992). A change of leadership in SAF, bitter experiences of conflict in the 1980 wage negotiations and an emergent sense of mutual distrust ushered in a collapse in the hitherto robust consensus. SAF's unilateral withdrawal from central bargaining can plausibly be seen as the definitive trigger behind the demise of the Swedish Model. However, another reading of the events of the period is that SAF were simply responding to the unilateral adoption of an offensive legislative strategy by the unions throughout the 1970s. If the latter view is taken, this puts the responsibility for the collapse of the model squarely at the door of the unions rather than the employers (see Johansson and Magnusson, 1998).

As the 1980s progressed, an ideological shift to neo-liberalism in the SAF leadership was detected (Lash, 1985; Pestoff, 1995). The demands of international competitiveness required restructuring, higher productivity and payments systems whereby rewards were determined by prevailing market conditions. In the sphere of work organisation, the decade also saw employer led innovations drawing on ideas infused from Japan and the US in areas such as total quality management, continuous improvement and organisational culture.

By the mid-1980s, pressure for innovation on work organisation was evident in union quarters. In 1983-84 the Metalworkers Union National Executive set up a programme committee 'on the value and terms of industrial work'. The work of this committee was sub-divided into a number of separate working groups each dealing with different topics: wage and distribution policy; employment and social security; research, the working environment and work organisation; training information and organisation and information; and international issues. The findings of these groups were combined into a single report to the 1985 Congress, '*Det goda arbetet*', referred to in English as 'rewarding work' or 'good work', the term used here. The report asserted that:

> Change today is occurring more rapidly than before. This is the case both in the
> outside world and here at home in our companies. Our organisation must adapt

itself to these changes if it is to work effectively with the problems of the membership (Metall, 1985: 210).

At the centre of such perceived changes were new conditions affecting firm competitiveness, both domestically and internationally. The 1980s were seen as being marked by a wide-ranging reorganisation in Swedish industry. Large-scale production was being replaced by flexibility and customer adaptation; and former corporate strategies of maximum utilisation of production capacities were being replaced by a more customer-focused approach based on segmentation and niche marketing. Organisational forms were becoming more decentralised and results-based rather than centralised and function-based. The Fordist production line was being increasingly superseded by automation, smaller work groups and quality circles (Metall, 1985: 29).

The new strategy elaborated was therefore to 'develop work' by promoting group-based work organisation, integral job training and the encouragement of job enlargement through payments systems (Kjellberg, 1992: 137). The challenge, nevertheless, was to devise a means by which these were to be achieved whilst remaining true to the spirit of the 'solidaristic wages' policy, which remained sacrosanct. Nevertheless, the newly emerging strategy marked a clear departure in that a new emphasis was being placed on production issues in the context of the transition to what some writers came to describe as post-Fordism (Lash and Urry, 1987; Mahon, 1991). Union goals were evolving to include work of a progressively developing nature in healthy, risk-free workplaces as well as the traditional notions of distributive justice.

A new report on 'solidaristic work' was presented to the 1989 Congress, '*Solidarisk arbetspolitik för det goda arbetet*' (Metall, 1989). This report sought to develop the 'good work' policy making more explicit the interconnectedness of the various components of the emergent strategy. Through continuous training and a gradual expansion of tasks, individual workers would benefit from enlarged job content, new rewards systems and enhanced employability. The meaning of solidarity was thus extended to encompass the equal right to skills upgrading, multi-skilling and solidaristic team working as integral aspects of 'good work'. A similar policy was adopted by the LO Congress in 1991 as 'developmental work'. Similar moves towards a proactive union stance on workplace development were evident amongst the white-collar unions (Kjellberg, 1992).

Despite the emergence of unilateral innovations from both sides in the 1980s, the spirit of collaboration nevertheless continued in certain guises. As well as the implementation of the co-determination legislation in the form of local agreements already mentioned, both sides took part in a series of programmes supported by the state with the purpose of developing the organisation of work. These included the

Programme for Development financed by the Swedish Work Environment Fund between 1982 and 1988 that included projects in firms on new technology, work organisation and the working environment. The main aim of this programme was to counter the increasing trend towards industrial injuries and psychic as well physical ill health attributable to poor work environments. The activities of the programme included research and education with a particular emphasis on identifying and diffusing examples of good practice. The work of the programme was anchored in the newly signed Development Agreements (UVA), that formally codified the Co-determination Act at company level and both sides of industry participated.

The next major initiative, the LOM Programme between 1985 and 1990, again funded by the Swedish Work Environment Fund, sought to promote projects at the sectoral and workplace levels on the interconnected themes of leadership, organisation and co-determination. This also sought closer working relations between two research centres, PA-rådet and Arbetslivscentrum (the Swedish Centre for Working Life) that were seen to be too close to employer and union interests respectively. This programme, however, was mainly anchored with LO rather than the employers. The programme covered a period in which the theme of leadership was prominent and influential in much of the business literature, particularly in the context of managing organisational culture (Peters and Waterman, 1982). Nevertheless, little involvement of managers was discernible and little activity was taken in larger firms. The key actors driving the programme were researchers at The Swedish Centre for Working Life who used action research methodologies as a means for pursuing theoretically led change in work organisation.

1.2.4 The 1990s: towards a process ideology

Towards the end of the 1980s the government set up three official investigations on work organisation: the Work Environment Commission (1988), the Productivity Delegation (1989), and the Investigation on Competence (1990). The Work Environment Commission sought to review regulations on the work environment, the Productivity Delegation sought to analyse the perceived sluggish productivity developments in Swedish industry with a view to identifying key factors that promoted its growth (SOU 1991: 82), and the Investigation on Competence sought to investigate training issues associated with recent changes in work organisation. According to Bäckström (1999: 142), the Productivity Delegation and the Investigation on Competence examined in effect the same thing but from different ideological standpoints: from a rationalisation ideology and a humanisation

ideology respectively. Each of these three investigations involved both employer and union participation.

The 1990s saw a new trend in business doctrines that could be loosely summarised by the notion of higher productivity through teamworking in continuous flow production. Central to such doctrines was the belief that production should be made to the precise quantity and quality specifications laid down by customers rather than in large batches, standard format and for stock. Conformity to customer requirements should ideally work backwards through the entire supply chain as a means of eliminating unnecessary waste, reducing the amount of capital tied up in stock and producing 'just in time'. (Womack et al, 1990). Organisational innovations based on such a doctrine saw widespread diffusion into Swedish workplaces in the 1990s (Stymne, 1996; Björkman, 1997; Bäckström, 1999; see also Collins, 1998 for a more general discussion). Such efforts are frequently reduced to three letter abbreviations or acronyms – TLAs – such as BPR, TQM, CRM, TBM and so on. Invariably they are guided by top-down ideals and promoted unilaterally by management without union involvement (see chapter 3 for a detailed discussion).

Another employer-led initiative of some significance in the early 1990s was the attempt of some firms to promote work reorganisation through the 'co-worker' concept at the company level whereby the traditional dividing line between blue- and white-collar work would be abolished (Mahon, 1994). This was a particular element of the T50 Project at the engineering multinational, ABB. The co-worker idea, however, was met with considerable resistance from the unions, largely on the basis that as proposed it presaged a shift to company level bargaining.

A further feature characterising the 1990s was downsizing. The logic of downsizing is also connected with process thinking, in particular, the doctrine of leanness. Advocates of lean production not only call for just-in-time logistics, they also call for all activities in the value chain to be eliminated if they don't add value. Taken to extremes, such a view can mean widespread job cuts and higher levels of work intensity for those who remain and are deemed to 'add value'. This entails a considerable step-change compared with the usual rounds of employment reductions during an economic downturn. Moves to downsize, invariably taken unilaterally by employers, had a profound impact on Swedish working life in the 1990s and will be dealt with in more detail later in the book.

Process ideas were influential in the BIV ('Best in the World') programme launched by the Royal Swedish Academy of Engineering Sciences (IVA), a professional body of engineers and lasting from 1990-1994. This sought to study and promote 'a modern work organisation that led to increased productivity, better working conditions, usage of skills and sharpened competition' (quoted in Bäckström, 1999: 145). The ideas of continuous flow production were seen as

both a means of boosting flagging productivity and departing from Taylorism. The main anchorage of BIV was with top management in manufacturing industry. However, links with SAF were weak, and links with the unions were non-existent.

Promoting and diffusing the ideas associated with the 'learning organisation' was the primary motive behind a further programme supported by the Swedish Work Environment Fund between 1990 and 1995. This initiative, an inter-disciplinary research programme known as the 'Programme for Learning Organisations', was also backed by unions and employer organisations and included development projects at around 40 organisations in both private and public sectors (Docherty, 1996). The programme was research-led and had fairly weak anchorage in both union and employer organisations. It was informed by a humanistic view on organisational learning consistent with sociotechnical systems thinking and aimed at building on some of the lessons learned from the LOM Programme.

A much larger effort, covering over 25,000 workplaces, ran approximately in parallel with the Programme for Learning Organisations. This was the work supported by the Working Life Fund (see section 4.2.3). This drew on the conclusions arrived at by the Productivity Delegation. It sought initially to address the issues of the physical work environment and rehabilitation. Its focus, however, soon extended to encompass productivity and work organisation issues by supporting change initiatives in firms that sought to increase productivity by breaking from Taylorism and focusing on continuous flow ideas. According to Bäckström (1999), the work of the fund was balanced ideologically as both rationalisation and humanistic ideals characterised the programme's activities. Both SAF and LO had weak links to the programme; at the workplace local union activists engaged themselves with the change efforts but managers were less enthusiastic.

1.2.5 Summary

In conclusion, it can be seen that in the latter half of the twentieth century Sweden saw a diverse range of organisational initiatives. These were promoted at various times by the employers, at others by organised labour and on some occasions the parties working jointly in the pursuit of common interests. On other occasions the government has been responsible for initiatives. A diagrammatic summary of these is set out in table 1. On the other hand, not all innovations in the organisation of work or the doctrines that inform them can be considered as resulting in convergence or even in aiming to. The 1990s in particular have seen a plethora of such innovations often based on ideas imported from overseas, in particular the

business and management discourses originating in the United States (Stymne, 1996).

Employer initiatives are largely motivated by performance factors designed to attain, maintain or improve competitiveness whereas the unions have sought to develop workplaces to improve the working environment and the quality of working life. However, there is evidence that the initiatives from both sides have increasingly recognised the interests and ambitions of the other party and that some degree of convergence is a necessary condition of advance. The URAF Programme, the negotiations of the procedural UVA agreement, the LOM Programme, and the Programme for Learning Organisations can all be seen as being based on notions of stakeholder convergence or 'win-win' outcomes even if such convergence has not always been matched by a similar degree of convergence in stakeholder commitment.

Table 1: A Swedish time line, 1938-2000: a summary of major initiatives in organisational and workplace innovation

Dates and critical events	Employer initiatives	Joint initiatives	Union initiatives	Government initiatives
1932-1938: labour market conflict				
1938		Saltsjöbaden agreement		
1951			LO report on structural change	
1956			Solidaristic wage policy	
1960 -1970s		Sociotechnical experimentation		
				Delegation for Administrative Democracy (FÖDD); Swedish Development Council Research Commission (URAF)
1970				
1970s: deteriorating election results for the SAP; greater state intervention in labour market	SAF 'New Factories' programme		Offensive legislative strategy	
1977-1980s		Co-determination ←		Labour market legislation
1980: General strike and SAF withdrawal from centralised bargaining	TQM; continuous improvement programmes; organisational culture	Development programme	'Good Work'	
1985		Development Agreement (UVA)		
1980s				
1989	SAF 'Good Jobs' project	LOM programme	'Solidaristic Work': employability, new rewards systems	
				Work Environment Commission Productivity delegation Investigation on Competence
1990: economic crisis and abandonment of full employment		Swedish Work Environment Fund		
1990s	Co-worker concept Lean production Downsizing	Working Life Fund Programme on learning organisations		
1992: bank crisis				
			RUD Project	
2000				

1.3 QWL and competitiveness – a brief history

Debates on the question of convergence in stakeholder interests are not new: they repeatedly surfaced in the organisation and management literature throughout the 20th century in Sweden and elsewhere albeit in various guises and appropriating different vocabularies. It is to a brief genealogical account of the convergence discourse in the literature that the chapter will now turn.

1.3.1 The Human Relations Movement

In both classical and neo-classical economic theory, labour is seen as an input or factor of production the cost of which should ideally be kept as low as possible if firm profitability is to be optimised. Such a view, common to both Marx and Taylor, was called into question by the Human Relations School in the 1930s. Workers, rather than being seen as being driven by rational, individualistic and materialistic motives, were seen, instead, as having needs for social anchorage and belonging. The workplace was seen as a social system and factors such as group norms, communications and supervisory skills were highlighted as the core concerns of workplace behavioural description and prescription. Followers of the school such as Elton Mayo and Roethlisberger and Dickson saw the role of management as brokers of social harmony wherein new forms of social anchorage at the workplace could compensate for wider social disorganisation.

Disenchantment with the harsher aspects of Taylorism among workers and, it should be said, in certain managerial echelons (Thompson and McHugh, 1995: 44ff), provided fertile territory for a novel series of social science interventions that drew on industrial psychology. This saw a clear break from the machine metaphor of organisation that characterised scientific management (Morgan, 1997). Above all, the Human Relations Movement sought to address what its adherents saw as the dehumanisation of the labour process. Its central message was that by paying due heed to the socio-psychological well-being of its employees rather than a narrow Tayloristic focus on controls and financial incentives, a firm would reap benefits in terms of performance. In game theory terms the school asserted that where managers appreciated the humanistic needs of their workforces, workplace relations could be conceived in positive-sum terms, that is, improvements in human well-being contributed to firm performance rather than being a mere overhead that undermined profitability.

The precise relationship between human well being and performance has been grappled with by management, unions and academics since the birth of the Human Relations Movement and beyond, indeed such a concern was evident in studies of UK munitions factories in the first world war. More recently, adherents of

sociotechnical systems theories (STS) and the quality of working life movement in the 1960s and 1970s are both explicit in espousing the contributory role of human resources in firm performance and thereby competitive advantage. In the words of Knights and Willmott (2000: 7):

> In post-Human Relations prescriptions for change, the iron fist of intensification and job insecurity is softened as well as strengthened by the velvet rhetoric of 'self-actualization' and the opportunity to work for meaning as well as money.

1.3.2 Strategic human resource management

In the 1980s and 1990s the emergence of strategic human resource management continued the theme of seeing people as a key determinant of competitive advantage and thereby HRM has recently taken centre stage in strategy considerations. Such an approach 'involves designing and implementing a set of internally consistent policies and practices that ensure a firm's human capital (employees' collective knowledge, skills and abilities) contributes to the achievement of its business objectives' (Huselid et al, 1997: 171). Moreover, an organisation's HRM policies and practices 'must fit with its strategy in its competitive environment and with the immediate business conditions that it faces' (Beer et al, 1984: 25, quoted in Bratton and Gold, 1999: 47).

In practice, the alignment of HRM to strategy can be of two types each of which suggesting different types of employee management and behavioural conformity (Bratton and Gold, 1999: 52). Firstly, strategies may be formulated and implemented according to analyses of the external environment. Here, in what is termed in the literature the 'hard' variant of HRM (Legge, 1995), competitive advantage is sought through low cost or differentiation (Porter, 1980). A 'rational' approach to managing people is adopted whereby people are viewed as any other economic factor, that is, as a cost that has to be controlled. A unitary frame of reference is assumed 'where there is no place in a company's HR strategy for those who threaten the continuity of the organisation by attacking its basic aims' (Bramham, 1989: 118). Secondly, strategies may be formulated and implemented according to analyses of the internal environment, notably the skills and capabilities of its workforce or core competencies (Prahalad and Hamel, 1990). Here the word 'human' is foregrounded over the word 'resource' by advocating investment in training and development and the adoption of 'commitment' strategies as a means of ensuring 'sustainable' competitive advantages (Pfeffer, 1994; Legge, 1995).

Where labour is a cost to be minimised as in 'hard' versions of HRM, it is difficult to see how there might be a positive relationship between employee well

being or QWL and competitiveness. On the other hand, 'soft' variants can be seen as consistent with and complementary to the resource-based theory of the firm that suggests that a firm's pool of human capital can be leveraged to provide a source of competitive advantage (Barney, 1991; Grant, 1991). By seeing people as assets to be invested in (and nurtured) rather than simply as resources to be consumed (and preferably minimised), soft HRM variants can plausibly, at least in theory, be argued as being consistent with improvements in QWL. Empirically, a linkage has been demonstrated between organisational performance and various features of 'soft' HRM such as teamworking, flexibility, quality improvements and empowerment (see e.g. Huselid et al, 1997).

1.3.3 From rhetoric to reality

It would, however, be a mistake to state that it is overwhelmingly accepted that employee well being and firm performance are positively related. Although some progress has been made in developing concepts and defining organisational approaches that attempt to unite these objectives, many organisations continue to be managed on the assumption that there is a fundamental conflict between well being and performance in defiance of a considerable amount of empirical evidence (Levine, 1995; Pfeffer, 1998). Indeed, it could be argued that the 1990s have been characterised by an intensification of pressure in Swedish firms to prioritise cost cutting and the downsizing of their activities in what Bäckström (1999) has termed a 'rationalisation ideology' in work organisations. Such an ideology has superseded that of 'humanisation' that characterised the 1980s and 'democratisation' that characterised the 1970s.

Such a view finds echoes in the work undertaken by Cappelli (1997) in the United States who also saw the nature of change in work organisations as being distinguishable by different epochs albeit stretching back to the turn of the century. Firms in the early decades generally sought to expand their operations through horizontal control over other firms, that is, through the monopolisation of markets. During the 1920s firms pursued strategies of vertical integration through combining elements of supply and distribution chains. In the 1960s a third wave could be identified whereby firms elected to create less vulnerability during recessions through economies of scale through diversification, and the final two decades saw moves in the opposite direction whereby firms have sought to dispose of peripheral assets, focus on core competencies and flexibility thereby becoming 'leaner and meaner'. In other words there appear to be temporal differences in what are considered to be appropriate strategic choices in striving for competitive advantage. Moreover, these choices will have a differential impact on the quality of working life.

The current study focuses on the relationship between QWL and competitiveness in Sweden. In the review of empirical studies contained in section 4.2 of the book there is considerable support for the existence of a positive relationship between QWL and various performance measures that we might reasonably expect to enhance competitiveness. Some researchers even assert that human factors are increasingly seen by Swedish manufacturing industry as having a quicker impact than technology in enhancing performance (Hörte and Lindberg, 1994: 249).

Nevertheless, researchers have detected some discrepancy between organisational practice and with what research findings state in relation to the positive contribution that QWL initiatives have on performance. In many cases, short-term financial objectives, productivity increases and downsizing are being pursued at the expense of human considerations (Pfeffer, 1998; Sverke et al, 2000, see also Springer, 1999, for evidence of similar developments in Germany). Indeed, Smith and Thompson (1998: 554) go so far as to state that 'mainstream business opinion now increasingly regards work intensification as the inevitable price of contemporary competitiveness'. However, before proceeding to investigate Swedish research in the area to date, it is pertinent to clarify the two central concepts used in the study, namely the quality of working life and competitiveness.
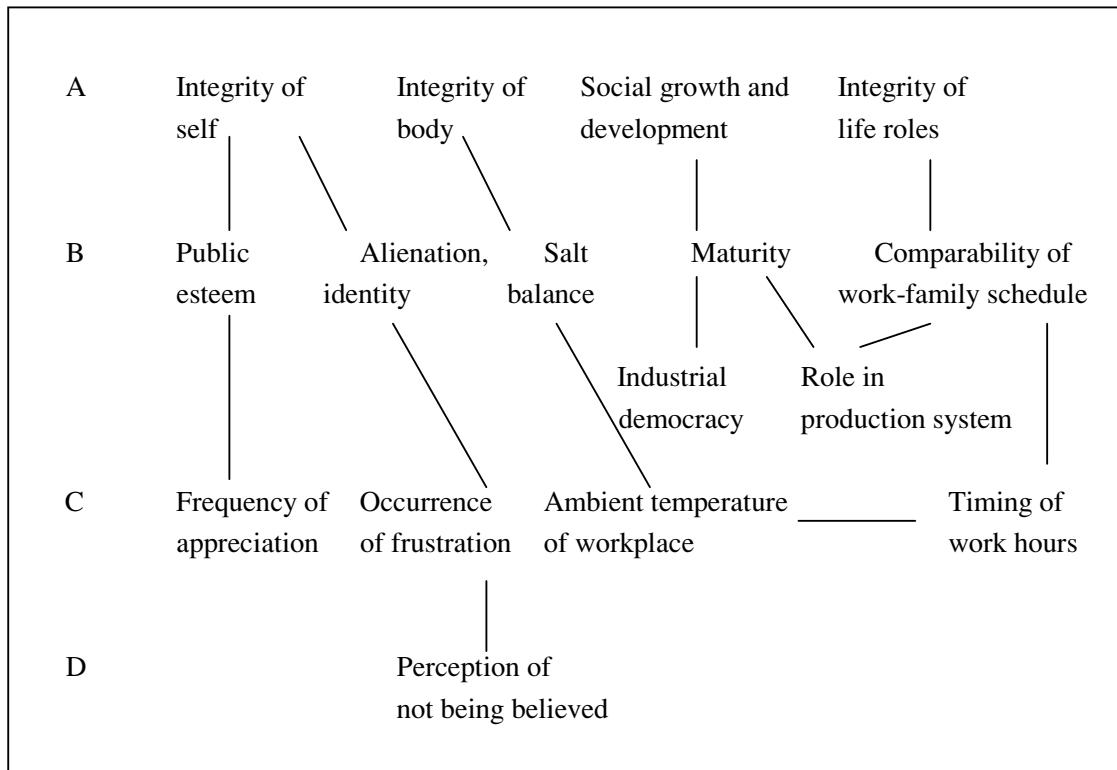
2. Conceptual definitions

This chapter aims to discuss briefly some of the main literatures covering the two main concepts at the core of the book, namely QWL and competitiveness. Following this, the usage of each concept in the study is specified and a process model is deployed to arrive at a conceptual framework that guides the remaining structure of the book.

2.1 The quality of working life

The concept of the 'quality of working life' is imprecise and thus problematic to operationalise. Historically, it can be traced back to the quality of working life movement that largely consisted of a number of industrial psychologists in response to a perceived disenchantment with the organisation of work in the late 1960s and early 1970s (Walton, 1973; Stjernberg, 1977; Littler and Salaman, 1984). A number of reports published in both the US and UK sought to develop models of job redesign that aimed to improve utilisation of worker initiative and reduce job dissatisfaction thereby offering an alternative to the technocratic rigidity and inflexibility of Taylorism. QWL has also been associated with organisational changes aimed at increasing the levels of job enlargement (greater horizontal task flexibility) and job enrichment (greater vertical task flexibility including the taking on of new responsibilities including those formerly undertaken by supervisory or managerial personnel). Crucially, the idea is that of attaining higher levels of participation and thereby motivation by improving the attractiveness of the work itself rather than through improving the terms and conditions of work (Hertzberg et al, 1959: 52).

   Early work on QWL was strongly rooted in psychology with a focus on the individual. The historical context for this has been identified as the breakdown of the illusion of industrial consensus identified as occurring from the 1960s onwards (Thompson, 1983). The term 'quality of working life' thus saw its birth at an International Conference in New York in 1972 that sought to share knowledge and initiate a coherent theory and practice on how to create the conditions for a 'humane working life' (Ryan, 1995: 9). This conference set up a task force to develop a model based on four dimensions of integrity: integrity of body, social growth and development, integrity of self and integrity of life roles. From this, Davis and Cherns (1975) elaborated a model of the QWL dimensions for the individual as set out in figure 1.

Figure 1: QWL dimensions for the individual (source: Davis and Cherns, 1975).

A	Integrity of self	Integrity of body	Social growth and development	Integrity of life roles
B	Public esteem	Alienation, identity Salt balance	Maturity	Comparability of work-family schedule
			Industrial democracy Role in production system	
C	Frequency of appreciation	Occurrence of frustration Ambient temperature of workplace		Timing of work hours
D		Perception of not being believed		

Quality of life phenomena explored in early studies included job satisfaction (measured by employee turnover, absenteeism or attitude surveys), organisational climate and the learning of new tasks (Stjernberg, 1977: 62). From 57 field study experiments conducted between 1959 and 1974 it was concluded by Srivastva et al (1975, quoted in Stjernberg, 1977: 64) that:

> The consistency of the findings from the innovative work experiments suggests that the studies were relatively effective in producing positive outcomes [on job satisfaction, withdrawal and productivity] (p 141).

Moreover:

> Examinations of the action levers across all of the change orientations suggests, however, that increases in autonomy, task variety and feedback are important factors in producing positive outcomes (p 157).

The concept has been seen as being closely related to sociotechnical systems views of organisational design (Davis and Trist, 1974), yet most Scandinavian versions of sociotechnical theory go further than job enrichment by emphasising

the need for good job design to encompass worker participation and influence in developmental change processes in the organisation. Some authors also argue that QWL has to be linked to the wider notion of 'quality of life' thereby covering factors such as general life satisfaction, leisure and well being beyond the workplace (Stjernberg, 1977).

Littler and Salaman (1984: 80-81) have identified five basic principles of 'good job design'. These are:

- The principle of closure - the scope of the job should include all the tasks necessary to complete a product or process thus enabling workers to derive a sense of achievement;
- The incorporation of control and monitoring of tasks including quality;
- Task variety or job enlargement and thus rotation;
- Self-regulation of the pace of work and choices over work sequence and methods;
- A job structure that allows for worker interaction and co-operation.

However, although pressure has increasingly mounted on many organisations since the 1970s to move away from traditional Tayloristic job designs, particularly in response to Japanese competition in manufacturing, such changes have not necessarily encompassed these design principles.

A further categorisation of QWL is that of Walton (1973) who saw the issue in somewhat broader terms than job (re)design. Here a wider systems perspective is drawn upon although echoes of the ideas of the Human Relations Movement and the sociotechnical school are clearly present. For Walton, improvements in the quality of working life needed to focus on the following factors:

- A just rewards system with minimum guarantees;
- A safe and healthy physical and psychosocial work environment;
- Job design based on the needs of both workers and their organisations;
- Employment security with prospects for internal career advance;
- A working climate with a positive social atmosphere and social integration;
- Clearly articulated individual rights;
- Worker participation in decision making;
- Due limits to the encroachment of one's working life on one's life beyond the workplace;
- Social relevance - an instilling of employee conviction that the organisation would act with social responsibility and honesty in its dealings externally.

Organisations adopting such an integrated approach to workplace design, it has been argued, lay the foundations for achieving higher performance outcomes compared to designs where QWL aspects are disregarded (Lawler et al, 1995).

Although there is no agreed definition of QWL, there does nevertheless appear to be a broad consensus in the literature that it involves a focus on work design and

all aspects of working life that might conceivably be relevant to worker satisfaction and motivation (Ryan, 1995). A key element here is that of alternative strategies for designing workplaces contrasting with those that sought to rationalise work through the principles of Taylorism. A central concern of the QWL movement has thus been that of replacing jobs based on single, repetitive tasks, often on assembly lines, with more 'humanised' forms of work having a less clear-cut separation of conception from execution. Such alternatives, it is argued, allow for jobs that are less alienating, allow for greater job satisfaction, more meaningful work and greater influence on workplace decisions. In turn, such developments generate higher-level organisational performance, less sickness absence and reduced employee turnover.

As noted by Ryan (ibid: 10), by the 1980s the QWL concept had become the 'dominant generic term for a loosely connected set of concerns in areas such as work organisation, working conditions, the working environment and shop-floor participation'. Similar concepts could be discerned in Germany (translated as the 'humanisation of work'), France ('improvement of working conditions'), and the Eastern European countries ('workers' protection'). However, different researchers have sought to emphasise different things in their use of the term. Some, for example, have focused on the extent to which the work environment motivates work performance, some have been interested in the safeguarding of physical and psychological well-being, whereas others have studied QWL as a concept for developing means to reduce worker alienation, both in the labour process and in society more generally. It can be seen that by the mid 1980s, therefore, the concept had moved beyond its origins in psychology and an emphasis on the individual by encompassing a more sociological approach involving group and organisational perspectives.

The ideas encapsulated by QWL can also be traced in related literatures on working life that deal with similar themes, but without using the QWL terminology. For example, Antonowsky (1987) has focused specifically on the health aspects of work by asking why people were so often fit at work rather than unfit. His research showed that fit employees were associated with jobs where they experienced a sense of context in their duties that were related to three main factors: comprehensibility, manageability and meaningfulness. Focusing similarly on health themes, Maslich and Leiter (1997) have argued that a significant source of stress and even burnout can arise when a conflict of values exists between the main stakeholders of an organisation, namely employees, owners and customers (clients). One precondition of a healthy workplace, therefore, is argued as being a shared value document as well as a multiple stakeholder approach to organisational control.

The case for stakeholder convergence with is also a theme of the emergent discourse on sustainability in organisations (Docherty et al, 2002a). Sustainable work systems are counterposed to intensive work systems. The latter are those that consume resources generated in the social system of the work environment. The interaction between the individual and work has a negative balance between consumption and regeneration and is characterised by exhausted work motivation, stress, long-term sickness absence, ill-health retirement, workplace downsizing and closure. In contrast, sustainable work systems develop by regenerating resources, add to the reproduction cycle and are consonant with long-term convergence between stakeholder interests.

In the attempt at arriving at a definition of the quality of working life for the current study, however, many of the categorisations in the literature such as that of Walton and the early psychological approaches were felt to be too broad and clear limitations were thus necessary. Moreover, there is some confusion as to whether QWL describes or characterises certain types of change processes or is in fact an outcome of such processes. The emphasis here is on the features of work redesign that can reasonably be argued as facilitating QWL improvements rather than QWL itself in the strict sense of its usage in the earliest definitions. These features of work redesign can be summarised as follows:

- *Job enlargement*: this entails the extension of job duties and rotation that might, for example, accompany a switch to some form of teamworking or more functional flexibility. Clearly, such moves will require training (Littler and Salaman, 1984).

- *Job enrichment*: this entails a vertical extension of duties, normally consisting of a greater proportion of one's duties being those traditionally associated with supervisory or managerial roles in the traditional Tayloristic model of workplace design. Such duties might include daily and weekly planning of work, quality control, problem identification and solving, maintenance, budgeting and supplier and customer contact. Again, training in new competencies is required (Kuhlmann, 2002).

- *Participation*: this entails the participation in an increasing number issues affecting the labour process and design of the workplace. The notion of consultative participation is intended here whereby channels are established for employees to be given a voice on matters that affect them and thus some degree of influence (EPOC, 1997: 16).

- *Autonomy*: this also entails participation, but that of a more delegated and devolved form. Here workers are granted powers of self-regulation in areas such as the pace of work, job methods and sequencing without reference back (ibid.). In much of the literature such notions are termed

'empowerment' (Senge, 1990; see also Willmott, 1993 for a more critical discussion).

- *Developmental scope*: this concept entails the notion of worker input into and discretion over developmental processes at the workplace in the spirit of sociotechnical systems theory. It involves providing systematic ways whereby the first four concepts above are systematically linked to a system of individual and workplace learning including new product and process design, as well as payment systems that support learning (Argyris and Schön, 1996).

To sum up, the more psychologically based dimensions of QWL outlined by Davis and Cherns, Walton and others are seen here as the *stakeholder outcomes* afforded to employees from a process of change in work organisation. The impact of such change on QWL is mediated by certain *organisational outcomes* in terms of job redesign. Such redesign is conceptualised as comprising five features appearing to contribute positively to QWL that can be discerned in the literature. Accordingly, we can think of a process whereby value is added for employees as follows:

new work organisation $\longrightarrow$ job redesign $\longrightarrow$ enhanced quality of working life

2.2 Competitiveness

The concept of competitiveness generally describes the degree to which an organisation that engages in adding value through market exchange can sell on the market on terms similar to its rivals. Closely allied with this is the notion of competitive advantage whereby the organisation enjoys some uniqueness that enables it to engage in exchange on better terms than its rivals do. For the purposes of this study, no distinction is made between the notions of competitiveness and competitive advantage. Assumed in the discourse of competition is the existence of market exchange. Although this discourse has reached certain locations in the public sector, the main emphasis in the study is on private sector firms.

Discussions on sources of firm competitiveness are commonly conducted with reference to the work of Porter (1980) on generic strategies. Porter argued that there are three fundamental ways in which firms can seek competitive advantage in a particular market. These are cost leadership (producing at the lowest cost in the industry), differentiation (offering consumers some sort of uniqueness in product or service provision that they value highly and for which they are often prepared to pay a premium price), and focus (choosing a narrow competitive scope within an industry).

Porter's views on strategic choices for maintaining competitiveness have subsequently been called into question. Prahalad and Hamel (1990) noted that in the information age, firms had an increasing capacity to imitate and copy a rival who was apparently following Porter's business and corporate strategy prescriptions to the letter. Moreover, empirical evidence from Japanese companies showed that it was possible for firms to be 'stuck in the middle' and adopt simultaneously what Porter would describe as conflicting business strategies. Toyota's encroachment into the US car market was based on both cost leadership *and* differentiation; indeed, this was the very logic behind total quality management. The key to genuinely *sustained* competitive advantage, therefore, was not that of adopting the correct strategy content but, rather, the capacity to innovate and do new things ahead of rivals. This depended on the core competencies of the organisation and these, in turn, rested on the firm's ability to learn collectively. Ultimately, therefore, competitiveness depends on the pace at which a firm embeds new advantages deep within its organisation rather than its stock of advantages at any particular time.

The notions of differentiation and focus in Porter's typology of generic strategies are in essence marketing activities rather than those within the domain of human resource management and therefore have no *direct* connection with the quality of working life. On the other hand, strategies for competitiveness through cost leadership are often directly associated with human resource aspects. The same could be said for the notion of innovative capacity that emphasises the core competencies of the organisation. These core competencies are, in effect, the individual and collective competencies of its personnel. An improved level of innovative capacity may lead to new focus or differentiation strategies, but in such situations the link between QWL and competitiveness is indirect. For the purposes of this study, therefore, the notion of competition is will be restricted to cost leadership and innovative capacity.

Both cost leadership and innovative capacity, in turn, can be achieved and, indeed, measured on a number of dimensions. For example, The World Competitiveness Yearbook (WCY, 2000), published by the International Institute for Management Development, although focusing on macro conceptions of national competitiveness, also publishes data on the competitiveness of firms and the environments in which they are embedded. Looking at factors inside the firm, the WCY methodology looks specifically at productivity, labour costs, corporate performance, management efficiency and corporate culture. In sum, competitiveness in the firm is dependent on the extent to which the firm is managed in an innovative, profitable and responsible manner as well as the availability and qualifications of human resources (ibid: 2).

It can be reasonably assumed that performance improvements and higher productivity will enhance the prospects for cost leadership and thereby competitiveness. Measuring productivity, however, is not unproblematic. Productivity is commonly conceived as output per capita or value added per employee (NUTEK, 1999b: 20), yet researchers have also proposed a number of key ratios. Brulin and Nilsson (1995), for example, propose lead times, capital tied-up, quality I (less waste, fewer complaints, zero faults), quality II (improved supply precision), throughput times, supply times, retooling times and stock turnover. More generally, performance can be measured by staff turnover, absenteeism rates and surveys of staff motivation.

Clearly, choices on work organisation innovation will impact on and thereby partially mediate competitiveness in the sense of providing organisations with the means to be as good as or better than their rivals. Improved competitiveness can thus be seen as a potential organisational outcome of innovative work organisation. In private sector commercial organisations this, in turn, will benefit the organisation's owners since a perceived improvement in a firm's competitive position will normally boost its share price and add shareholder value. By the same token, we can talk about greater effectiveness in public sector organisations benefiting taxpayers or boosting taxpayer value. Accordingly, we can think of a process whereby value is added for owners or taxpayers as follows:

new work organisation $\longrightarrow$ increased competitiveness $\longrightarrow$ added shareholder/ taxpayer value.

2.3 Summary

For purposes of simplification, the study delimits both the concept of the quality of working life and the concept of competitiveness. As stated in section 2.1, the focus with regard to the former is on those aspects of job redesign that might plausibly enhance the quality of working life, rather than on the psychological or subjective aspects of QWL that featured strongly in the early literature. Although QWL can encompass aspects of health and safety and the workplace environment, these are not systematically considered in the study. Similarly excluded are references to the linkages between QWL and wider notions of the quality of life beyond the workplace.
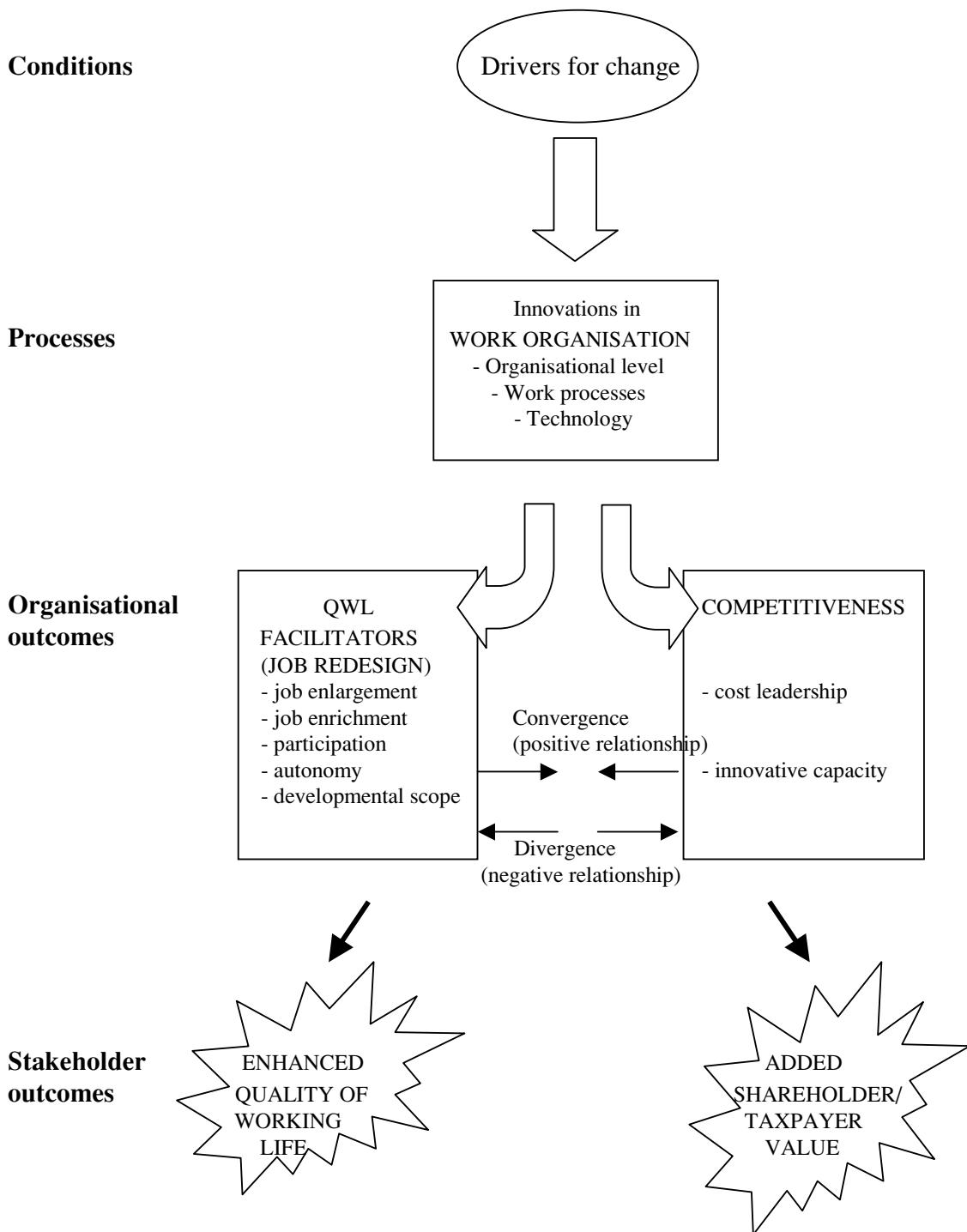
Competitiveness is seen as consisting primarily of two aspects, namely cost leadership and innovative capacity. The capacity to develop new techniques for organising production processes can clearly lead, in turn, to lower cost innovations. As also stated, innovative capacity can also enhance performance and competitiveness through generating new advantages in a firm's marketing

activities associated with differentiation and focus. These, however, are not considered in the study. Finally, it might be the case that improved competitiveness also impacts positively on the quality of working life through generating more resources for investment in human resource development as well as generating higher expectations of these amongst the personnel of the firm concerned.

The conceptual framework guiding the study is set out as figure 2. A number of conditions or drivers of change in the environment are seen as the main impetus behind innovations in work organisation. These are considered empirically in chapter 4.1 of the book. The main ideas or doctrines associated with innovation are seen here has the processes of change. These are dealt with at a largely theoretical level in chapter 3. These innovations are then considered as having organisational outcomes, specifically on job redesign features and competitiveness. Conceptual discussions of these organisational outcomes and how they are treated in the study are undertaken in the first two sections of the current chapter. The empirical core of the study, chapter 4.2, will then deal with the convergence between the job redesign facilitators of QWL and competitiveness in the specific context of Sweden in the 1990s and beyond. A number of conclusions and a subsequent discussion from the study then finalise the book in chapter 5.

One caveat on convergence is necessary here, however. We can plausibly argue that there is in fact a third stakeholder group that has equally legitimate interests in organisational outcomes to those of employees and owners/taxpayers. These of course are customers or clients or patients. For reasons of simplicity, however, the study will not give systematic treatment to the interests of these stakeholders. Such an analysis awaits further research. Another topic deemed beyond the scope of the study is the question of whether the organisational outcomes identified here do in fact correlate positively or otherwise with stakeholder outcomes enjoyed by employees and owners/taxpayers respectively.

Figure 2: QWL and competitiveness – an analytical framework.

Conditions

Drivers for change

Processes

Innovations in
WORK ORGANISATION
- Organisational level
- Work processes
- Technology

Organisational outcomes

QWL
FACILITATORS
(JOB REDESIGN)
- job enlargement
- job enrichment
- participation
- autonomy
- developmental scope

Convergence
(positive relationship)

Divergence
(negative relationship)

COMPETITIVENESS

- cost leadership

- innovative capacity

Stakeholder outcomes

ENHANCED
QUALITY OF
WORKING
LIFE

ADDED
SHAREHOLDER/
TAXPAYER
VALUE

3. Innovative concepts impacting on work organisations

In the industrialised western world, the manufacturing sector experienced a prolonged period during the middle decades of the twentieth century whereby 'Fordist' principles of production provided a stable and predictable foundation for the organisation of work and industrial relations. Typically, this model of production involves centralised company structures, economies of scale and Tayloristic work organisation featuring mass production with far-reaching fragmentation of tasks, production line technology and the de-professionalisation of work (Auer and Riegler, 1990). In contrast, writers on work organisations have documented that recent trends in the organisation of work exhibit a considerable array of innovation that in certain respects signal a departure from the relative stability of the Fordist model (see for example Smith and Thompson, 1998). Such innovations, although frequently originating in manufacturing, have frequently been diffused elsewhere, for example to service industries and the public sector.

Much of the literature tends to polarise the organisation of work into two 'paradigms' of mass production (Fordism) on the one hand and some form of flexibility (post-Fordism or Toyotaism) on the other that breaks with Taylorism and Fordism in certain respects. Such a view vastly oversimplifies the history of work organisation in the twentieth century and understates the extent of continuity in the core concerns of labour-capital dynamics. Nevertheless, changes have occurred that are substantial and have profound implications on both the quality of working life (positively and negatively), on competitiveness and thereby the relationship between the two concepts. For example, the successes of Japanese car manufacturers in penetrating the US market by the early 1980s led to a fundamental rethink among both scholars and practitioners in the quest for the secrets to corporate competitive advantage. Here the emphasis switched from economies of scale to economies of focus. By concentrating on producing fewer products, companies were able to achieve higher productivity and lower costs. Western producers typically responded by adopting similar strategies.

It would be a mistake, however, to over-emphasise the role of manufacturing in contemporary labour processes. Without exception, all western economies have witnessed a decline in manufacturing employment and a concomitant increase in services since the Second World War. Services, by their very nature, are produced and consumed simultaneously. This means that the customer will invariably interact with the producer and be able to articulate specific requirements about what is produced. Hence it is largely futile for service providers to stick with standardised products. Moreover, even physical goods increasingly feature a service element as a means of differentiation from competitors.

The increasing service focus as well as shorter product life-cycles are of course having profound implications on the organisation of work: stable, hierarchically designed organisations producing standardised outputs are not suited to the diverse and changing nature of contemporary customer demand. The requirement, rather, is for customer focus through flexibility and relationship building (Grönroos, 1994). In short, a perceived change to a world characterised as being more dynamic has led to a recasting of the internal and external requirements for firm competitiveness as depicted in table 2.

Table 2: Dimensions of performance (adapted from Docherty, 1996: 10).

Performance Concepts	Contextual Assumptions	
	Static	**Dynamic**
Efficiency (internal performance)	Rational resource utilisation Productivity 'Good Work'	Individual competence development Organisational development Single and double-loop learning
Effectiveness (external performance)	Creation of added customer value Profitability	Capacity to adapt, innovate, transform Flexibility
Societal constraints	Ethics, legislation, good practice, societal values	

3.1 Organisational models and ideas

This section comprises a critical survey of the literature on innovations at the organisational level that have impacted on work in the 1990s and beyond in the western world generally. The survey should not be seen as comprehensive. Rather, it is a basic outline of some of the main ideas and concepts of change that we might expect a) to have impacted on Swedish organisational practice, and b) to have had implications on the relationship between QWL and competitiveness. For a more detailed discussion of such ideas and concepts the reader should refer to texts elsewhere (see for example Collins, 1998). Such treatment is beyond the aims of the study.

3.1.1 Networks and alliances

An emerging body of literature in organisation studies has identified a form of governance and co-ordination that is neither that of a hierarchy nor a market. In

such a view, formal and informal links develop between actors across economic and organisational boundaries that are clearly distinct from the price mechanism (see e.g. Powell, 1990; Håkansson and Johansson, 1992). Here links between organisations evolve over time and intimate bonds of reciprocity solidify in the form of networks. Organisations develop shared interests, enduring mutual dependence and interdependence. Exchange, rather than being institutionalised by the price mechanism, becomes potentially institutionalised by a number of other mechanisms such as trust, consensus, dialogue, power, learning and negotiation (Kallinikos, 1996: 129). Negotiated communal dialogue becomes the representational practice and organising becomes horizontal rather vertical (Hirschorn and Gilmore, 1992; Perrow, 1992). Networks have proliferated out of a belief that traditional hierarchical approaches to organising are not responsive enough to cope with today's dynamic business environment (Fulop and Linstead, 1999). Accordingly, they hold out the prospect of comprising a clean break from the bureaucratic organisational forms of Fordism in that horizontal relationships are established and built upon over time that entail cross-functional groupings that incorporate individuals both within and between organisations.

The term 'network' actually refers to a range of differing forms of co-operation and collaboration between actors where, in each case, the competitive position of the parties is not threatened. Co-operation may mean the sharing of information, premises or equipment that might be mutually beneficial whereas collaboration might involve the sharing of core competencies and take the form of strategic alliances, regional clusters, strategic partnering or linkages (Huxham, 1996). Clearly, the focus on relationship building and trust entails a managerial focus that contrasts with that of the traditional bureaucracy and offers a different route to competitiveness. The insight that added value can be obtained through maintaining a relationship with customers has prompted innovative work by Nordic business researchers such as Grönroos (1994). He has coined the concept of 'relationship marketing' which emphasises the ongoing nature of market exchange and the building of firm-customer relationships rather than seeing marketing in terms of discrete transactions.

In the network situation, standard organisational behaviour is that of creating relational contracts. These are '…tacit agreements between the parties which are enforced not through legal processes, but through the shared needs of the parties to go on doing business with each other' (Kay, 1993: 55, quoted in Fulop and Linstead, 1999: 424). In the slow process through which networks are built up, a relationship is constructed on the basis of reputation, trust, friendship, interdependence and altruism (Powell, 1990). Accordingly, parties are unable to act on opportunism or self-interest alone. Furthermore, networks enhance competitive advantage through the sharing of core competencies. In many cases,

these competencies include intangible resources such as tacit knowledge, which cannot, by definition, be *systematically* exchanged through market transactions.

In organisational networking, instead of the dehumanisation often experienced in other realms, properly managed service automation can increase the independence and value of lower-level jobs and 'empower' contact people to be much more attuned to customer needs (Quinn, 1992). Here, it should be noted, 'customers' are not necessarily outside the boundaries of the organisation as internal markets may make economic sense in preference to hierarchical control structures. In the 'intelligent organisation' (ibid.), management becomes a task of administering intellect and services as well as the networks as structural capital. Focus shifts to core competencies, and the desirability of vertical integration is greatly diminished. In game theoretic terms, the win-win outcomes of co-operation between partners in the network comprising the intelligent organisation better describe the intended and realised outcomes of operating procedures than the more traditional zero sum games of hard-nosed commercial bargaining.

Pioneering conceptual work on the network model of organising and the significance of strategic alliances has been undertaken by Swedish researchers largely based at Uppsala University (see for example Håkansson and Johansson, 1992). Other such work has been that of Brulin (1998) who has investigated the regional economy in the rural area of Gnosjö in south-western Sweden and drawn parallels with regional networks in northern Italy. Brulin's research has also considered the role of universities and trade unions (Berggren and Brulin, 1997) as actors in regional networks by exploring Putnam's concept of social capital (Putnam, 1992).

The possibility of developing a new regional networking role for unions has also prompted a research project 'The Unions and Regional Development (RUD)' undertaken at the National Institute of Working Life in Stockholm (Nilsson and Rehn, 1997). In particular this sought, through setting up 20 or so union-led regional networks, to explore the potential role of unions as proactive agents in the development of local and regional firms. Nevertheless, despite this work, there is no aggregate data on the precise extent of networks of economic and social actors in Sweden. Indeed, the highlighting of networks as being in any way 'typically Swedish' may be misplaced. The organisation of work in Sweden has a history of deep embeddedness in vertical corporatist institutional structures (Lash, 1985). This is clearly in contrast with, say, northern Italy.

Clearly, however, some organisations have looked at networks as new forms of organising for adding-value and enhancing competitiveness. What, then, about their implications on the quality of working life? Many writers have observed that networks have the nature of creating a degree of dependency among network members (Powell, 1990). This suggests that power relations do not magically

disappear with the move away from bureaucracy. Networks develop inclusive rules of membership and certain actors are in a stronger position than others to decide what constitutes legitimate knowledge and what such knowledge means to the network (Fulop and Linstead, 1999: 442). Seen in such a light, it seems to difficult to conceive that switching from a vertical division of labour to a horizontal division of labour should logically have any impact on the quality of working life per se. However, such moves may be accompanied by certain degrees of job enlargement and thereby involve some improvement in the quality of working life.

The point should also be made that the term 'network' is in fact a generic term for a variety of types of inter-organisational collaboration often characterised by different motivations and outcomes. For example, networks can be designed or emerge with a view to lowering transactions costs, information exchange, learning, transorganisational development or professional knowledge sharing. It seems reasonable to suggest that each of these may have a differential impact on QWL, but no research has been undertaken systematically to date on QWL under different network configurations.

3.1.2 Lean production

Womack et al. (1990), in empirical work focusing on Toyota, attribute the success of Japanese firms to their all-encompassing production philosophy of lean production. Lean production aims to combine the craft production advantages of highly skilled work with the mass production advantages of economies of scale. But it does so in a way so as to avoid the high cost of the former and the rigidities of the latter. Concisely, lean production can be understood as the elimination of all activities in a value chain that do not add value to the customer or end user.

Lean production systems deploy teams of multi-skilled workers at every level in the firm and utilise increasingly flexible, automated machines to produce not only high volumes, but also high degrees of product variation. The principles of lean production thus include teamwork, communication, efficient use of resources and elimination of waste, and the Japanese concept of 'kaizen' meaning the search for continuous improvement (Styrhe, 1998). The proponents of lean production argue that, compared to mass production, it requires half the human effort in the factory; half the manufacturing space; half the investment tools; half the engineering hours; and half the time to develop new products (Womack, et al., 1990: 13).

The basic logic of lean production is that Tayloristic (Fordist) models of mass production encourage the sub-optimal use of productive resources as buffers against the uncertainties of fluctuating product demand and labour supply. Under lean production the time to market for new products is shortened through 'concurrent' engineering and the utilisation of flexible technology in production

processes. In manufacturing, these changes are accompanied by radical plant redesign whereby dedicated product and continuous flow production lines are staffed by flexible and multi-skilled teams.

A further aspect of lean production is the 'just-in-time' concept of stock control (JIT). Here buffer stocks are in effect eliminated as production runs are tailored to specific customer orders (Womack et al., 1990: 160-161), (Harrison, 1992). Moreover, there is no requirement for warehousing of finished products as they are shipped to the customer to order. Lean production is also justified on the grounds that it facilitates effective quality control. Employees are trained in the importance of quality and procedures for identifying defects and tracing these back to the ultimate cause so that they will not recur (Womack et al., 1990: 79).

Womack et al, in arguing for the benefits of lean production, also saw it as promoting organisational learning. A standardisation of work procedures under lean production enables the setting of benchmarks against which performance can be measured and meaningfully diffused. Womack et al also studied alternative designs to lean production such as that by at the experimental Volvo car assembly plant at Uddevalla in Sweden constructed according to sociotechnical systems design. They argued that such designs did not encourage learning to the same extent (Womack et al, 1990: 101-2). On the other hand, their view sees learning as that of the unproblematic diffusion of uncontested objective knowledge and disregards the issues of how such knowledge is attributed with meaning, contextualised locally and translated into everyday practice in social interaction (Lave and Wenger, 1991; Ellström, 2000). Indeed, the logic of learning under lean production, with its emphasis on standardisation, could be said to hinder certain types of learning as the encouragement of conformity to norms is clearly in conflict with the challenging of such norms. The latter, of course, is an essential aspect of double-loop learning (Argyris and Schön, 1996).

The implications of lean production and just-in-time on the factory are that the number of traditional unskilled manual jobs shrinks, and the increasing reliance on new technology for production and stock control blurs the distinction between blue- and white-collar work in the jobs that remain. Overall, Womack et. al. present a benign if not beneficial picture of lean production which is seen as a harbinger of job enrichment through task restructuring. Furthermore, it generally involves an enhanced role for the supervisor who is given equal status with the industrial engineer. However, responsibility for setting standard operating times remains outside the control of the work group (Wood, 1989: 34). In other words, the traditional 'Fordist' division of labour is left intact. As argued by Berggren (1989: 172), the lean production approach favoured by the Japanese is wrongly presented as a representative of the skill-based 'craft paradigm'. Rather, it *continues* the principles of standardisation, economies of scale and Tayloristic

methods of work organisation. In particular, it exhibits a high intensity of work, central control over flows and pace, short cycle times and has been described as 'management-by-stress' (Parker and Slaughter, 1988). Indeed, the requirement for bufferless design has reduced the scope for work autonomy (Björkman, 1997).

Critical accounts of lean production also point out that it segments the workforce undermining solidarity; it involves a broadening of skills but not a deepening of them; the kaizen process implicitly involves the establishment of a new division of labour with an elite performing the kaizen tasks; growing wage differentials between core and peripheral (largely female) workers; unrestricted duration and flexibility of working hours; and a lack of a role for unions in work design (Sandberg, 1995: 21). If such accounts are a more accurate description of organisational realities under lean production, it seems difficult to envisage how it might be compatible with improvements in the quality of working life.

3.1.3 Total quality management and continuous improvement

Concomitant with the infusion of Japanese ideas to the west on lean production has been a similar interest on questions of product and process quality usually as part of the philosophy of total quality management (TQM). For example, quality initiatives have been reported as occurring in three-quarters of firms in the US and UK (Wilkinson et al, 1993). Advocates of TQM claim in its defence that it both broadens employees' skills and facilitates empowerment. The emphasis on quality as a key determinant of competitive advantage is a central aspect of lean production. TQM can be seen as the accumulation and transformation of four key components: statistical control of processes, product control procedures/audits, training and cultural change (Tuckman, 1995). Yet TQM is also associated with other production methods which have involved, for example, the setting up of 'quality circles' aimed at tapping into workers' expertise to aid problem solving, as well as the usage of increasingly sophisticated technology to enhance quality control.

Closely connected with TQM and, likewise, having Japanese origins, is the concept of kaizen, generally translated into English as continuous improvement. Basically the idea is that there is never any best or optimal way of conducting a productive task or operation. Employees are inculcated with a sense of the need to continually improve matters for customers, especially on quality and produce suggestions for improvement as a matter of routine. Not only does this add value in the short run, but it also generates greater employee participation with concomitant long-term HR benefits. Nilsson (1999: 32) goes so far as to state that continuous improvement programmes are not just about the development of quality, but are also central to the development of work itself.

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In Sweden, researchers at the National Institute for Working Life in Stockholm undertook an investigation of continuous improvement as part of the Programme for Learning Organisations in 1995 and 1996 (see section 1.2.3) (Hart et al, 1996). The main issue considered in this research was how to accomplish continuous improvements in organisational contexts of management-by-objectives. The research team studied the main forms of improvement activity and set out to identify their most essential aspects in terms of design, establishment and operation/redesign. A principal finding was that continuous improvement activities tend to be integrated in the main organisation rather than being parallel activities as appears to be the case with quality circles and the Japanese variants of kaizen. In the Swedish context, therefore, continuous improvement has been observed as being a model for participative rather than the coerced evolution more closely associated with kaizen and more traditional rationalisation strategies (Hart et al, 1996).

Despite the high degree of interest in quality, often as an all-encompassing organisational philosophy or culture, it nevertheless remains definitionally elusive. There is some confusion in the literature, for example, on whether it entails superior or exceptionally high standards of goods or services, or whether it refers to the extent that such standards have been met (Crosby, 1979; Deming, 1982). In terms of organising work, similar confusion arises. For some, quality 'gurus' in particular, quality does not mean high standards with regard to employee quality of working life or pay and conditions. Instead, it means the degree of conformity to uniform and dependable work practices that are consistent with delivering goods and services at low cost and at a quality desired by the market (Wilkinson and Willmott, 1995). The aim, according to a key quality guru Philip Crosby, is to eliminate waste and 'do it right first time'.

An insistence on 'doing it right first time', however, is clearly in conflict with notions of workplace learning through experimentation, reflecting on experience and trial and error. Like lean production, TQM attempts to standardise work through the issue of written rules and instructions as explicit knowledge. The emphasis on quality has attempted to introduce standardisation and 'best practice' across sectors by means of laying down quality assurance systems such as ISO 9000 and ISO 14000. Yet endeavours to 'manage quality' by conformity to such quality norms clearly contradicts with the challenging of such norms, a process that is essential for double-loop learning to occur (Argyris and Schön, 1996; Ellström, 2000; Döös and Backström, 2000).

Critically minded researchers have also seen the emergence of JIT, quality circles and TQM in the west as a means of recovering lost ground to the Japanese. Such a view has also been seen as an 'attempt to construct a new managerial framework of industrial and social consensus' (Tuckman, 1995: 54). Moreover, the

subsequent diffusion of TQM to the service and public sectors is seen as a new hegemonic project for management control through consent beyond the manufacturing enterprise. Such researchers also argue that the claims with regard to skill broadening and empowerment are bogus. In reality, the establishment and formalisation of procedures involved in quality programmes is essentially Tayloristic by involving a clear separation of conception from execution (Braverman, 1974). Indeed, if TQM is a hegemonic project for control through consent, it is thereby a means for control over employee subjectivity. Clearly, therefore, TQM is by no means congruent or even overlapping with QWL.

3.1.4 Learning organisations and knowledge management

Disenchantment with established managerial practices based on instrumental rationality and planning has led to an increasing interest in theories of organisational learning and the normative offshoot of these encapsulated in the idea of the learning organisation (see Huzzard, 2000a chapter 3 for a detailed review of such theories). Approaches to organising from a learning perspective generally eschew a decision-making logic based on plans of where the organisation should be in the future through calculated rationality and detailed environmental analysis. Instead, choices are based on inferences from action-outcome relations that occurred in the past. In a world believed to be increasingly turbulent and unpredictable, managers are increasingly less confident in their ability to forecast with any degree of accuracy (Mintzberg, 1994). The implication for organising is that organisational processes are such that the creation and diffusion of knowledge becomes increasingly significant (Nonaka, 1994) and organisations should be seen as learning systems with appropriate designs to match (Senge, 1990; Pearn et al, 1995; Nevis et al, 1995). In support of the 'learning organisation' idea, Senge has argued that 'the rate at which organizations learn may become the only sustainable source of competitive advantage' (ibid: 3).

Typical design features of the 'learning organisation' include a hollowing-out of traditional hierarchical structures as employees at lower levels take on increased responsibility for planning, problem solving, quality control, personnel matters, and administration (Svensson, 1997: 234). Proponents of the learning organisation see this as 'empowerment' (for example Marquardt, 1996: 101ff; Pedler et al., 1997: 210), and others have seen it as a 'holographic' design (Mirvis, 1996: 22-3), which may include teamworking, cross-functional project groups as well as joint ventures and industry consortia. Control is undertaken through common understanding and shared values rather than budgets and established procedures (Handy, 1995: 51). An alternative metaphor of 'hypertext' design is suggested by Nonaka (1994: 32) whereby organisations have the ability to switch between the

various contexts of knowledge creation 'to accommodate changing requirements from situations both inside and outside the organisation'.

Other features associated with learning organisations are reflexivity and trust. Individual learning occurs through awareness of what one is doing, and this is facilitated by reflexivity. Collective awareness can be similarly nurtured through reflexivity being built into organisational routines in order to overcome their innate defensiveness (Svensson, 1997: 230). The notion of reflexivity is similar to that of curiosity, which Handy (1995) sees, alongside forgiveness, trust and togetherness, as being a key design characteristic of learning organisations.

There are clear echoes of Human Relations thinking in the various accounts of the learning organisation. For example, the significance of individual learning and development in organisational development, the claims of empowerment that accompany decentralisation as well as the seeing of people as an investment rather than a cost. Rather more critically, Coopey (1998) sees there is a general democratic deficit in contemporary organisations and that it is only when this is redressed and voice is given to dis-enfranchised groups that the trust necessary for learning can be realised. Other writers have questioned the claims of greater empowerment associated with learning organisations. For example, a common thread is that all members of the organisation learn the same things according to the same set of values: 'shared meanings' are placed on new knowledge and action is thus facilitated that is consistent with a 'shared vision'. What is generally not made explicit in orthodox theories is that what is learnt is invariably consonant with management's agenda (Huzzard, 2000b).

Much of the literature on knowledge management and learning organisations, particularly that originating in the US and UK is managerialist and unitaristic and has a theoretical and empirical disregard for employee perspectives. Moreover, knowledge diffusion is frequently seen in 'black-box' terms as being unproblematic and uncontested; the learning organisation thereby takes the form of a rational control mechanism. Some writers have also posited that conceptual-isations of organisations based on knowledge and learning constitute a rhetorical device enabling elites to assert different forms of control through a new 'normalising discourse' (Svensson, 1997; Gherardi, 1999).

In Sweden, however, a rather different approach has tended to characterise research in the area. For example, the idea of the learning organisation associated with the internationally unprecedented Programme for Learning Organisations started out from an organisational vision whereby conditions would be established that continually considered, supported and renewed employee competencies. The action research of the programme sought to develop both firm operations and employees simultaneously. Learning, rather than involving the inculcation of pre-programmed knowledge from elsewhere (that is both sanctioned and filtered from

top management), occurred pragmatically as a result of reflection on everyday action by employees interacting (cf. Lave and Wenger, 1991). Clearly, the conditions for such learning are intimately bound up with team design that should be such as to enable autonomous reflection and autonomous action upon such reflection.

Accordingly, it seems questionable whether the learning organisation offers any guarantees to employees on improving the quality of working life per se. However, it would be a mistake to conceive the learning organisation as being a unified concept. As the interventionist research of the Programme for Learning Organisations has shown, the pessimism of critics such as Svensson and Gherardi might be misplaced. Alternative models of the learning organisation built on pragmatic, situated learning can be developed that offer better prospects of improvements in the quality of working life for employees. It has been argued that the discourse of learning and knowledge can open up spaces for furthering employee interests that are compatible with QWL advances (Huzzard, 2001); whether it in fact does so is of course a matter for empirical investigation.

3.1.5 The balanced scorecard

Accompanying an increased interest in 'softer' themes in management such as learning, culture and human development (at least rhetorically) has been a belief that traditional management accounting systems have become unreliable as instruments of organisational control. An increasing lack of confidence in management through using hard performance data has resulted in attempts to develop broader conceptions of control. One such conception is the balanced scorecard proposed by Kaplan and Norton (1996). This framework is an explicit recognition that traditional accounting based on (past) quantifiable, financial information such as return on equity, residual income and economic value added is insufficient as an instrument of management control. In commercial firms, prosperity and survival also depend on evolving customer relationships, internal processes as well as learning, innovation and growth suggesting the need for information on these aspects to be incorporated in a broader-based control system. In recognition of this, the balanced scorecard incorporates additional control measures that give greater weight to intellectual capital in what its authors claim to be 'a strategic framework for action' that is more long term than traditional accounting approaches.

Central to the idea of the balanced scorecard is the belief that:

> for an organisation just to maintain its existing relative performance, it must continually improve…ideas for improving processes and performance…must

increasingly come from front-line employees who are closest to internal processes and an organisation's customers. Standards for how internal processes and customer responses were performed in the past provide a baseline from which improvements must continually be made (ibid: 127-8).

In support of their advocacy of the balanced scorecard, its authors also argue that 'the ability of a company to mobilise and exploit its intangible or invisible assets has become far more decisive than investing and managing physical, tangible assets (ibid: 3).

Organisations exist in a new operating environment characterised by new features such as cross-functionality, integrated links to suppliers and customers, market segmentation, global scope, innovation and knowledge workers. The placing of reliable financial values in each of these areas and the competencies that underlie them are such that it is unlikely that they will be adequately captured in organisational balance sheets based on traditional accounting principles. Although such financial measures will continue to play an important role in the control function, they are inadequate for 'guiding and evaluating the journey that information age companies must make to create future value through investment in suppliers, employees, processes, technology, and innovation' (ibid: 7).

To meet such objections, the balanced scorecard is proposed as a means of a new management information system that combines financial and non-financial measures to be available to employees at all levels of the organisation. Kaplan and Norton see that results can be strategically controlled through core measurements from four key perspectives - those of the financial objective, customers, internal business processes and learning and growth. These, in turn, are assessed in relation to the organisational mission thereby facilitating the link between strategy and operations. The scorecard can be said to be balanced in three respects: first it provides a balanced information system for diverse stakeholder groups; second it is balanced between measures based on past performance outcomes and future performance drivers; and third it is balanced between objective, outcome measures and more subjective, judgmental measures. The scorecard enables managers to establish key activities for all four perspectives and identify objectives, measures, targets and initiatives for each.

In Sweden, research into early implementation of the balanced scorecard has been undertaken by a team of management consultants (Olve et al, 1997). This focused on large firms such as KappAhl, Rank Xerox, Electrolux, Skandia, Swedish Railways, ABB, Coca Cola (Sweden), SKF as well as a number of smaller firms. The study showed that the models adopted in the firms covered clearly took their inspiration from Kaplan and Norton with both Skandia and ABB supplementing their model with additional perspectives covering human factors.

Electrolux, on the other hand, drew on experiences from the experimental measurement projects at other organisations in areas such as quality. Research projects are currently underway on management control under teamworking at Ericsson Radio Systems (Bengtsson, 1998) and Allgon Mobile Communications (Nilsson et al, 1998), including the balanced scorecard, but little work has been conducted in public sector or non-profit contexts. One exception to this is the study of Huzzard (2000c) of management control in the Swedish Union of Clerical and Technical Workers in Industry where the control system appears to resemble an embryonic balanced scorecard.

In case studies of a Swedish clothing agent and a telecoms product development firm, Edenius and Hasselbladh (2002) have drawn on Foucauldian influences to focus on the balanced scorecard as a discursive practice (Kallinikos, 1996). Two main issues were at stake in their view. In their first case they considered how the balanced scorecard naturalises the alleged cognitive limitations of managers and leads them to replace everyday knowledge with highly selective representations, and in the second case they explored how the balanced scorecard acts as a straightjacket on strategic intentions yet also helps constitute new patterns of action. In effect, it works as a framing device - in their words an 'intellectual technology' – as it constitutes and orders reality rather than revealing what is unknown. As an accounting practice, it creates new domains of power/knowledge. Although Edenius and Hasselbladh are sceptical that Kaplan and Norton have found a new means of unmasking the secrets of business success, they nevertheless accept that the balanced scorecard is a highly selective form of representation that frames new domains of action.

To date, however, little research has been conducted in Sweden on how the implementation of the balanced scorecard has impacted on the organisation of work. Although clearly motivated by considerations of performance improvement, its linkage to QWL enhancement is questionable although a positive relationship might exist with specific regard to the learning and growth perspective of the model, particularly if these are explicitly aligned with development scope. As stated, certain firms in Sweden have sought to augment Kaplan and Norton's original model by including a human perspective that measures factors such as motivation, leadership, turnover, contingency work and gender (Olve et al, 1997).

3.2 The organisation and control of work

Innovations impacting on work are also discernible in both research and practice that have a focus at the workplace level – on specific work processes – rather than being conceived as new forms or doctrines of managing at the organisational level. Significant examples of innovations in work processes include teamworking,

projectification, flexibility, business process re-engineering, new rewards systems and new partnership systems. These are all taken up in this section. As with the preceding section on organisational level innovations, however, the survey should not be seen as an exhaustive treatment of the literature. Rather, it is an attempt at a brief familiarisation of the reader together with some Swedish examples where appropriate for purposes of illustration.

3.2.1 Teamworking

An alternative model to that of mass production is that of independent, flexible, small groups or teams. The hierarchy is largely broken up, middle management delayered and horizontal dependency, within business networks, replaces the vertical dependency of the traditional bureaucracy (Chandler, 1963). Such an approach has been seen as indicating a belief 'that collective organization resembling teams is somehow the natural way to organize human effort, and, since the industrial revolution, the use of production lines has undermined this natural inclination to work in groups' (Fulop and Linstead, 1999: 209). Such a view seems to encapsulate ideas of a return to some sort of golden age of pre-industrial manufacturing where craft production was undertaken in small, co-operative groups (Katzenbatch and Smith, 1993). Taylorism was thereby a misinformed and temporary diversion and the contemporary fashion of reverting to teamworking ushers in real prospects of improving the quality of working life through job rotation and job enlargement. Moreover, teamwork, so the argument goes, allows for greater prospects for individual learning and the diffusion of new knowledge (Kock, 2002).

Although teamworking generally involves greater autonomy and involvement in decision making on the part of team members, the degree to which this occurs varies widely. Teamworking appears in various formats thus rendering a generic definition of the term extremely problematic. Accordingly, distinctions between different types of teamworking have become well established in the literature. For example, the influential survey of groupwork in Europe published by the European Foundation for the Improvement of Living and Working Conditions in 1999 (EPOC, 1999) classified teams into three ideal types: team-based, medium group delegation and weak group delegation. Such categorisation was possible and useful because it highlighted very different degrees of decision-making rights and delegation in the teams studied.

A similar categorisation was seen helpful in the research undertaken in Germany by Kuhlmann (2002). In identifying teams as being characterised either by a high level of development, a medium level of development or a low level of development, Kuhlmann focused attention on varying degrees of task integration

in teams and concomitant degrees of departure from Taylorism. A further dimension along which we can also differentiate teams is that of empowerment whereby 'fully empowered teams' are self managed in the sense that they take full responsibility for establishing planning, direction and control (Glaser, 1992, quoted in Fulop and Linstead, 1999: 238). At the opposite end of the continuum, unempowered teams exist simply to execute a facilitator's directions.

In many cases firms have established profit centres at what was traditionally considered the 'bottom' of the organisation - these consist of multi-functional and high performing groups of around ten people. For example, empirical evidence suggests that Sweden has the most widespread incidence of teamworking in Europe: over half of Swedish workplaces have reported that more than 60 per cent of their employees work in teams, and only 9 per cent of workplaces report no teams in direct production (NUTEK, 1999a: 12).

A survey of teamworking conducted by the European Foundation in 1996 sought to investigate the extent of teamworking in European workplaces, the extent of direct participation, the forms of teamworking, the reasons for its introduction, the economic and social effects, the degree of employee influence and control as well as sector differences (EPOC, 1999). Overall, the study reported that '"team-based" work organisation in European workplaces is hardly realised' (ibid: 34): teams are seen as 'useful, but unused'. Yet, echoing the NUTEK finding above, in cases where moves to some form of delegation of responsibility to groups has occurred, Sweden was 'clearly at the top' of the list of the countries where diffusion of the team concept has been evident (ibid: 48). The motives for introducing teams are predominantly economic, that is, prompted by performance considerations. Some survey respondents, especially in northern member states, did state that QWL considerations were a motive, but this was generally in tandem with productivity goals.

At the Swedish engineering group ABB, it has been shown that the consequences of a switch to teamworking have been reduced supply times, maximum flexibility for construction and manufacture together with concentration on customers within the country to hand rather than some limitless hunt for customers within a global market (Peters, 1992). As a central aim of its T50 project, ABB sought to break down its 30-100 strong functional production units into small, autonomous teams working in one continual process. The thinking here was to reduce production times and seek to maintain a market edge through time based competition (Stalk and Hout, 1990).

Empirical studies have shown, however, that the precise design of teamworking varies. Studies of the Toyota-GM joint venture at NUMMI in the US by Adler and Cole (1993) show that although the design of teamworking at the plant was seen as a vehicle for establishing new, improved performance standards on the basis of

improvements on the shop-floor, such processes were highly regimented. In the NUMMI model designed on the principles of lean production, the assembly line in effect remained intact. Involvement of the teams in planning was highly limited and its problem-solving activities were very tightly focused on existing routines and standards laid down by management. In other words, although there was some scope for knowledge creation under the banner of 'continuous improvement' and thereby some degree of increased humanisation, many key aspects of Taylorism were retained (cf. the critical comments on lean production above). The plant was typified by intense machine pacing, rigid production quotas, close surveillance and the sacrificing of safety standards (Berggren, 1994)

Proponents of the sociotechnical school in Sweden advocate a more human centred approach to teamworking pointing to experiments in the Swedish car industry as models for an alternative version of the post-Fordist organisation of work (Sandberg, 1995). Here the assembly line is partially broken up, as in the case of Volvo, Kalmar, so as to allow stationary partial assembly of parts of the vehicle by small work groups assisted by advanced technology, or indeed wholly broken up as at Volvo, Uddevalla. The latter approach, consistent with union visions of 'good work', involved a holistic approach to learning within teams in 51 independent assembly workshops that afforded team autonomy. As the teams were in effect entrusted to assemble an entire vehicle, a greater degree of closure was evident, a principle of 'good' job design previously identified by Littler and Salaman (1984) as being consistent with the aims of the QWL movement. Cycle times were accordingly between 1½ and 3½ hours for sub-systems and between 8 and 10 hours for the whole car as opposed to the 60 seconds on the assembly line at NUMMI.

An in-depth research project on teamworking in the process-based industries of steel and petrochemicals in Sweden was published in a doctoral thesis by Bergman in 1995 (Bergman, 1995). This work revealed, from case studies, that the design of teamworking in these industries also bore a strong resemblance to the ideas of the more optimistic industrial sociologists of the 1960s who advocated sociotechnical solutions. The study showed that teams manage, from their own collective interests, both the technical demands of the production process and the rules and norms handed down by the workplace management. Nevertheless, a central conclusion was that the complex, qualified work associated with recent automation in the petrochemical industry, although being a new type of work, in many respects is a continuation of previous work that required co-operation and technical skills. Moreover, technology had a significant role in reducing team autonomy. In other words, modern forms of teamworking in process industries constituted neither an upgrading nor a downgrading of the labour process.

The question of which approach to teamworking contributes best to organisational performance and thereby competitiveness has generated considerable debate. Adler and Cole (1993) assert that the lean production model is conducive to organisational learning (offering superior performance) whilst the latter, based on humanistic work design, favours individual learning (but at a lower level of performance). The logic here is that standardised work procedures facilitate a benchmark against which team performances can be assessed and meaningfully diffused. On the other hand, this conclusion is questioned by Berggren (1994: 42) who argues that the holistic principle at Uddevalla, influenced by sociotechnical systems design (STS), enabled 'a generalized assembly competency of great potential value'. Moreover, the enhanced autonomy advocated by STS provided greater scope for double-loop learning. Although the debate on performance remains unresolved, there seems little doubt that the sociotechnical approach allows for more autonomy and empowerment and thereby a higher quality of working life.

3.2.2 Projectification

The perceived need for flexibility has also impacted on the temporal nature of work and thereby in some cases the durability of employment contracts. Researchers have noted that one such response to the demands of flexibility has been an increase project-based organising (Bower and Hout, 1988; Engwall, 1998; Ekstedt et al, 1999). Projects are increasingly being used from activities ranging from dealing with unique one-off problems to a means of organising routine day-to-day operations in all types of organisations. Tasks are 'projectified', and individuals are tied to projects on an individual basis. Projects can occur in the context of full-time permanent employment contracts or through temporary contracts signed by temporary or 'contingent' workers. Models of project management have been devised and adopted to create order and control of projects throughout their individual duration. Moreover, in electing to organise through projects, an organisation can make itself more transparent in the long run in respect to resource utilisation (Blomquist, 1999).

Projects are commonly designed as arenas for learning and renewal (Midler and Lundin, 1998). Where such intentions are more than mere rhetoric, they may offer opportunities for creativity and reflection on experience and thereby enhance personal development in a context of decoupling and relative autonomy from a permanent organisation. Projectification has been perceived as advantageous in many sectors in Sweden including manufacturing, the ICT sector and the media industries. The labour process at the manufacturing firm Atlas Copco has become in essence 100 per cent project-based. However, despite the apparent attractions of

projectification, it can result in barriers to organisational learning as individual learners move to other activities when projects are wound up and there are major difficulties in the routinising of new knowledge. Where organisations are highly projectified there is little or no organisational memory.

The label 'neo-industrial organising' has been coined by Ekstedt et al (1999) to describe projectification in their study of some 25 cases in a wide variety of local and international organisations in Sweden. A common emergent pattern from the projects was that all entailed some element of renewal. Action undertaken in the projects and the learning gained from reflection on such action emerged as the basis for renewal efforts whereby knowledge generation in relation to the host organisation played a significant role. Ekstedt et al go far as to claim that projectification or neo-industrial organising comprises a new way in which economic activities are organised marking a clear break from the 'industrial' era. The claim that Swedish industry has become more project-oriented is also made by the various authors contributing to a volume on project management in Sweden edited by Berggren and Lindkvist (2001).

In the concluding chapter of their book, Ekstedt et al take up the question of the implications of projectification on participation. They suggest that projects generally reduce the need for monitoring functions and increase the requirement for project participants 'to design, carry out and follow up contracts' (ibid: 216). Projects, they argue, are a knowledge-intensive environment wherein the need for hierarchical control is reduced compared to traditional industrial bureaucracies. At the same time, 'the influence of the employees over their daily work increases' (op cit.). On the other hand, there is little to suggest that general managers forfeit power in terms of establishing project remits and defining the boundaries of legitimate economic activity. These findings, grounded in empirical analysis, would suggest that projectification has a double-edged impact on QWL in that the prospects for participation are enhanced whereas the prospects for empowerment are diminished.

There is less likelihood of participation for those working in projects as temporary employees than permanent employees working on projects. If increasing proportions of the workforce are working in temporary organisations, this would suggest, on balance, that the prospects for convergence between QWL and performance at the aggregate level are reduced by projectification or 'neo-industrial organising' rather than enhanced by it. An associated implication is an ongoing segmentation of the labour market into a 'commanding force, supporting troops, mercenary troops and reserve army' positioned along a continuum from permanent to temporary to non-employment (Ekstedt et al, 1999: 220-1).

The experience of project work for individuals may be stimulating, motivational and rewarding where it is felt that one's work to carry the project forward can be

taken within the allotted time-frame and where expectation and fulfilment are in balance. Research has established that individual motivation is high and work has been effectively carried out when goals are concrete, have a definite deadline, are challenging and realistic (Latham and Locke, 1979; Hackman and Oldman, 1980). On the other hand, the pressure to complete the project by an imminent deadline, often through enforced overtime, can result in stress and an intensification of work (Sörensen and Grimsmo, 1993). Moreover, the potentially negative aspects of project-based work are exacerbated in multi-project environments where the autonomy of individuals working in projects is circumscribed by the (often shifting) balance of priorities between projects (Hovmark and Nordkvist, 1998). Whilst it is acknowledged that some stress can be positive (Crawford, 2000), it has also been linked to burnout, long-term sickness absence and even ill-health retirement (Pines and Aronsson, 1988). Brödner and Forslin (2002: 21) describe the potential problems for individuals as follows:

> In the project organization the individual is subject to simultaneous and independent demands from several internal or external clients. Work entails running between meetings, each triggering high commitment and resulting in additional tasks and pledges. Over the day this process accumulates and unfulfilled promises bring the level of unrelieved arousal beyond natural recovery.

We can conclude, therefore, that whilst projectification does offer certain scope for improving the quality of working life, there are nevertheless real dangers of negative stress, burnout and forced early retirement through ill health. More research in the area is needed, but it seems reasonable to assume that as the degree of projectification increases, the number of permanent jobs declines. Writers such as Handy (1996) in his depiction of the 'portfolio worker' paint a rosy picture of this situation whereby workers happily go through life switching from one work experience to the next. Yet whilst this may be an exciting prospect for the IT worker in his or her twenties, it is less likely to be so for the older employee who places a much higher value on job security.

3.2.3 Flexibility

Writers also noted a further switch in emphasis in the 1980s (e.g. Piore and Sabel, 1984) away from the division of work tasks and a rigid, specialised division of labour. Such a trend was evident in Sweden at least as much as elsewhere. As a result of technological advance and the fragmentation of consumer tastes, firms have increasingly seen the need to develop flexibility in production (Anell and

Wilson, 2000). According to Atkinson (1985), this has taken three forms: numerical flexibility whereby firms seek to adjust labour inputs to output changes, functional flexibility where firms seek mobility within the factory, that is the ability to change what workers do, and wage flexibility where firms seek adjust rewards to directly reflect performance fluctuations. We can add a fourth category here, that of contract flexibility, as an increasing proportion of the workforce are employed on short-term, temporary contracts, particularly in the context of projectification.

New models of the 'flexible firm' have accordingly been advanced as alternatives to Fordism (Brulin and Nilsson, 1991, 1997). These revolve around the idea of a new international division of labour whereby an increasing degree of polarisation has been emerging between a firm's core workers and its peripheral workers (Wood, 1989: 7). The former are multi-skilled, functionally flexible, enjoyed employment security and attractive rewards. In contrast, the latter have limited skills, temporary contracts, and possibly work part-time. Schoenberger (1989) elaborates this idea by arguing that there are also high skilled production workers at the core rendering a three-tier employment structure with spatial delinkages and skill differences.

Reich (1991), in similar vein, tracks a noticeable shift from high volume, standardised production up to the end of the 1970s to high value, specialised production from the 1980s onwards. The initial phase was characterised by a high degree of convergence between the interests of corporate business and those of the nation state (ibid: 54) whereas this convergence became noticeably less clear-cut thereafter. Reich's thesis is that a country's standard of living is now less dependent on its core corporations or even the national economy, and more dependent on the world demand for the skills and insights of its individual workers. The core corporation is now '...a facade behind which teems an array of decentralised groups and sub-groups continuously contracting with similarly diffuse working units all over the world' (ibid: 81). In other words, the world production process is increasingly becoming a global enterprise web of international supply networks a process known in the jargon as 'outsourcing' with an increasing emphasis on knowledge rather than products.

In Sweden an extensive study of the extent of flexibility was undertaken by researchers at the National Institute of Working Life in the 1990s and published in 1998 (Wikman et al, 1998). An initial survey revealed that three quarters of respondent firms had implemented change that involved the delegation of responsibilities and job enlargement. In nearly half of the cases these were facilitated by state support, usually the Work Life Fund (see section 4.2.3). In a follow-up study, a more nuanced picture of change was sought by categorising innovations into three types: increased job rotation, the delegation of planning and

preparation and the delegation of evaluation and development. The study revealed that 66 per cent of workplaces had seen change that involved job rotation, 70 per cent had seen the delegation of planning and preparation and 73 per cent had introduced devolved practices of evaluation and development (ibid: 16-17).

A further aspect of flexibility is that it tends to involve the dissolution of the boundaries to work in both time and space. In Sweden this has been identified in research as being a particularly significant feature of white-collar workers who are contracted to work according to goals or results but are rewarded according to time-based contracts. The demand for flexibility and the need to complete a given task inevitably lead to unpaid overtime being worked, sometimes at home. This tendency is particularly marked amongst women employees and in the public sector (Aronsson and Göransson, 1997). Accordingly, the pressure for flexibility has led to an intensification of work, in some cases being perceived as the necessary price to pay for personal advancement in the organisation.

As with many of the innovations tracked in this section, the managerial pursuit of flexibility (and thereby competitiveness) is double-edged in that in some circumstances it might improve QWL and in others it may be detrimental. Clearly, functional flexibility may improve the range of tasks a worker undertakes and even encompass some control, planning and monitoring tasks. In this sense, it can be said to contribute to QWL and the vision of 'good' job design (Littler and Salaman, 1984). On the other hand, if such moves do not incorporate the power to regulate the pace of work, claims to QWL improvements are much less compelling. It is difficult, however, to reconcile numerical, wage or contract flexibility with QWL improvements.

3.2.4 Business process re-engineering

Another idea infused from US practice adding further to the general discourse of the quest for competitive advantage is that of business process re-engineering (BPR). Hammer and Champy (1993) advocate BPR as a means of radically redesigning work. Companies are urged to organise around process outcomes, for example filling a customer order, rather than functional departments such as marketing, production or finance. This necessarily involves an overhaul of job designs, organisational structures and management systems as well as exploitation of new technology. In other words, the labour process is redesigned around the idea of continuous flow production with the total elimination of all buffers.

BPR is defined by its founders as the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed. It is the way ahead for 'truly great companies'. In practice, this means the

replacement of traditional, sequential processes in the production of a good or service with a single, integrated task facilitated by the assistance of information technology. One individual is thus capable of doing the work of many, and systems are built around teams that are configured to mirror the processes that the business actually works around rather than the functions it may use to execute such processes (Grint, 1994: 181). In support of their recipe, Hammer and Champy claim empirical evidence of process-cycle times being cut by 50 per cent. They insist that the transition to BPR is not adaptive and incremental but fundamental, radical and dramatic. What is advocated is not tinkering at the edges, but starting organisational design afresh, from a blank sheet of paper. Organisations are exhorted not to automate, but to obliterate (Hammer, 1990) with a clear focus on business processes rather than tasks or functions.

BPR embodies the same rationality as scientific management, i.e. a rationality based on technological or instrumental control of nature, resources and even social systems (Grey and Mitev, 1995: 8). In other words, the possibility that people may deviate from the simple nostrums proposed for the quantum leaps in business performance attributed to BPR is not considered. Employees are assumed to be infinitely malleable (Willmott, 1994: 40). Problems of organisational design are seen by BPR in terms of problems of processes rather than problems of structures. Bureaucracy is not seen as some functionally superior form of organising, but, rather, as the inevitable consequence of process fragmentation. 'The way to eliminate bureaucracy and flatten the organisation is by re-engineering the processes so that they are no longer fragmented. Then the company can manage nicely without the bureaucracy' (Hammer and Champy, 1993: 48). Work is shifted across organisational boundaries thereby 'improving performance'. Moreover, as with many other organisational innovations, the ideas of BPR appear to have been diffused to the public sector (Jones and Thwaites, 2000).

Although retaining a focus on the need to organise around processes as the key to competitive advantage, Stalk and Hout propose 'time-based management' (TBM) as a guide to best practice. Here process design is seen as a chain of activities each adding value that can be quantified by time: sales, order entry, order coding, engineering, order coding, scheduling, premanufacturing and manufacturing, delivery and preparation (Stalk and Hout, 1990: 70). Here time has a money equivalent in the same way as quality, productivity and innovation. Somewhat interestingly, premanufacturing/manufacturing are only considered to take up less than 5 per cent of compressed time in typical manufacturing value delivery systems. This would suggest that the choice of model of factory organisation is not the critical determinant of competitive advantage (Stalk and Hout, 1990: 70). Again, a firm pursuing TBM will look very different in organisational form compared to Fordist models with departments integrated around process rather

than function rendering production workers a rather secondary if not peripheral role.

Critics of BPR say it is a camouflage for corporate downsizing and slash-and-burn cost reduction. This is denied by Hammer (1994) who says it is a way of redesigning work not eliminating jobs. An essential element in the BPR sales hype is that it creates self-managing teams, combines jobs, upgrades skills and thus *empowers* the workforce (Hammer and Champy, 1993: 39). Similarly, ideal employees are those 'who will make their own rules...' (ibid: 10). And yet we are urged to accept that 'it is axiomatic that re-engineering never, ever happens from the bottom up' (ibid: 207). The only way that such assertions can be reconciled is if a new conception of empowerment is involved. The meaning of empowerment, however, is altered away from having any association with emancipation to a different meaning whereby it is a gift bestowed by higher authority - it becomes implicitly manipulative and thereby contradictory.

There are indications that BPR is a passing fad (Jones and Thwaites, 2000). Not least, this can be attributed to its high failure rate. For example, Knights and Willmott (2000: 27) refer to a survey conducted by consultants Arthur Little in which less than one-sixth of executives reported favourable outcomes and 60 per cent of respondents indicated encountering unanticipated problems or unintended side effects. Indeed, Hammer himself reports that 70 per cent of BPR start-ups fail, but refuses to accept that the basic idea is flawed, blaming, instead, managers for failing to adopt a BPR mindset.

To sum up, therefore, if BPR has (had?) any contribution to make to QWL it is through its claims to empowerment. However, as the critics have argued, any such claims are profoundly fanciful. The BPR conception of empowerment must necessarily entail workers making decisions and rules (within teams) through the internalisation of dominant corporate ideological norms and this is difficult to reconcile with notions of increased employee autonomy. Moreover, the top-down approach of BPR, informed by the machine metaphor, is clearly at odds with both organisational learning and continuous improvement, management ideas that appear to have surpassed it.

3.2.5 New rewards systems

Writers promoting ideas associated with the 'learning organisation' have stressed the need for these to develop incentive systems designed to promote organisational learning (Argyris and Schön, 1996: 187). Pedler et al (1997: 115) see a key characteristic of what they prefer to call 'the Learning Company' as being payment systems that are:

part of an environment that encourages learning, experiment, new ventures…
whatever else it does, the Learning Company works hard at legitimizing
individual and collective learning efforts that are not aimed at promotion.

Moreover, it is generally accepted that providing a direct link between skills and performance and a rewards system reflecting the financial performance of the workplace can increase the participation and commitment of employees. Such rewards can be individually or team-based and can often be directly to performance outcomes measured in terms of profitability.

Such views find echoes with union aspirations of 'good work' whereby individuals have possibilities and incentives for personal development. Accordingly, unions such as the Swedish Metalworkers have sought to make explicit linkages between new payments systems, competence development, workplace learning and development and thereby improved competitiveness (Huzzard, 2000a). Pressure for change has been from the employers many of whom have been pressing in recent years for systems that incorporate some element of individual rewards. This of course has been the traditional means by which white-collar salaries have been determined, albeit within the context of nationally agree collective agreements.

Earlier blue-collar payments systems based on piecework have been seen as unsuitable in newer, more flexible forms of work organisation. Although it is accepted that the largest proportion of a salary earned by a production worker will remain collectively agreed and paid, there is also motivation for an additional element to be paid on an individual basis according to the contribution of the employee to production results and development. The presumption is that rewards systems should be based on notions of firm competitiveness, developmental potential and employee commitment and participation rather than top-down methods of control (Lawler, 1990).

Such supplements can variably consist of the degree of difficulty in one's work, levels of responsibility, or agreed competence ladders whereby employees are placed on an increasing scale according to the range of duties they perform horizontally and/or vertically. The Swedish Metalworkers Union, for example, has a policy for individual salaries to be paid according to an individual's measurable merits such as years of service, experience and education, or paid according to objective assessments of work performed, for example production results, capacity to co-operate, creativity and problem-solving. A problem with such systems, however, is that those who exercise the right not to undertake competence development could be penalised for doing so. Moreover, in systems of collective supplements is it just for one person to enjoy the rewards earned by another person's increased competencies?

Some payment and rewards specialist argue that in an era when premiums are placed on learning and knowledge that rewards systems should be directly related to individual competence levels as a reinforcement for the development of a more highly skilled and flexible workforce (Armstrong and Brown, 1998). Such systems might reward employees for their *dynamic* effectiveness or involve competence related pay that helps enable workforces to see opportunities to develop themselves in ways that give their firms competitive advantage. Profit-related pay has been an apparently successful feature of rewards systems in the Swedish banking sector since the 1970s. Little empirical work has been conducted, however, on the subsequent impact of such systems on performance more generally in Sweden. Nevertheless, should it be the case that they do have the effects intended, then they do hold out the prospect of providing a means of convergence between QWL and firm competitiveness.

3.2.6 New partnership systems

A traditional feature of Fordist production is that of joint regulation of the workplace by management and trade unions through collective bargaining on distribution issues. In some instances this has been buttressed by legislation. In many countries in the west this institutional arrangement was characterised by adversarial industrial relations and no real participation of unions on matters related to running the business enterprise. Recently, however, some unions have sought to review their roles by adopting a more collaborative approach encapsulated by the term 'social partnership' (Ferner and Hyman, 1992). The precise meaning of this term is somewhat unclear, but has been defined by Cave and Coats (1999) in a publication produced by the Trade Union Congress in the UK as consisting of six principles: commitment to the success of the organisation; recognising legitimate (stakeholder) interests; a commitment to employment security; a focus on the quality of working life; transparency; and adding value to the firm. Of the definition of Cave and Coats it can be seen that the inclusion of the fourth and sixth of these principles make an aim of social partnership the convergence of QWL and firm performance and thereby competitiveness.

In the Scandinavian countries, unions have been pursuing policies aligned with partnership for some decades. For example, it has been accepted by the Swedish blue-collar union confederation since the 1950s that rationalisation in firms was required to facilitate structural adjustment. Such rationalisation had to be accepted by the labour movement, albeit alongside active labour market measures undertaken by the state to maintain full employment (Huzzard, 2000a). The spirit of partnership was also evident in the support of the unions for legislation on co-determination in 1977 and its subsequent implementation at the workplace.

A more recent example of partnership thinking promoted by the employers has been that of the 'co-worker' concept (Mahon, 1994), notably at ABB (Peters, 1992; Björkman, 1997). This initiative, involving the elimination of the dividing line between blue- and white-collar work and seeking discursive forms for a shared identity within the firm, was not embraced by the unions because it explicitly signalled a shift away from sector level bargaining and thus a lessening of union control. Despite this attempt at introducing a new discursive turn, no definition of the term 'partnership' exists in Sweden. Rather, it is more of a state of mind characterising the pragmatic approach to union-employer relations that has, on the whole, been mutually beneficial to both sides for a number of decades. Perhaps it could also be argued that the spirit of collaboration forged at Saltsjöbaden in 1938 has been cognitively institutionalised (Scott, 1995) to such an extent that semantic debates on the meaning of 'partnership' have been rendered somewhat unnecessary.

During the 1990s the Swedish bi-partite arena was characterised by greater co-operation both at national and local levels. At the national level an increased number of co-operation agreements were concluded within both the private and the public sectors. On March 18 1997 a new 'Agreement on Industrial Development and Wage Formation' was signed in Stockholm arising from the belief on both sides that wage formation in Sweden had evolved without any regard to growth in the Swedish economy (Hammarström et al, 2003). Signatories included the Swedish Employers Confederation (SAF) led by the Engineering Employers Federation, the ALMEGA Industrial and Chemical Employers Federation, six unions belonging to LO including Metall as well as the industrial unions affiliated to TCO and SACO. The agreement has been described as 'an entirely new model for collective bargaining and conflict resolution' (Elvander, 2001: 15). In effect, the agreement covers the entire competitive sector in the Swedish economy comprising, in all, 19 bargaining arenas and aims to facilitate joint dialogue and consensus on Sweden's economic and to some extent political conditions for industrial enterprise and put distributional discussions into such a context. This was supplemented by a subsidiary procedural agreement for collective bargaining and conflict resolution in the industrial sector aimed at constructive negotiations that sought to avoid conflict.

Moves towards a partnership approach to joint regulation across Europe received a further boost by the publication of the 1997 EU Green Paper 'Partnership for a New Organisation of Work' (COM 97: 128). This set out a central role for social dialogue and interaction between the EU's social partners at a number of levels. Arising from the Green Paper, a number of projects have been initiated at Stockholm under the aegis of the SALTSA group that has been set up and administered by researchers at the National Institute of Working Life. The group consists of representatives from each of the three union confederations with a view

to setting up research projects to investigate a number of aspects of partnership in Sweden.

The work of the SALTSA group has included participation in a European-wide project proposed under the rubric 'Social Partnership and Work Organisation: Boxing or Dancing for the Trade Unions in Europe?' This project has sought to investigate a number of research questions including how the social partners understand the concept of 'partnership', the extent to which partnership agreements or initiatives can be identified and the effects of these on competitiveness and income security, union participation in partnership design, the social capital requirements for effective union participation, the extent to which prevailing union and industrial relations structures constrain or advance partnership initiatives, gender implications, workplace size, local-national relations as well as the critical success factors that govern such initiatives (Nilsson, 1999b).

Whilst not replacing the traditional union role of acting as an adversary in deciding on the distribution of the fruits of production, the moves to social partnership nevertheless see unions as also having a co-operative relationship with employers and pursuing positive sum games in arenas of mutual interest. One such arena is the provision of forums for knowledge exchanges between union representatives and employers that can benefit both sides. If it is the case that knowledge has moved centre stage as the key organisational resource, then unions also require a capacity to learn. In so doing, as a useful knowledge source they retain or acquire legitimacy as influential actors that can have an impact on the firms and authorities at which they organise their members (Huzzard, 2000a).

Social partnership, however, relies on the willingness of the partners to participate, a condition that is not at all guaranteed. Not only are there potential objections from employers who may see social partnership as an infringement on management's right to manage, but also the implicitly pluralistic framework of social partnership is ideologically unacceptable in certain unions that have more traditional channels of unambiguously independent representation. Some critical accounts have also suggested that social partnership is simply a new label for an old phenomenon - that of accommodation to employer interests and the manufacturing of consent (Burawoy, 1979; Kelly, 1996; Taylor and Ramsay, 1998).

3.3 Technology

As stated in the final section of chapter 2, many innovations impacting on organisations are associated with the introduction of new technology. Three main aspects of the role of technology are discussed in this section: the computerisation of the workplace, the impact of communications technology on the creation of

virtual organisations and teleworking, and finally the role of technology in creating new workplaces for interactive service work in call centres. Again, it should be pointed out that the intention here is not to provide the reader with a comprehensive survey of the literature in what is a vast field. Rather, it is to identify some of the main contours of the innovations that have made been possible through decisions to introduce technological change at the workplace.

3.3.1 Computers at the workplace

Technology has developed such that it can be plausibly argued that competitive advantage no longer depends on economies of scale (Berggren, 1989: 172). One expression of this is computer-integrated manufacturing (CIM) which, when combined with Tayloristic work methods, brings together a company's strategic business plan, its manufacturing plan and state-of-the-art technology. Exploited to its full potential, it obviates the need to stop the assembly line to change equipment and allows wide diversity in product specifications and negligible defects.

Moreover, new production and information technology has in some cases led to new market conditions. For example, flexible manufacturing systems allow switches within and between families of products. As argued by Thompson and McHugh (1995: 172), choices to introduce such systems lock firms into a technological trajectory that is no longer compatible with the fragmented model of work organisation associated with Taylorism. Collaboration with designers, producers and managers is essential if market possibilities are to be exploited. This also enhances the intellectual participation of the worker (Piore and Sabel, 1984). Technology can thus open up the prospects of specialisation thus rendering standardisation and long production runs uneconomical in the context of diversifying product markets.

On the other hand, Zuboff (1988) found in her research that technology is posing new demands on both workers and managers. Computer programs are inevitably codified in a way that involves a high degree of semantic and thereby cognitive closure that restricts the operational range of the user and his/her self-expression (Kallinikos, 1996). Moreover, when tied to highly intensive work systems such as lean production computerised processes, technology can lead to increasing restrictions on employee time and latitude of action (Smith and Thompson, 1998). Zuboff (1988: 342-55) also noted that modern technology also has potentially 'panoptic' power of surveillance that enables greater control of behaviour.

In Sweden a number of research programmes have focused on the development of new technology and the effects of this on the workplace. Such programmes have largely aimed at intervening in organisations so as to encourage technological

development on sociotechnical design principles. Between 1997 and 1999 NUTEK (The Swedish Board for Industrial and Technical Development) set aside 20 mSEK per year for a new programme aimed at stimulating and facilitating strategic change in both firms and public sector service activities through new usage of information and communications technology and developing work organisational forms. The programme, 'People, Technology and Organisation' (MTO) also sought to establish methods for integrated and anchored change activities. As with many other research initiatives in the field, the programme was action-orientated being implemented on a project basis in collaboration with firms and other organisations together with researchers from universities and research institutes.

From 1987 to 1992 the Swedish Work Environment Fund and NUTEK administered the MDA Programme ('People, Computer Technology and Working Life'). This programme was conducted by 18 interdisciplinary groups consisting of around 125 researchers in total. It was conducted in similar fashion to the MTO Programme and, likewise, aimed to generate increased knowledge on methods, models, tools and ways of working in developmental activities using technology and aimed at change (Utbult, 1993). The programme covered many different sectors, was interdisciplinary and implemented in projects. Similar methods were adopted in the research programme undertaken at the Institute for Metalwork Research (IVF) between 1966 and 1973 in co-operation with the National Work Environment Protection Fund as well as the attempts at promoting groupware and computer support for collaborative work systems though the Samtek project (Docherty, 1992).

In summary, the obvious point can be made that certain technological advances can reduce the arduous nature of certain repetitive work tasks and thereby enhance QWL hardly needs to be mentioned. Yet there is a dark side to technological change and its negative impact on work as documented in empirical research by Zuboff (1988). Moreover, it would be a mistake to assume that technological innovations are widespread or universal, particularly in locations where women are undertaking semi-skilled intensive assembly work and packing jobs (Thompson and McHugh, 1995: 181).

3.3.2 Virtual organisations, ICT and teleworking

A further consequence of technology is that its potentials have been identified as enabling certain firms to reorganise themselves as 'virtual organisations' (Davidow and Malone, 1993). Virtual organisations are usually high-tech firms working in highly flexible and creative environments, often with team members interacting via the internet or mobile telephony (ICT) rather than face-to-face contact. The capacity to react to rapid change is deemed paramount. Being virtual in nature they

have also been termed 'imaginary organisations' by Hedberg et al (1994). Frequently, a perceived requirement for flexibility is sought by virtual organisations through projectified teamwork or 'virtual teams'. In some Swedish firms such as Atlas Copco and Alfa Laval Agri the currently preferred organisational form is that of near 100 per cent projectification supported by ICT. Clearly, however, such an arrangement requires permanently organised systems support.

Hedberg et al also focus on the fact that the relations a firm has with its network partners is of central significance to the firm. The value chain cannot realistically be considered in terms of being bounded within the firm as a distinct legal entity - hence the emergence of the borderless 'imaginary' firm. 'Imaginary organisations' are:

> ...systems where the decisive values, processes and actors for the firm also exist and are administered outside the firm's legal and accounting domains and outside its sphere of linguistic description (Hedberg et al., 1994: 16).

Hedberg et al. go so far as to offer the notion of 'imaginary organisation' not only as a structural model, but also as a perspective for making concealed resources become visible, clarifying the necessary new structures, developing core competencies, developing new network relations and improving commercial intuition (ibid: 24). This perspective is offered as a 'macroscope' - a tool for understanding the totality of an organisation in its context and a means for looking at wider solutions (ibid: 99).

As with Quinn's notion of intelligent organisations in networks, in the virtual or imaginary organisation new capabilities also come to the fore. The key to unlocking these is the imaginative integration of the company's knowledge-producing (intellectual), electronic (information and control) and personal interaction (communications and authority) systems and the potential for communications technology in developing networks. Such organisations have the potential to break down costly organisational bureaucracies thereby reducing overheads, allow for speedier strategy implementation and facilitate learning. In addition, the logic behind the virtual organisation pushes it to adopt new organisational structures whose characteristics are captured by a diverse range of metaphors. Typically, these may take the form of infinitely flat (with limitless spans of control), spider's web (cross-functional design groups), shamrock, inverted pyramid structures depending on the logistics of output delivery and strategy. Others include starburst and cluster configurations as well as voluntary organisations (Quinn, 1992: 146ff).

In Hedberg et al.'s model, the key actor(s) is/are 'the imaginer(s)' - the manager(s) of the lead-organisation. He/she, as the imaginer, is able to see the possibilities within the network, promotes loyalty and co-ordinates the activities within its boundaries. Here, all resources are considered as internal to the organisation irrespective of formal ownership rights. A clear distinction from traditional organising principles is that it is right to grow without getting bigger. Competencies are consciously nurtured in the partner organisations in the network and it is in the lead organisation's strategic interests to build and maintain long term relationships built on trust. External suppliers and customers are conceived as opportunities and resources rather than potential sources of cost. Moreover, competencies require knowledge, knowledge requires learning, and learning requires the conceptual development of learnership as a management style.

The move to virtual organisations and projectified forms of work supported by ICT has generated an extensive research agenda (Lundgren and Wirberg, 1997). The issues of how learning outcomes are diffused between projects, the monitoring of individual learning and how learning and control are related are matters in urgent need of investigation. Such issues, moreover, are made significantly more complex in the presence of virtuality suggesting the need for research into the implications of future generations of technology and how this relates to current knowledge in the area of project management and organisational learning.

A further development is that communicative applications are tending to become increasingly mobile without requirement for direct connection to a telephone line. This has prompted a new phenomenon coined by researchers as 'teleworking' as new technological developments remove the need for virtual organisations and teams to remain spatially fixed. Given such a background, a research project was initiated within the Programme for Organisational Development and Learning at the National Institute for Working Life that aimed to explore the extent to which the development of mobile ICT was influencing work and learning (Docherty and Lundgren, 2000). The project acknowledged that the conditions for learning in Swedish working life had changed as a consequence of the technological and institutional changes of the 1990s: the tempo and complexity of learning processes had both intensified. The aim, therefore, was to develop sustainable forms of work that support the continual development of employee motivation, creativity, participation, well-being and competence as well as ensuring effective and competitive organisations.

The processes of dialogue in virtual and imaginary organisations are considerably more informal than traditional forms of management control: Hedberg et al found few examples of formal agreements and thereby sanctions in their empirical investigation in Swedish organisations. They nevertheless concede that a pluralistic, power-neutral network is unusual, a finding that suggests that

although technology is a significant facilitator of virtual organisations, it offers no guarantees of QWL improvements. Moreover, there is no demonstrable relationship, either, between information technology and organisational performance measured in terms of profit (Essler, 1998).

3.3.3 Technological Taylorism: call centres

A particularly marked development in the organisation of work resulting from the deployment of new technology has been the rapid rise in the number of call centres. These are a dedicated operation whereby computer-utilising employees receive inbound telephone calls that are processed by an Automatic Call Distribution system (ACD) (Taylor and Bain, 1999). Typically, such techniques are used in organisations involved in service activities such as banks, insurance companies or after sales services on consumer products. The preconditions for call centres include the centralisation of routine, highly intense administrative tasks in large back office factory units, linkage between front and back offices and the building of customer relationships (Knights et al, 1999).

Many call centres are fundamentally designed on Tayloristic and Fordist principles. Economies of scale are sought through centralisation, and this in turn, facilitates investment in automation. These centres bear a striking resemblance to factories in that job tasks are repetitive and highly scripted, production targets are set and prominently displayed, and calls are fed to operators by the ACD in similar fashion to a conveyor belt. Supervision is possible both by human and non-human supervisors. Advanced skills other than data retrieval are not required. Instead, the emphasis is on the quality of communication and the energy, empathy and enthusiasm shown towards the customer. These features have led researchers to describe call centres alternatively as 'electronic sweatshops' (Thompson and Callaghan, 1999) or having the characteristics of 'an assembly line in the head' (Taylor and Bain, 1999).

On the other hand, it is almost certainly an exaggeration to categorise all call centre labour processes as only comprising routine work tasks. Certain centres are perhaps better described as 'service centres' involving non-routine tasks and a considerable degree of subject expertise on the part of the service provider. In particular this applies to the health sector where skilled health professionals can provide advice to patients via the telephone. Further examples can be found in B2B markets where industrial customers can seek advice on complex transactions that are not at all routine and involve high cycle times on the part of the call centre or service centre operator.

The various research activities in Sweden on call centres have been published together in a report compiled by the Swedish government's Standing Commission

on New Technology in 1999 (SOU 1999: 138). This focused on the areas of the conditions for their technical development, the commercial possibilities provided by call centre technology, experiences from case studies in the field and, finally, of most interest here, the development of the call centre labour process. The report noted that there were no data on the extent of call centres nationally or their rate of expansion over time. Neither were there data on the age and gender composition of the call centre workforce. Varying and in some respects contradictory estimates were made of the extent of the call centre phenomenon by the various researchers making contributions.

So far as the effect on working life was concerned, the report concluded that comparisons with deskilled repetitive work such as that in McDonalds fast food outlets were unjustified. In many cases, staff were required to be highly qualified and were engaged in complicated work needing experience. Call centre employers appear to demand numerical flexibility, particularly in relation to working hours. Unions have resisted this, yet grievances appear to have generally been resolved in local agreements. As to the working environment, no reliable survey data is yet available, but the report concludes that general features typically include both good and bad examples. On the other hand, there is a general pattern of high work intensity for long periods, poor ergonomics, monotonous duties and demeaning control methods (ibid: 11).

The empirical data on call centres in Sweden is thus patchy. But what we can conclude from the Commission on New Technology Report is that these workplaces involve high work intensity and poor management. As innovations in the organisation of work, call centres have been sought by service firms as a means of utilising technology to maximise productivity, in this case in the form of customer service provision. Given the nature of work in the centres however, it is difficult to see any convergence between such attempts at enhancing competitiveness with improvements in the quality of working life.

3.4 Discussion: from intensive to sustainable work systems?

A relatively new way of conceptualising the changes occurring in the organisation of work is captured by the dichotomous model of intensive versus sustainable work systems (IWS/SWS). These two polar opposites envisage contrasting ways of managing human resources (Docherty et al, 2002a). Intensive work systems are seen as those that consume human resources whereas sustainable systems are those that regenerate human resources (Kira, 2000). Echoing the concerns of the Green Paper (COM 97: 128), the point of departure is that the underlying conflict between employee well being and organisational productivity has not been satisfactorily resolved. Moreover, earlier attempts at humanisation such as

sociotechnical systems design have failed to take adequately into account the dynamic nature of organisational environments (Adler and Docherty, 1998).

Intensive systems are those that consume resources generated in the social system of the work environment. The interaction between the individual and work has a negative balance between consumption and regeneration and is characterised by exhausted work motivation, stress, long-term sickness absence, ill-health retirement, workplace downsizing and closure. In contrast, sustainable work systems develop by regenerating resources and thereby adding to the reproduction cycle. They foster personal development and learning, employability throughout the life cycle, sustainable development and growth as well as expanding co-operation (Kira, 2000).

The IWS/SWS model, however, is not an innovative idea or technique deployed in organisations for some specified end. Rather, it has been devised by researchers as a new way of reconceptualising the changes in work organisations that have been taking place by putting individual well-being centre stage and, drawing on ideas from ecology, introduces the notion of sustainability. It is motivated by the idea that humane work has merit as an organisational objective on its own terms, rather than being a means to performance ends that directly contribute to enhanced competitive advantage.

The interaction between employees and their work is addressed both from the point of view of employees (their basic needs that define 'good work' as well as psychosocial health resources used in dealing with their work and the work environment), and an organisation (The psychosocial factors and the environment they form, change trends in current work organisations and contemporary organisational models). The impact of the IWS/SWS model on work organisations in practice remains to be seen, however. Indeed, in a recent literature review it was conceded that 'the current work organisational trends…[are leading] to human resource consumption rather than their regeneration' (Kira, 2000: 66).

However, it is an oversimplification to equate intensive work systems with Taylorism and sustainable work systems with departures from Taylorism to what have often been coined in the literature as 'post-bureaucratic organisations'. Recent international statistics on stress, burnout and healthy work organisations suggest that many 'newer' organisations are consuming rather than regenerating their human resources (Docherty et al, 2002a). There are indications, moreover, that many 'empowered' workers lose a sense of direction in their work as well as clear limitations on what they should do, how they should do it and during what timeframe. In the words of Docherty et al (2002b: 3) '...where bureaucratic structures and rules have disappeared, they have rather left the mature adult lost, lonely and increasingly stressed'. In other words, traditional sociotechnical design

assumptions on autonomy and empowerment may need to be rethought in the light of our experiences of post-bureaucratic forms of organising.

The possibility that empowerment and autonomy can actually increase stress and contribute to burnout is put into stark relief by the findings of the Third European Survey on Working Conditions published by the European Agency for Safety and Health at Work in 2000. Of the 15 EU countries covered by the survey, Sweden registered the highest percentage of workers - 79 per cent - whose pace of work was dependent on direct demands from people such as customers (as opposed to management). On the other hand, Sweden also saw the lowest percentage of workers - 12 per cent - whose pace of work was dependent on the automatic pace of machines, that is, set by management (see Docherty et al, 2002b: 9 for data). These suggest that Sweden has the most autonomous (and allegedly empowered) work organisation in Europe, a finding supported by the EPOC studies of work organisation (EPOC, 1999). Yet further data also suggest that Sweden has the highest levels of long term sickness and ill health early retirement attributable to stress and burnout. Again, this suggests that traditional sociotechnical systems thinking has serious shortcomings and, likewise, that conceptualisations of QWL that foreground autonomy and empowerment still require considerable refinement.

In conclusion, Schumann et al (1995) see traditional work organisations being phased out as they are seen as being inappropriate in responding to the challenges of new production technologies and the complexity and dynamics of product market demand. This is probably an overstatement, for example, studies show that flexible organisations are still a minority in Sweden (NUTEK, 1996: 9). Yet whilst there is undoubtedly no shortage of empirical evidence suggesting the continuity of bureaucracy and the Tayloristic organisation of work, substantive changes have nevertheless been taking place. However, the literature also suggests that conceiving the resultant relationship between the quality of life and competitiveness as being tension free and of a win-win nature is profoundly problematic in theory and it, would appear, in western organisational research. To what extent, then, can the same be said if we focus more closely on empirical research in Sweden?

4. Swedish evidence

There is considerable evidence of widespread change in the organisation of work in Sweden in the last two decades (Stymne, 1996; Brulin and Nilsson, 1997). The trends away from the homogenous, predictable workplaces of Fordism are not only in evidence through the spatial strategies of Swedish employers with regard to globalisation, but also manifest themselves in changes at the workplace. Indeed, writers such as Thompson and Sederblad (1994: 238) argue that the Swedish Model, as well as having political, welfare and industrial relations components, also has important work organisation dimensions.

In addition to these innovations, Thompson and Sederblad (1994: 242) detect 'a diffusion of leading management methods' into Swedish practice from overseas associated with the extensive integration of corporate structures in the globalis-ation process. In Sweden, as elsewhere in Scandinavia, the picture is one of widespread decentralisation of decision-making and work tasks, a professional attitude towards competence development, a trend to less hierarchical organisations and widespread usage of teamworking and job rotation (NUTEK, 1999a: 73).

At the same time, a considerable debate has taken place on the implications on the quality of working life throughout the recent period (Barklöf, 2000: 5). The number of cases of long-term sickness absence and industrial injuries has begun to increase for the first time in many years. Similar trends are observable in the level of burnout and stress and many jobs that were previously permanent have been replaced by temporary contracts.

Although the Swedish economy in many respects saw recovery in the latter years of the 1990s, relations at the workplace have become harsher and more uncertain across the entire labour market. In general, the pressure for greater flexibility had led to decentralised responsibility, flatter organisations, higher competence requirements, limitations in permanent full-time jobs, and an increased intensity of work in the full-time jobs that remained. The result was an increased incidence of contingency workers: the labour market position for many had seen a processual transition from employment to employability to contractibility. More-over, such trends were equally apparent in both the private and public sectors (Wikman et al, 1998).

What, then does the research tell us on the convergence between QWL and competitiveness? An attempt at answering this question is the aim of this chapter. The focus is primarily micro, that is, the organisational level. This is largely for methodological and conceptual reasons. Although there is aggregated level data readily available on performance both at the sector level and across the Swedish economy as a whole (for example through the electronic databases of SCB), such

data is not generally compiled on the components of QWL adopted in this study, or on work organisation innovations more generally. Even if such data were available, moreover, it would indeed be a hazardous exercise to attempt to perform correlations and deduce relationships of cause and effect. In any event, work organisation is a matter of considerable complexity. Translating what are largely qualitative concepts into quantitative data for making meaningful comparisons or rankings between workplaces is a dangerous exercise: a similar concept may take on different meanings in different contexts. One source where aggregate data has been compiled, however, is that of work by NUTEK on flexibility. This is discussed accordingly.

4.1 Drivers of change

Changes in work organisations, whether at the organisational level or at the level of work processes, do not occur in a contextual vacuum. Sweden, as elsewhere, has experienced innovations in organisations in the last fifteen years or so that in some respects represent major change. Invariably, however, such change has not materialised because of some whim on the part of organisational actors but, rather, is a response to some sort of perceived change in the organisation's environment. Innovation can thus in large part be attributed to the pressure to adapt to change drivers that can be seen as factors that condition change processes (see figure 2).

Accordingly, this section attempts to contextualise the empirical discussion on convergence that follows in section 4.2. A number of change drivers in particular have been identified and these are considered in turn: large firms and globalisation, consultants/gurus, the trade unions, political actors and the work-life research community, societal debate, the media and the financial markets as well as the new economy. It should be seen that this list is ontologically diverse including individuals, organisations, institutions as well as discourses.

4.1.1 Large firms and globalisation

The 1990s crisis in the Swedish economy was accompanied by a significant shift in the structure of capital as Swedish multinationals have increasingly fought to escape rising domestic costs by exporting facilities overseas thus accelerating the internationalisation process (Thompson and Sederblad, 1994: 245). Indeed, it seems reasonable to suggest that internationalisation has had a profounder impact on employment in Sweden than elsewhere given the relatively high concentration of large firms in the Swedish economy (Olsen, 1996: 13).

Bartlett and Ghoshal (1989) argue that we are witnessing a process of globalisation as a result of increasing competitive pressure, global outsourcing,

developments in communications technology, a reduction in tariffs and a homogenisation of consumer tastes. Their thesis is that the world economy is becoming dominated by three trading blocs: Europe, North America and the Pacific Rim with multinational companies operating across borders within each bloc and transnational companies active in all three. Such a view has been questioned by some authors (Hirst and Thompson, 1996) not least on the grounds that internationalisation was equally evident in previous epochs, notably the 1890s. Hence globalisation cannot be said to constitute any historical rupture and is, in fact, nothing more than a 'necessary myth'. This view, however, is refuted by those such as Giddens (1998) who argues that the globalisation thesis is valid on the grounds that the historical comparison that really matters is that with the post-war period characterised by the Keynesian welfare state rather than that with events a century previously. Moreover, what particularly marks out the current shift is the expanded role of world financial markets, 'increasingly operating on a real-time basis' (ibid: 30).

Evidence that the benefits of globalisation are uppermost in the minds of the leaders of Swedish corporate business is found in the words of Percy Barnevik writing the introduction to a book on global strategies in 1994 (Barnevik, 1994). The Chairman of ABB stated that for highly standardised products, the economies of scale realised by integrating production globally could lower unit costs by 20 to 30 per cent. Typically this may involve running fewer plants worldwide, buying inputs from fewer suppliers and reducing duplication in engineering. Unit costs could be reduced even further if manufacturing was relocated to low-cost countries. In other words, firms could gain offensive advantages through increased volumes.

At the same time, having a presence in many markets can offer defensive advantages through enabling a firm to retaliate against competitors in domestic markets. This is one reason why western exporters have found it difficult to penetrate the Japanese market. Moreover, globalisation offers economies of scope to broad-based global firms over local niche players by offering a wider range of products at lower cost (Barnevik, 1994). The impact of globalisation on the Swedish economy is illustrated by the fact that by the mid-1990s the 25 largest Swedish-owned companies employed only 25 per cent of their labour in Sweden.

Of further significance is the fact that company managements feel compelled to concentrate more on specialised rather than mass production in the high wage countries of the north because of the sharper competition from low wage countries (Sandberg et al., 1992: 29). The need to switch to shorter production runs of more sophisticated products specially adapted to consumer specifications has forced company managements in countries such as Sweden to develop rationalisation strategies such as work intensification, direct control and responsible autonomy

through group self-management, cost reductions and changed working hours. Sandberg et al. (1992) detected a shift in managerial strategies from rationalisation directed at labour to rationalisation directed at the objects and the instruments of work, that is the rationalisation of material and machines. Moreover, profound changes are occurring in organisational design. In the words of Sandberg et al. (1992: 30):

> there is a tendency to combine decentralisation, task integration, product shops and group organisation with various kinds of 'symbolic management' and profit responsibility to get individuals and groups to identify with the company and work harder toward company goals.

4.1.2 Consultants/gurus

The significance of management consultants and gurus and their impact on organisational praxis has a long history (Huczynski, 1993; Furusten, 1995). The appeal of business gurus is that of providing off the peg solutions to complex organisational problems that we still know very little about. Simple models and prescriptions are diffused to managers looking for easy solutions to seemingly intractable problems. In many respects gurus repackage old ideas as new ones (Hammer and Champy, 1993) in a marketing exercise designed to sell more books and more tickets on the lecture circuit. The written and spoken textual production of the guru therefore not only acts as a means for aiding managerial sense-making, but also functions as a lucrative cultural commodity (Jackson and Carter, 1998). Moreover, the ideas of gurus, particularly those who are US-based, appear to be of considerable influence in Sweden and they apparently travel freely across borders, often being applied in an off-the-peg fashion without sensitivity to context (Björkman, 1997).

Huczynski (1993) argues that gurus tend to successfully diffuse their ideas when they are tailored to particular managerial needs, are launched at the most opportune time and are promoted with evangelical zeal by their authors. One such author typifying the 'business guru' and whose ideas have had considerable influence throughout the western world is the American Tom Peters. In his tome *Liberation Management* (Peters, 1992) he asserts that '...perplexed is what we should be. The times are perplexing, confusing; not to be perplexed and confused is dangerous'. According to Peters, 'crazy' is a good word. If you're not feeling crazy, you're not in touch with the times. This is the 'nanosecond nineties' - an era which is witnessing the most profound shift in organisations since the start of the Industrial Revolution.

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All success-geared businesses must become, in Peters' words, 'bonkers organisations'. With customary irreverence and bravura, Peters reveals, from a broad cross-section of empirical cases, how today's 'winners' are achieving success by paring management down to fighting trim, simplifying processes, encouraging creativity and getting close to customers - all the while maintaining a 'healthy craziness'. People and companies are directed towards a challenging process of revolutionary restructuring, reinvention and retraining in order to achieve necessary disorganisation: 'Only opening yourself up to perpetual destruction offers hope for renewal'. In Peters' texts we can clearly see elements of both provocation and distinctiveness. Moreover, the apparent market acceptance of Peters can be testified by his charging of $25,000 per presentation as long ago as 1987 (Huczynski, 1993: 1).

In his study of the creation and diffusion of popular management in Sweden, Furusten (1995) found that popular managerial manifestations tend to promote an ideology on management that originates in the United States. Moreover, he concluded that consumption (by managers of organisations) actually governed production since the constructors of the popular texts have to offer what the consumers are prepared to pay for. The authors and consumers thereby form an alliance with distributors and commentators (for example, in the media) to establish and defend an institution that can be understood as North American managerialism. Such an arrangement enables managers to give credibility and meaning in complex problem situations and relationships. In turn, this may or may not impact on actual organisational behaviour.

4.1.3 The trade unions

The Swedish blue-collar union confederation, LO, pursued a strategy of 'solidaristic wages' from the early 1950s. The essence of this was to create fair relations between wage levels based on the principle of differentiation of wages according to the nature and demands of the job, but a rejection of wage-setting on the basis of profitability and the wage paying capacity of different companies and sectors. As to the white-collar confederation, TCO, although the principle of solidarity was similarly expressed in terms of rejecting profitability criteria, rather more emphasis was placed on the need for greater differentials in relation to different types of work, in particular to reflect status differences between white and blue collar employment (Forsebäck, 1980).

By the end of the 1980s, the strategy of 'solidaristic wages' was becoming increasingly problematic to sustain. The system had been transformed by the collapse of centralised bargaining and the increasingly successful employer-led strategy of moving to a pay determination system whereby wages were more

closely related to performance (Kjellberg, 1992). The difficulty of formulating any effective union response to these changes therefore led to a review of union strategy. In a switch of emphasis to production issues, the Swedish Metalworkers Union at its 1985 Congress began to highlight a new policy of 'good work' that attempted to humanise the labour process in manufacturing. This was refined as 'solidaristic work' at its Congress four years later (Metall, 1989).

In 1991, the LO adopted a policy of 'developmental work' on similar lines to that forged two years previously by Metall. Similar principles were adopted at the TCO conference of the same year (Mahon, 1991), following the earlier initiative of the Swedish Clerical Workers in Industry, SIF (SIF, 1990). The principle difference of emphasis, however, between Metall and SIF in this respect is that the latter has always believed in appropriate differentials between grades of different levels of skill and competence, albeit that similar rewards should be afforded to employees within the same skill band, across companies, irrespective of profitability. The implications of Metall's strategy of 'good work' clearly involved an expansion of blue-collar work into traditional white-collar areas.

The policies of 'good work' and 'developmental work' can both be seen as an acceptance by unions of the need to pay heed to organisational performance and competitiveness as a means of pursuing union goals of furthering employee interests. As such, the unions within the recent period have arguably become a force for stakeholder convergence to a degree that was not previously evident with the solidaristic wages policy. The perceived need within union circles for convergence is also evident in their apparently enthusiastic embrace of process agreements at the sector level from 1997 onwards including the Industry Agreement (Elvander, 2001, 2002).

It can be seen, therefore, that the espoused strategies of the unions, at least at the national level, envisaged a proactive role for the unions in influencing the labour process so as to promote, jointly with employers, a more humanistic variant of post-Fordist production than that associated with the Japanese concepts of lean production (Womack et al., 1990). Such a variant could be based on

> an understanding of the qualitative importance of human work, and the productivity gains to be had through employing more qualified workers and utilising integrated tasks (Berggren, 1989: 172).

The iconic concept of solidarity at the heart of union ideology was accordingly extended to cover production as well as distributional issues - all workers had the right to obtain the skills to perform 'good work' entailing enlarged job content. The way to achieve this was the flexible and democratic work group, which would generate productivity gains which, in turn, would generate scope for higher

rewards than those achievable on the Fordist production line (Mahon, 1991; Kjellberg, 1992).

4.1.4 Political actors and the work-life research community

In the latter part of the 1980s the Swedish government levied a special work environment tax on firms as a measure to counteract the then strong inflationary tendencies in the Swedish economy. This tax generated revenue of some 15 billion SEK and given a perceived increase in sickness absence and labour supply bottlenecks it was decided that this should be ploughed back into the business sector in the form of a fund for a five year development programme. The fund's mandate was initially defined in terms of rehabilitation processes, but it was quickly realised that it would also need to move into related fields such as work organisation. However, as Sweden entered recession in the 1990s the focus switched away from rehabilitation and towards productivity as Swedish firms fought for survival in the increasingly competitive global marketplace. In all, around 25,000 projects were generated by the fund (Gustavsen et al, 1996).

At approximately the same time, a second fund that was also supporting various change initiatives, the Swedish Work Environment Fund. This was a regular fund for financing applied work-life research in various sectors of the Swedish economy. Its administering body, answerable to the Swedish Industry Ministry, was established in 1972 and financed through the state. On its abolition in the mid-1990s its fund administration duties were transferred to the Swedish Council for Work Life Research (RALF) and its research, development and training functions were transferred to the National Institute for Working Life (ALI).

These two funds illustrate that actors within the state, largely at the Ministry of Industry, have actively supported work organisation intervention by supporting a wide range of innovations. These have typically involved the establishment of corporatist arrangements and infrastructure support whereby employers and unions have been encouraged to undertake joint projects. In many cases, moreover, assistance from the research community has been sought in the form of action research interventions that have sought to develop workplaces in directions of benefit to both parties.

4.1.5 Societal debate, the media and the financial markets

Media debates in the latter part of the 1990s in Sweden saw clear echoes with the modernisation discourse evident elsewhere in Europe, notably in the UK in the writings of authors such as Giddens (1998) and in the political praxis of Blair's 'New Labour' government. Although it cannot be said that such an approach to

modernisation has been universally appropriated by the parties and commentators normally associated with the Swedish political left, the Blairite 'Third Way' has been greeted with some enthusiasm in the circles associated with the centre-right. For example, the distancing of the 'Third Way' from high taxes and redistribution has been praised in the conservative daily broadsheet *Svenska Dagbladet* (see *Aftonbladet,* 8th December 1999). Moreover, the same newspaper has accused the blue-collar union confederation LO of standing in the way of every attempt at renewing the country (see *Expressen,* 17th August 1999).

A further development has been the increasing influence of the financial markets in the political and economic discourse of Sweden and a gradual legitimisation of their role by actors in the Swedish state and media. A belief that the state would be unable to finance pensions in the long term has resulted in a concerted attempt by the government to promote private pension schemes as a means of topping-up state and occupational pensions. The taking up of private pension funds has also increased as a result of the increasing level of the contingent workforce. These factors, in turn, have helped to add to the capital holdings of the financial institutions that are thereby playing an increasingly influential role in the stock market. Having no particular commitment to any firm or workplace, the managers of institutional funds, in a competitive market, are obliged to move their relatively liquid assets between various firms for short term financial gain rather than seek longer-term prosperity through loyalty to any single enterprise.

Moreover, the Swedish government has sought to encourage private savings in stocks and shares through popularising share ownership. This culminated in spring 2000 with the sale of shares in the state-owned telecommunications utility, Telia. Here individual investors were urged in the media to purchase the 'peoples' share' at a supposedly bargain price with the practice of individual buying and selling of shares increasingly being legitimised in a fashion that was hitherto taboo in earlier versions of the Swedish welfare model. Such popularisation has been reinforced by the decisions of both national daily tabloid newspapers to publish weekly supplements with lists of shares, mutual funds and unit trusts as well as advice on personal finance and investment options. The first year of the new millennium also witnessed the birth of a TV game show aimed at popularising the stock market.

In summary, it can be plausibly argued that in many respects the closely related discourses of market economics and neo-liberalism have been actively constructed in societal and media debate. Playing the stock market is no longer seen as being the prerogative of rich capitalists, and rising stock prices are promoted as being to the benefit of all savers. Certainly, the need to secure such benefits renders necessary the introduction of innovations in firms. Moreover, the discourses fuel the idea that successful Swedish firms require to be increasingly flexible, and this

requires the sustained undermining of the rigidities and regulations in the Swedish labour market (Ehrenberg, 1998).

4.1.6 The new economy

One discourse for representing the perceived changes afoot is that of the 'new economy' (Krugman, 1997; Armstrong and Court, 1998; Kelly, 1999). Authors proposing the idea that recent changes amount to something 'new' refer to a world in which people are working with their brains instead of their hands where communications technology is creating global competition in goods and services. In such a world, innovation is more important than mass production and investment buys new concepts or the means to create them, rather than new machines. As to the medium of exchange, following the Soviet Union's collapse, a new consensus has emerged on the inevitability of free markets and fierce competition within them: it no longer takes a production line to compete, just a good idea. However, such markets are changing profoundly as are industrial and occupational patterns (Armstrong and Court, 1998).

The new economy is digital and, being characterised by increased usage of the internet, is allegedly overthrowing old ways of seeing the world and taken-for-granted assumptions. No organisations are immune from the effects of new technology, globalisation and deregulation. Successful firms have to keep innovating to keep ahead of rivals and the average size of companies is shrinking. New products emerge in months rather than years, and market power is increasingly based on making sense of an overabundance of ideas rather than rationing scarce material goods. Each added connection to a network's pool of knowledge multiplies the value of the whole. Speed is becoming the standard, and markets are being revolutionised as consumer choices are multiplying. Plummeting computer software and hardware costs are changing the bases for organising production and altering transactions costs calculations (Quinn, 1992). Such a view has been identified by some as constituting a 'new economic paradigm' (Shepard, 1997).

The essence of the new paradigm is the claim that the changes evident in the world economy - the rise of digital technology, the growing volume of international trade and investment - have qualitatively altered the rules of the game. Rapid technological change, the new paradigmatics claim, means that economies can grow much faster than they used to; global competition means that we need no longer fear that an overheating economy will experience inflation. This is obviously an attractive view in that it holds out the prospect of high growth rates without detrimental macroeconomic side effects. The traditional economic orthodoxy is that economies have natural limits to growth as capacity limits are

reached, but these natural limits have now, it is alleged, broken down because such capacity constraints no longer exist in global markets.

On the other hand, sceptics argue that the sustained high levels of inflation-free growth and falling natural rates of unemployment in the US, UK and possibly Sweden in recent years can be explained by temporary factors. In the US and UK, for example, the high rates of the dollar and sterling have depressed import prices and thereby reduced inflationary pressures (Shepard, 1997). Moreover, in rebutting the claims of the 'new economy', it has been pointed out by certain economists that with or without globalisation, if the central monetary authorities attempt to expand an economy faster than the sum of its labour force and productivity growth, then the result will be inflation. In other words, there is no theoretical basis for arguing that globalisation has altered the natural limits to growth (Krugman, 1997).

A further critique can be made on the grounds that whilst there have been recent changes at the microeconomic level, it cannot be reasonably sustained that such developments amount to a historical rupture of any significance. Some scholars of management and organisation theory have thus questioned whether recent changes can be seen as a paradigm shift by arguing that even under Fordism organisations and economies were never in an unchanging state. As in the 'Fordist' era, contemporary macro- and micro economies are characterised by both change *and* continuity. Such a state of affairs has always prevailed, thus claims to a 'paradigm shift' are decidedly tenuous (Smith and Thompson, 1998).

If the sceptics are correct then the 'new economy' has no ontological status beyond that of being a discourse. Notably, however, as a discourse it presents a benign and sympathetic view of the role of business and, as noted by Krugman (1997), people in business are taking the doctrine very seriously. In presenting a rosy picture of the economic prospects of high and predictable growth and the dynamic role of business, the discourse tells people in business what they want to hear and helps legitimise business in the eyes of external stakeholders. The new paradigm informs us that tough management styles, downsizing, rationalisation, technological innovation and speed-up have ushered in a productivity revolution and have thereby 'worked'. Moreover, the power and persuasiveness of the discourse can also be gauged by its apparent success in travelling. This is evidenced by the publication of a key text acknowledging the arrival of the 'new economy' in a Swedish translation (Kelly, 1999).

4.2 Empirical summary

It will be recalled from the analytical framework developed in chapter 2 that the main empirical focus here will be on convergence between the job redesign features that we might plausibly claim can contribute to QWL and

competitiveness. These are outcomes of processes of organisational innovation. Almost by definition, competitiveness is a relative rather than an absolute concept. Strictly speaking, an organisation's competitive standing can only be understood in relation to its rivals. On the other hand, we can look at measures of *effectiveness* and argue that these may be demonstrative of an improvement in competitiveness. Such effectiveness measures are often quantitative in form. For this reason the literature survey will include improved effectiveness measures where appropriate as a means of operationalising competitiveness.

A limitation is that the empirical survey is largely at the micro level. The reason for this is the absence of aggregated data on the quality of working life and the difficulty of operationalising the concept. QWL measures (or rather the job design features that facilitate them) are normally qualitative in form. It is thus neither appropriate nor indeed possible to base the methodology of such a study on statistically based correlations that pinpoint patterns of association. Any claims about convergence must accordingly be considered to be tentative yet plausible as opposed to being relationships that are statistically validated.

It is by no means the case that research evidence exists on convergence for all the categories of organisational innovation discussed in chapter three. Accordingly, this chapter is organised around a number of themes, which generally correspond to those themes identified in that chapter where research findings have been traced. A special section, however, is also included on the change activities generated by the Working Life and Work Environment Funds which cannot easily be put under the rubric of any specific category of innovation.

4.2.1 Flexibility

The pursuit of rationalisation as the motivator for workplace change in Sweden in the 1990s is confirmed in the research undertaken by NUTEK (1999b: 44ff). This research, commissioned by the Swedish Ministry of Industry, focused particularly on the question flexibility (NUTEK, 1996; NUTEK, 1999a; NUTEK, 1999b). The aims of the research included an increase in the awareness of flexible work organisations, a mapping out of their existence, investigating their effect on productivity, working conditions and transformation capacity and, finally, identifying the factors that assisted and hindered the diffusion process.

The first study was a cross-sector study of flexibility in work organisations and its impact on productivity. It was undertaken by a questionnaire sent in spring 1995 to approximately 2000 private sector workplaces with more than 50 employees, a sample that represented around a third of workplaces in Sweden. Responses were received from 707 workplaces. Flexible organisations were defined as having one (or more) of the following features: organised human capital development, a high

degree of decreased responsibility, a less bureaucratic organisation with high customer focus, and an individual compensation system that gave incentives to individual flexibility. Degrees of responsibility in both flexible and non-flexible organisations were analysed by constructing a number of different parameters of work tasks undertaken by employees in direct production rather than managers. These were: daily planning, purchasing policy, quality control, weekly planning, maintenance, customer contacts and budgeting.

The survey results were analysed to investigate the effects of implementing a flexible work organisation on the output variables of economic performance in terms of added value, working conditions (sickness absence and turnover), and transformation capacity and comparing these with traditional organisations. Even allowing for the higher levels of labour quality (that is, higher education) in flexible organisations, the results were 'very clear cut'. Flexible organisations emerged strongly as being more productive: the actual figure was thought to be as high as 60 per cent (NUTEK, 1996: 14).

On labour turnover the logic of flexibility is that the motivation to quit decreases with better working conditions, more variety in work tasks and the decentralisation of responsibility. Moreover, sickness absence could be expected to decrease with flexibility for the same reasons. The study found that organisations adopting one or more of the flexibility criteria had reduced their labour turnover by more than 20 per cent, and reduced the level of absenteeism by almost 24 per cent (ibid: 15). However, the evidence also suggested that firm size was significant. In a subsequent study it was reported that among small firms (i.e. those with less than 50 employees), flexibility had resulted in higher absence rates than in larger firms (NUTEK, 1999a: 18).

As to transformation capacity, the study used three indicators: whether the workplace had undertaken an organisational change since 1990, the average age of machinery and equipment and, thirdly, the proportion of employees affected by a large recent investment in software. In the investigation of the first of these, external, sector-specific independent variables were factored into the analysis. Although these variables, particularly workplace size and R & D participation, were shown to be significant, flexibility nevertheless emerged as the 'dominant explanation of transformation capacity' (NUTEK, 1996: 16). No connection was established between flexibility and modernity of capital equipment. However, in the case of the third factor here, the proportion of employees covered by recent software investment, flexibility was seen to be a very important explanation. At workplaces deemed to be flexible the proportion of employees included within new software programmes was identified as being about 13 per cent higher (ibid: 17).

The results of the survey were subsequently put into wider context by comparing them with similar studies undertaken elsewhere in Scandinavia (NUTEK, 1999a). In this latter comparative research flexible organisations were identified in similar fashion and labelled as 'front-runners' whereas non-flexible firms were labelled 'other workplaces'. Overall, in Sweden, Finland and Denmark about 13 per cent of workplaces with 50 employees or more could be categorised as front-runners, whereas in Norway the figure was 5 per cent.

The surveys showed that attitudes towards the changes that follow a reorganisation were very dependent on how actively employees participated in the reorganisation phase. In other words, where higher participation levels are registered, there was a greater degree of support and co-operation by employees in change processes (ibid: 17). The results also showed that in Sweden and Finland, when controlling for other factors, productivity gains were registered from implementing a very flexible work organisation and becoming a front-runner. In Sweden, the productivity of front-runners grew more rapidly than at other workplaces during the 1993-95. However, this result was not as significant as the results on levels of productivity. As to the impact on employment, job totals grew faster among front-runners than other workplaces in Finland and Sweden, although the opposite was true in Denmark. But the report argued:

Since front-runners in Sweden also improved their productivity growth more than other workplaces, the result of faster employment growth is indeed a good result, indicating the competitiveness that a very flexible work organisation can generate (ibid: 18).

In a subsequent report the analysis was taken a step further by looking at the impact of flexibility on employment and growth (NUTEK, 1999b). The hypothesis here was that the benefits that result from introducing a flexible organisation include higher rates of growth since these workplaces are better equipped to meet the greater demands and competition on the market. Among the findings reported here were that flexible workplaces had significantly higher increases in productivity than traditional work organisations in the years 1990-91, 1992-93 and 1993-94. Moreover, between 1993 and 1995 the average rates of growth were identified as being some 3.5 percentage points higher for flexible workplaces than their traditional counterparts. The former registered growth rates of 12.5 per cent whereas the latter registered only 9 per cent growth in comparison.

The report also drew the distinction between workplace change restricted to increased flexibility and workplace change of a more general character not associated with flexibility. For latter such cases of workplace change the impact on productivity was less, but not found to be statistically significant (ibid: 91). On the

other hand, when growth was measured against flexible and non-flexible workplaces respectively in the same period, the higher rates of growth generated by the former were 'clear and verified' (ibid: 92). Further, in looking at levels of productivity for each year between 1990 and 1995 in flexible and traditional organisations, the former enjoyed stronger growth during the latter part of the period. From having a somewhat lower level of productivity, these workplaces made progress and by 1994 and 1995 had registered a significantly higher level of productivity than workplaces with other types of organisations.

The study also explored the nature of the reverse relationship, that between the effect of greater competition on flexibility. Competition was assumed to encourage change towards flexibility as a competitive environment renders it necessary for workplaces to adjust and respond quickly to new market conditions. Such a view presumes that the environment supplies the workplace with information about the possibility and perhaps necessity for organisational transformation as a means of improving productivity and profitability. The study showed that competitiveness, seen as innovative ability, did promote flexibility (NUTEK, 1999a: 16) and that reorganisation processes towards flexibility were weakest among small and independent firms in sectors with limited competition (ibid: 19). However, in international markets the study found only a weak connection between a higher proportion of exports for flexible workplaces compared with those that retained non-flexible forms of work organisation (NUTEK, 1996: 18).

4.2.2 Lean production

Against the background of increased pressure in firms for rationalisation and higher levels of productivity, the Swedish Council for Work Life Research took the initiative in 1999 to commission research on lean organisations. The aim of this was to draw attention to the consequences of the wave of structural changes that had characterised the 1990s and the effect of these on the work environment (Tegsjö et al, 2000). The first step was to arrange for various researchers from different research backgrounds and traditions to map out the extent of lean organisations in Sweden and diffuse existing research findings in three areas: the operational consequences of lean organisations, the health consequences of lean organisations, and change processes in lean organisations.

The research programme defined lean organisations as those having workplaces with ten or more employees that had seen a personnel reduction of at least 10 per cent during the period of investigation in 1995 and 1996. Using this definition, 15,400 workplaces were identified as being 'lean'. The number of people working in lean organisations was estimated at being around half a million. Of these,

around 22 per cent were employed in organisations that had been sold off or had activities contracted out from their former employing organisation (Barklöf, 2000).

In terms of operational consequences, the researchers generally came to a unified view that even though personnel reductions can be an understandable and necessary defensive measure in a crisis situation, any positive consequences are likely to be ephemeral whilst the more longer term consequences are likely to be negative. Moreover, if initial slimming-down processes are continually repeated without certain counter-measures, then the cost reductions can be more then offset by indirect cost increases. Such counter measures include defending and strengthening the developmental capacities of the firm and its employees.

Downsizing of personnel numbers also means a dilution of organisational competencies, and such a loss needs to be compensated. The researchers suggest that many firms have pursued the ideas of lean organisation as a simple strategy to gain competitive advantage through cost leadership in production processes (Porter, 1980). Although usually an effective means of securing quick rises in stock market valuations, such a strategy has nevertheless led to organisational 'emaciation' which was not the true intention behind the ideas of lean enterprise. The metaphor 'lean' should, rather, signify not just the removal of unnecessary fat but also the build up of new muscles in the form of increased competencies and innovative capacities. The objective should not be downsizing, but rightsizing (Tegsjö et al, 2000: 8).

The argument that lean enterprise is not simply downsizing is illustrated by Edström and Sabel (2000) in empirical studies of four Swedish utilities: the Swedish Post Office, Swedish Railways, Swedish Telecom and Swedish Water Board. The conclusion of these researchers from the case studies was that rationalisation through personnel reductions required to be simultaneously offset by individual development processes. Such development work could, for example, engage employees from different operational units and build on individual capacities and competencies. Above all, management had a responsibility to ensure that development processes had a sufficient support structure and that a proper balance was struck between rationalisation and development (ibid: 81). If managed in such a fashion, therefore, lean production need not necessarily be in conflict with the quality of working life for those remaining in employment. The effect on the quality of working life of those displaced from the utilities through lean production was not, however, investigated.

Drawing on the ecological analogies discussed in section 3.4 above in relation to sustainable work systems, a number of writers have also sought to explore the effects of lean organisations on the health of employees and whether there has been a tangible human 'pain barrier' associated with rationalisation. Drawing on existing studies, the researchers drew attention to the higher risks of sickness

arising from imbalances between destructive and reconstructive physiological and psychological processes. Such imbalance was conceptualised as constituting the pain barrier (Barklöf, 2000). Researchers in the programme undertook a secondary analysis of data from a major longitudinal study conducted between 1992 and 1995 on the relationship between psychosocial conditions at work and the physiological risk factors for heart disease. One aspect of this study found empirical support for there being a positive relationship between organisational instability and negatively perceived changes (including cutbacks and downsizing) and working conditions (operationalised as demands on employees, stimulation, control and strain) (Westerlund et al, 2000).

Another study in the programme drew on a secondary analysis of survey data and interviews with around 8,000 employees in various organisations both private and public sectors between 1994 and 1997. The study showed that employees in lean organisations reported the highest level of deterioration in terms of job security and salaries, workload as well as anxiety and conflict arising from the implementation of change. Moreover, people in lean organisations reported a higher level of obstacles in their work and higher levels of physical strain. These trends were particularly high for female employees. On the other hand, the most notable improvements in influence and personal development were also registered in lean organisations. The authors concluded that all organisational change, including the introduction of the ideas associated with lean organisations, were seen by informants as impacting negatively on working conditions compared with more stable contexts (Härenstam et al, 2000).

As stated elsewhere in this book, a logical consequence of the leanness doctrine is that of downsizing. This had a profound impact on Swedish employment patterns in the 1990s; a table is worth referring to here as a means of gaining some appreciation of the extent to which the doctrine was appropriated by Swedish employers (see table 3). However, a rather more nuanced explanation of down-sizing may be needed than that of simply attributing it to the rational adoption of an imported management fashion. In the early 1990s, many employers feared that the government would change the employment protection laws to make it harder to lay off employees and thereby sought to release personnel as an anticipatory measure in the expectation of such a change (Arvedson, 1998).

Table 3: Highest reductions in employment levels in Swedish firms, 1988-1995 (source: Arvedson, 1998, quoted in Gatu, 2003: 37).

Firm	Employment reductions	Percentage change
Telia	16868	-35
Electrolux	15152	-50
SJ	14481	-38
Stora	11592	-46
Trelleborg	10355	-60
BPA	9319	-64
ABB	8864	-25
Posten	8743	-16
Volvo	7243	-13
Modo	6075	-46
NCC	5489	-34
Johnson	4967	-33
Samhall	4630	-14
Skanska	4446	-19
SAS	3431	-33
Nordbanken	3411	-32
Assidomän	3266	-32
SSAB	3200	-25
Scania	3185	-23
SCA	3047	-28
Philips	2920	-82
KF	2904	-12
Vattenfall	2254	-24
Catena	2089	-43
IM	1899	-46
Södra	1753	-40
AGA	1500	-55
Atlas Copco	1466	-35
Bilsped	1420	-22
SEB	1149	-11
Korsnäs	1141	-32
Securitas	1026	-17
Apoteksbolaget	1019	-10
Marabou	990	-31
Danisco	684	-31
Unilever	527	-18
LKAB	433	-12
Handelsbanken	382	-5

4.2.3 The Working Life and Swedish Work Environment Funds

Both the Workplace Development Programme (1982 to 1988) and the LOM Programme (1989 to 1996) referred to in section 1.2.3 put considerable emphasis on the intervention methodologies of action research with a view to promoting social dialogue and democratisation (Bäckström, 1999). Strongly influenced by the ideas of Jürgen Habermas (1984/1987) this work had a strong philosophical and sociological anchorage and typified the distinct approach to working life research in Sweden (Gustavsen, 1998). Such an approach was also a hallmark of much of the work associated with the Working Life Fund and Swedish Work Environment Fund.

Table 4: The AMBIV Project - summary of outcomes in cases published (adapted from AMBIV, 1995b)

Workplace	Change motive	New work organisation	Result
ASSA AB, Eskilstuna	High turnover rates; high levels of repetitive strain injuries; poor supply precision.	Flow production: teams with full assembly responsibility, customer contact and work planning.	Reduced turnover from 50% per year to 3%; improved supply provision from 20% to 99%.
Nokia AB, Motala	High levels of industrial injuries; high costs; poor quality; low effectiveness.	Teams of ten assembling diverse products. New responsibilities included supply quality, materials handling, maintenance, fault finding and reporting and production technology.	Number of strain injuries reduced from 150 per year (1980s) to zero at completion of project. Savings of 15% in indirect time. Increased individual flexibility.
Norwesco AB, Öregrund	Industrial injuries; mutual dissatisfaction over payments system.	Some teamworking in high-volume production. General extension of job content linked to product development.	Steady increase in productivity compared with constant level pre-project. Job enlargement and greater openness.
TVAB, Töcksfors	High turnover and sickness absence; high quality costs; increased customer demands on quality and supply precision; rapid company expansion.	Stimulation of teamwork via organising production around products. Weekly and daily planning in teams; also responsibility for results, quality, supply times and working hours.	Reduction of 80% in sickness absence and 75% in injuries. Improved quality, supply precision and productivity. 80% reduction in throughput times.
Volvo Lastvagnar, Umeverken	Need for creation of greater effectiveness in production; high levels of strain injuries.	Nine independent teams in the press shop each having 10-12 members. Team duties included all direct manual duties as well as some indirect duties. Pace governed by human capacity and time to learn.	Improved psychosocial environment through greater skills development, job enlargement and delegation of responsibility. Inclusion of more indirect duties in the teams. Holistic view of operations and learning.

An evaluation of the Working Life Fund concluded that it is likely that a major wave of change in work organisations occurred during the time period of the fund from 1990 to 1994 and that there were strong indications that such changes were a major reason for considerable productivity increases (Gustavsen et al, 1996: 200). The authors of the evaluation also concluded from around 100 case studies of change that a major difference accounting for successful innovation (and thereby higher productivity levels) was not so much the solution chosen but, rather, how the chosen solution was implemented. The key success factor was that change needed to be concept-driven within a participative actor structure. The latter underscored the point that success depended on anchorage of the change programme to all actors in the work organisation concerned.

The focus of the fund switched as it progressed to that of aligning workplace development (and thus QWL improvements) with productivity. An attempt to evaluate the effect of the workplace development initiatives supported by the fund on productivity was undertaken by Brulin and Nilsson at the National Institute of Working Life. These researchers selected a random sample of 1,500 projects in spring 1994 and sent survey questionnaires to contacts for each. At the same time, a control group was formed of workplaces that had not been supported by the fund. The conclusion was that the fund had fulfilled its aims in that both workplace development and productivity improvements were registered. Change projects had resulted in increased job rotation, greater participation of shop-floor employees in planning, control and participation in the change activities. Key figures on lead-times, throughput times, supply times and retooling times were also discernible as being higher at fund-supported workplaces than the control group (Brulin and Nilsson, 1995).

The Swedish Work Environment Fund also supported various change initiatives. Complete analysis of the work of the fund is impossible in this text; however, the activities of one project can exemplify its work. Arising from joint discussions on the increasing levels of strain injuries at manufacturing workplaces, the Swedish Engineering Employers Confederation and the Swedish Metalworkers Union entered discussions on the topic in a joint working party. This resulted in the establishment of a new joint body, AMBIV, The Joint Committee for Action Against Strain Injuries in Industry. This group set up nine sub-projects at workplaces between 1989 and 1995 where there was local agreement on the desirability to introduce innovative reforms to the work organisation and review payment systems in directions that were of mutual benefit to both sides (AMBIV, 1995a). Reports on five of the projects were published, and the overall summary of these set out in table 4 provides clear evidence of convergence between QWL and competitiveness.

As stated in section 1.2.3, a new programme on learning organisations was set up on a tripartite basis from 1989 to 1996. An express intention of the programme was simultaneously that of 'improving the lot of the worker and promoting business development' (Adler and Docherty, 1998: 327). The latter was seen as particularly important in the context of globalisation, yet individual competence development was seen as an essential prerequisite of this. The programme was action-oriented in the sense that the organisations involved, having initiated change projects themselves, were able to add value through the participation of researchers as sounding boards, advisers or collaborative assistants over a period of several months. Researchers also followed and documented the development processes as they progressed. A selection of case studies published in Docherty (1996) and Anell (1996) illustrated the importance of competencies and human capital in organisational learning processes as well as the need for the participation of all employees and the desirability of a sense of shared identity in an organisation that learns.

In conclusion, it can be seen that although market conditions changed the context of the various change projects supported by the Working Life Fund and Swedish Work Environment Fund, the projects were not solely driven by firms pursuing strategic change for survival and prosperity in the competitive marketplace. Rather, their motivation was attributable to political actors at the level of the state and actors within the research community supported by the trade unions. However, Brulin and Nilsson (1995) argue that had the focus been on productivity improvements at the outset of the Working Life Fund's work, then the impact on productivity would have been higher still. Moreover, case studies of change processes in the manufacturing unions in Huzzard (2000a) showed that union goals of new payments systems to promote learning were not always successfully established. Nevertheless, in many cases the experience of both funds suggests that there are certain prospects for convergence between improvements in the quality of working life and productivity and thereby competitiveness.

4.2.4 Teamworking

The Kalmar plant, opened in 1974, was one of Sweden's first experiments with teamworking. The plant combined a basic series structure with parallel substructures. Production was divided into sections with buffers between each. These enabled workers within a section to vary their work speed independent of the main flow that remained under the control of the centre. The Uddevalla alternative started production in 1987. Here the factory was divided into six parallel, autonomous plants each producing a sixth of the output. Here, under 'dock assembly' whole cars were assembled by groups according to principles

marking a clear break with Taylorism (Sandberg, 1995). SAAB at Malmö also launched a similar experiment.

The aim at Uddevalla, supported by Metall, was the enriching of production, improved quality and productivity under teamworking based on human centredness and theories of holistic learning (Sandberg, 1995: 1). A new emphasis was given to economies of scale: small scale, manual skilled work in final assembly, centralised, large scale and possibly automated operations in materials handling and minor assembly (Berggren, 1989: 189). Above all, the setting up of the experimental plant at Uddevalla was an attempt to put into practice union strategies of 'good work' which reflected a growing concern that wage goals alone were insufficient. A fundamental rethink was necessary of Tayloristic principles of organising work and the unions needed to pursue a strategy proactively to this end.

The fact that Kalmar and Uddevalla fell victim both to the steep recession of the early 1990s and Volvo's corporate political infighting does not render lean production (also termed 'super-Fordism' by Mahon, 1991: 297) as the inevitable trajectory of work organisation into the 21st century and the death knell of more human-centred sociotechnical alternatives. As demonstrated by Berggren (1995), the performance of the Uddevalla plant, even leaving aside humanistic factors, was such that the logic of closure was not at all clear-cut. Berggren's central proposition was that holistic models of teamworking are better suited to promote organisational learning than teamworking under lean production and must therefore contribute more effectively to competitiveness, (Senge, 1990).

A doctoral dissertation by Ahlstrand (2000) focused on the changes in the organisation of the production process that occurred at Volvo Cars and Volvo Trucks in the early 1990s and the implications of these on production workers and supervisors. The changes were directed at the established division of labour - both vertical and horizontal - between different groups of employees: managers, supervisors, white and blue-collar workers. The study was based on an interpretative framework that developed through a constant dialogue between established theories and empirical analyses. Material was compiled from interviews with key actors at the workplace, company documents, and notes from participant observation. At Volvo, managers sought to develop and innovate by joining forces with others, including trade union organisations, to develop joint processes of training and change to broaden and deepen the participation of employees, primarily the assembly workers and supervisors in the context of teamworking.

The author argued that the changes within the teams could be understood against the background of not just Volvo, but the entire industry, attempting to come to terms with the well-known production and personnel problems arising from the Tayloristic system of production. In this sense the innovations concerned

were motivated by a perceived need to improve the quality of working life. But this is far from an exhaustive explanation. The changes were also generated by the companies' need to increase their competitiveness and respond to an increased challenge from Japanese companies. Efficiency in terms of quality, delivery times and the balance sheet was believed to be improved by increased use of Japanese organisational principles and coupling the market with organisation in a novel way. Furthermore, there was an interest on the part of trade unions to form a coalition with management as they, like management, sought to introduce decentralised wage systems as well as increased skills training and job enrichment for their members.

Brulin and Nilsson (1999) in their case studies of teamworking at the Volvo assembly plant at Torslanda, Gothenburg, and SAAB's assembly plant at Trollhättan also reached a similar conclusion. They found that the model of teamworking (or group work as they preferred to call in order to distinguish it from the Toyota model) that has survived at Volvo, the KLE model, retains the assembly line, but involves self-regulating teams working on the line as part of an integrated production system. In addition to direct production (around 80-90 per cent of the time), teamwork involves 10-20 per cent of time on indirect duties such as everyday problem solving, planning, contact with sub-contractors and material supply. KLE also attempts to integrate production with product development thereby enabling team members to be involved in change and development work at the plant.

The model does not of course share the job closure aspects (Littler and Salaman, 1984) and holistic features of the sociotechnical designs. On the other hand, the relative autonomy of the teams under KLE is in clear contrast with the Toyota model of teamworking under lean production. Brulin and Nilsson conclude that the latest models of teamworking in vehicle manufacture do suggest that it is possible to create job development for operators and break away from the strict Tayloristic heritage of separating planning from execution, although this is less clear-cut at Trollhättan. Accordingly, sociotechnical design is not necessarily a precondition for developing, fulfilling jobs consistent with improvements with QWL. Neverthe-less, Hart (1993) adds a note of caution by concluding that teams in Sweden today are 'not autonomous as such but form an integrated part of decentralised planning and production systems.' Moreover, moves to teamworking have been identified as facilitating rationalisation and thereby job loss and union membership reductions (Berggren and Brulin, 1997) as well as the intensification of work (Huzzard, 2000a).

Further indicators on the extent to which teamworking can usher in convergence between QWL and performance can be found in the work of Kock (2002). Kock, through case studies of three Swedish manufacturing companies, sought to

investigate the significance of teamworking for the learning conditions and activities of team members. In a telecommunications company, operatives had negative experiences of teamwork as work and intensity was high and participation was negligible. In an engineering company the experience was more positive: operatives saw the pace of work as acceptable and participation was significant. Finally, the experience from a mechanical assembly plant was on balance positive as, despite a high work tempo, participation was seen as on the increase. In other words, it is difficult to make generalisable conclusions about the role of teamworking and convergence: many contingent factors have an impact including external context, content and learning potential of the duties, team design, the influence of change agents, organisational climate and the length of previous experience of teamwork amongst the operatives.

4.2.5 Continuous improvement programmes

There are no aggregated studies on the extent of continuous improvement programmes in Sweden and it is difficult to make generalised statements on their scope and overall effects. Nilsson (1999a: 17), however, refers to sources at the Swedish Employers Confederation SAF who state that around 25 per cent of affiliated firms have continuous improvement programmes somewhere in the organisation if not totally throughout it. The point is also made by Nilsson that continuous improvement initiatives in Sweden have generally involved a far higher degree of influence on the change processes resulting from identified improvements than in the 'kaizen' variant in Japanese firms. This is attributed to the greater degree of both horizontal and vertical integration of tasks under Swedish variants of teamworking, the high competence levels of Swedish workers and the proactive role of local union organisations in workplace change compared with the Japanese concept.

The early forms of continuous improvement in the mid-1980s took the form quality circles. These could not be deemed a success as they were opposed by the unions who saw them as a potential vehicle for the ideological control of their members against the interests of the union (Nilsson, 1999a: 18). However, with the switch to a greater customer focus and redesigned production, local managers began to see the advantages of integrating continuous improvement activities within the work of the teams rather than being the sole concern of production leaders and technicians. Nilsson (1999a: 20) illustrates an example of a particularly well-developed programme at Scania in Södertälje where continuous improvement is an integral part of team routines and is seen partly as a means for raising productivity and partly a means for enhancing the individual competencies of team

members and the prospects for advancement to the next rung on a competence ladder.

As stated in section 3.1.3, a research team within the Programme for Learning Organisations undertook studies of continuous improvement at the National Institute for Working Life (Hart et al, 1996). The team conducted a survey through questionnaires, case studies and action research. Following a major campaign by the Swedish Employers Confederation (SAF) to promote the introduction of continuous improvement programmes, the case studies were carried out at locations that included SAAB Automobiles, ABB and Ericsson Radio Systems all of which were ex-ante considered to be 'early adopters'. It was concluded that systematic improvement activities are of considerable significance to firms and that technical, economic *and social* results were better than in firms that had eschewed such activities. In the words of the researchers:

> Continuous improvements are therefore associated with successful development work. Improvement activities that are developed systematically thereby appear to be profitable and also provide increased prospects for accomplishing work relations that are of benefit to employees (ibid: 89)

It will also be recalled from the discussion on the quality of working life in section 2.1 that a distinctive feature of Scandinavian variants of sociotechnical systems design is the idea that workers should not only benefit from a wider and enriched job content, but should also participate in and influence developmental change processes in the firm. The Swedish variants of continuous improvement identified by Hart et al. would appear to indicate that such aspirations have in several cases have been met:

> We also discern a tendency that firms that have developed an organic improvement system also succeed in managing relatively extensive radical renewal within an overall framework of a process of ongoing development. The establishment of an organic improvement system enables a rapid and wide-ranging dialogue across the entire firm. Problem solving and thinking within a context of improvement activities are also deployable in more overarching strategic contexts (op cit.)

Having said this, the implementation elsewhere of programmes resembling those at Scania is patchy. Some versions appear to bear a closer resemblance to the Japanese model. A more sceptical account of continuous improvement at SAAB Automobiles is offered by Stymne (1996: 80) who states that such activities at the plant, although successful (an increase was registered in suggested improvements

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from 1,000 in 1988 to 22,000 in 1994), nevertheless entail far less involvement of team members in the change processes that they generate. The absence of true participation is perhaps surprising given the conclusions of Axelsson and Bergman (1999) and Berger (1999) that this, together with employee motivation, is a key determinant of competitiveness and developmental potential in firms.

Nilsson (1999a) attributes the problems of diffusing the Swedish alternative to kaizen to a number of factors: the character of the production process, the qualifications of the operators and the lack of time and physical space for team members to convene reflective meetings of more Tayloristic workplaces. Despite these problems, Nilsson concludes that the Swedish variant of continuous improvement has enormous potential for increasing efficiency in production processes, increasing orders and thereby competitiveness as well as boosting the individual learning of team members and thus convergence with the quality of working life. The point should also be made that working life scholars, often adopting action research methodologies, have sought to introduce the principles of continuous improvement in their endeavours to set up research programmes aimed at achieving sustainable work systems.

4.2.6 Technological change and HRM

Hörte and Lindberg (1994) sought to investigate the performance effects of technological development and human resource management in Swedish firms using Advanced Manufacturing Technology such as computer integrated manufacturing. The research acknowledged that in technological approaches to process development, technology was introduced primarily to minimise the need for personnel, whereas the aim of (soft) HRM approaches was, rather, to use the workforce to gain competitive advantage through its skills and motivation. The latter approach still saw the need for technology, but as a tool at the disposal of workers rather than vice versa.

The authors, at the outset of the study, observed that 'the emphasis on technology in Swedish industry has decreased in the last few years, and … there is an increased emphasis on organisational and human issues…' (Hörte and Lindberg, 1994: 249). Given this, their aim was to show which of the two approaches contributed most to performance, the latter concept being operationalised along six measures. In total, 70 firms in Sweden were surveyed between 1987 and 1992 and a number of hypotheses were drawn up based on a study at MIT called 'The International Motor Vehicle Programme' which demonstrated that HRM was vital for productivity and quality performance.

An analysis of the data showed some support for the hypothesis that the greater the emphasis on HRM, the higher is the performance. A larger proportion of firms

relying on HRM-based approaches to development reported a substantial decrease in unit costs, absenteeism, personnel turnover and productivity increases during the period compared to companies less reliant on such approaches. The hypothesis was not supported, however, in the case of lead-time reduction and quality improvements. A second hypothesis that technological approaches to development led to higher performance levels than non-technological approaches was supported for only two performance criteria, namely cost reduction and reduced personnel turnover. A third hypothesis was also tested that performance was enhanced when HRM and technological approaches were combined and this suggested a positive relationship on the measures of cost reduction and productivity increases. The overall conclusion from the study, however, was that there was considerable support for the proposition that HRM approaches had a positive effect on performance, but there was no strong or consistent support that technological approaches did likewise. These findings would therefore suggest that there is some evidence of convergence between QWL and performance enhancement that contributes to competitiveness where HRM-based approaches to workplace change are preferred to approaches driven by technological innovation.

4.2.7 Rewards systems

Although both the unions and employers in Sweden have seen the importance of skills and competencies in the maintenance of competitive advantage, there is less consensus, however, between them on the issue of whether and how competency and learning should be rewarded. Metall reports that only 10 per cent of its members enjoy what it sees as its vision of 'good work' (Jansson, 1998), including payments systems that reflect and reward competence development. A particular obstacle in the realisation of the policy has been detected as employer attitudes towards competence-related-pay. Huzzard (2000a), for example, reported in case studies of union change at the workplace that successful attempts by local union clubs to develop the labour process did not necessarily result in new agreements on competence-related pay due to management resistance.

Although we have sparse aggregate data on the application of various rewards systems across the Swedish economy, the Swedish Metalworkers Union undertook a survey of the rewards systems covering its members in 1998. This survey showed that nearly all payments systems consisted of a basic element and 56 per cent of union members had elements whereby individuals were rewarded according to the duties they performed, usually on some agreed scale or ladder. In addition, some form of individual payments covered around 80 per cent of members. The data also showed that there had been increasing trends towards the adoption of systems that

catered for some form of upward progression through job categories and thereby personal development (Nilsson, 2000: 7).

What we know about new payments systems can be supplemented by case study data. For example, useful illustrations of current practice are provided in the case studies of the Volvo and SAAB assembly plants at Torslanda and Trollhättan respectively by Brulin and Nilsson (1999) referred to previously. At Torslanda the basic idea is for a ladder of development that is set by the different tasks that an operator can actually execute. In other words, there is an explicit linkage to competence levels. This is augmented by a team based bonus related to quality and an individual supplement determined by the production leader on the basis of the operator's level of activity, willingness to co-operate, take initiatives and so on. At Trollhättan the payments system is also stepped on the principle of more tasks, more pay. This, however, is less developed than at Torslanda and is seen by local union actors as being rather ineffective as most workers tend to stagnate halfway up the ladder.

Both the Torslanda and the Trollhättan models can thus be seen as giving signals to production workers in the teams to accept job enlargement and thereby develop competencies as well as take new initiatives that can lead to quantitative and qualitative improvements in performance. Similar conclusions can be drawn from the case studies reported in Huzzard (2000a) on developments at Alfa Laval Thermal (Lund) and Volvo Trucks (Umeå). The position, however, is not uniform as testified by the many failed attempts to develop payments systems that promote personal development. One such example is that of Assa (Eskilstuna) also reported in Huzzard (2000a). Nevertheless, although there is evidence of employer resistance to competence related pay, a number of cases are discernible where payments systems are enabling some convergence between QWL and performance.

4.2.8 Work intensity

Although research has clearly shown that improvements in aspects of the quality of working life are compatible with improved performance, there is also evidence of a negative relationship between competitiveness and QWL. Research has shown that productivity has increased markedly in Swedish industry in the 1990s. Growth rates have increased accordingly, and in the latter part of the decade unemployment had started to fall. Moreover, a deficit in the public finances of 200 billion SEK in 1993-94 had been transformed into a surplus by the end of the decade (Barklöf, 2000). On the other hand, the level of long-term sickness and industrial injuries has increased. Barklöf (ibid.) also reports increases in the number of cases of personnel burnout as well as organisational activities severely stretched due to lack of staff. It

could thus be stated that the trend to downsizing and leanness has frequently resulted in near organisational demise.

Westerlund et al (2000), in a summary of a number of studies on the impact of organisational change on employee health in various sectors, have shown that negatively perceived changes such as programmes demanding cutbacks and closures are generally associated with worse working conditions and lower indices of physiological well-being. The most apparent effects are those on blood cholesterol levels that clearly increase the risks of heart disease. On the other hand, the study qualified its overall summary by stating that although moves to towards lean organisation involved fewer employees and therefore an increased intensity in the pace and complexity of work for those employees who remained, there may be positive consequences if change programmes are implemented sensitively and attempts at providing greater empowerment, job enlargement and competence development are genuinely proceeded with.

Research has shown that many activities in the public sector have increasingly been exposed to the ideas, techniques and discourses of management more traditionally associated with the private sector. In general, such moves can be characterised as an attempt to open up the public sector to the 'discipline' of competition. For example, managers in local authorities have sought to introduce internal markets (Müllern and Östergren 1995) and managers in the health sector have introduced a number of initiatives such as provider/purchaser models, profit centres and downsizing (Blomquist and Packendorff, 1998; Wallenberg, 2000). Moreover, the new management ideas have been put into practice against a backdrop of significant personnel reductions in the context of drastic public expenditure cuts. Statistical surveys reveal that the number of employees in the public sector in Sweden halved during the 1990s (Palm, 2000). The public sector has thus been subject to radical rationalisation, job intensity and leanness (Wikman et al, 1998).

Focusing on the health sector, Wallenberg (2000) detects an international trend whereby traditional administrative solutions are being superseded by those based on market-oriented principles. However, in surveying the research on the effects of greater competition and marketisation in the sector on working conditions, the author concluded that no studies had been undertaken that investigated the impact of competition on health care personnel. It was plausible that such changes had a positive impact in that they generated a greater awareness on matters of service quality, resource development and a stronger sense of commitment to one's own unit. On the other hand, increased stress was likely to be a consequence of the change processes undertaken and increased workloads were a likely consequence of personnel reductions (Palm, 2000).

In a subsequent project, Wallenberg (2001) sought to investigate the implications of competition for working life in the health care sector. Two basic hypotheses formed the point of departure: first, that competition had no consequences on working life, and second that competition had consequences and that these could be positive or negative respectively. A preliminary study was published in 2001 based on a questionnaire (n=1200) and 25 interviews with health care personnel in two health authorities – one that had been subject to experiments with competition (and a purchaser-provider split) and a second that continued to be run on traditional lines, that is, through a single provider guided by strong political leadership. The study showed support for the second hypothesis that competition could have positive implications for employees through increased local independence, more creative and adaptive problem solving and potentials for development on-the-job. In contrast to many of the studies reported on here, therefore, Wallenberg has shown that organisational change driven by performance motives may converge with QWL improvements.

Further deterioration in QWL, however, is evidenced by the increase in temporary organisational forms and projectification in the Swedish labour market with the consequential effects of increased work overload and stress (Sörensen and Grimsmo, 1993). The increased uncertainty and reduced job security of the newly emergent labour market of temporary and scattered work practices have clearly had a negative impact on psychological well-being (Barklöf, 2000; Sverke, et al, 2000; Westerlund et al, 2000). Paradoxically, this trend of increased intensity in both the pace and complexity of work has occurred at the same time as favourable macroeconomic trends have been discerned. The question, therefore, is the extent to which such positive economic developments are in fact sustainable.

5. Conclusions

The central argument on which this book is based is that we need a new language for conceptualising actionable knowledge that involves a discursive rehabilitation of the quality of working life (QWL). But in contrast to earlier work on QWL, such a discourse cannot easily be detached from business dynamics (Adler and Docherty, 1998). Accordingly, sustainable organisational change requires a convergence between QWL, however defined, and competitiveness. Considerable evidence is presented here to refute the scepticism of certain critics who doubt that convergence is possible.

On the domestic front, there is evidence to suggest that certain firms have sought to forge new (post-Tayloristic) relationships with their workforces by adopting 'soft' HRM techniques such as striving for shared values and new techniques of participation (Beckerus and Edström, 1988). Moreover, firms in manufacturing and organisations elsewhere have introduced a considerable array of innovations both at the organisational level and at a level that is more focused on the management and control of work. In many respects, the changes have improved the quality of working life compared with the previous regimes of repetitive tasks, low autonomy, and physically dangerous work environments associated with Fordism. Employers have, in many cases, also seen such moves as necessary as a means for producing to meet the demands of changing and increasingly diversifying consumer markets and remaining competitive within them.

An overall assessment of organisational innovations is usefully facilitated by distinguishing between those that have been primarily motivated as means for improved competitive advantage and those that have been primarily motivated by a search for improving the quality of working life. In the case of the former, the main stakeholders driving change in the private sector have been the top management of firms faced with pressures from the financial markets for increased shareholder value, whereas in the case of the latter the main stakeholders have been the trade unions, research community and, in some cases, actors within the state including politicians. It should be said, however, that in the tight labour market of the late 1980s certain top managers also briefly sought to improve the quality of working life as a necessary means for easing labour supply bottlenecks.

What can we say, then, about the prospects for convergence between QWL and competitiveness? The various studies referred to in this literature survey show that where innovations are motivated primarily by an improvement in QWL, such improvement can lead to improved performance and competitiveness thereby supporting the basic stance of those advocating a 'soft' approach to strategic human resource management. In contrast, however, innovations that are primarily

motivated by the need to improve performance and competitiveness through cost reductions either have no relationship or have a tendency to impact negatively on QWL – the latter is the case with the doctrine of leanness that has been observed as becoming prominent in the 1990s (Bäckström, 1999; see also Brödner and Forslin, 2002). The study of Wallenberg (2001) can be seen to be demonstrative of an exception to this trend – here the motivation is to seek performance improvements through increasing the innovative capacity of the work system by allowing greater autonomy and unlocking the creative potential of employees. The relationship between competitiveness and QWL is thus positive in this case.

Despite the evidence that firms can reap considerable performance advantages through attempts at increasing the quality of working life through greater job enlargement, job enrichment, competence development and delegated participation, there is also considerable evidence that some firms are actually eschewing such approaches in deference to short-run pressure for immediate results on the 'bottom-line' of the profit and loss account and rapid increases in stock market valuation. In the United States, Levine (1997: 97) has noted that:

> Investments in high involvement management are not properly valued by the stock market, leading to systematic under investment in these assets.

The evidence suggests that something similar has been happening in Sweden in the final decade of the millennium. Bäckström (1999) has coined the term 'the ideology of rationalisation' to characterise approaches to organisational innovation and change throughout the period. The many examples of cases where 'good work' and 'productive work' were feasibly combined in the latter 1980s appear to have given way in many respects to a different management logic. In the words of Barklöf (2000: 8):

> Now, at the beginning of the 2000s, it is apparent that working life relations did not at all become so good or developmental, in any event not generally, and we thus have to ask the question 'what went wrong?'

Like Levine in the US, Barklöf concludes that personnel cutbacks in Sweden in the name of rationalisation and leaner production have been based on short-term financial motives rather than strategies for organisational, personnel or operational development.

There is considerable evidence whereby management attempts at improving competitiveness have impacted negatively on QWL. On the other hand, there is little or no evidence of cases whereby innovations primarily motivated by improving QWL have been detrimental to performance and thereby competitive-

ness. Perhaps this is due to an unwillingness of the research community to embark on such work or, alternatively, is a reflection of the exercise of managerial prerogative to ensure that such innovations are not experimented with. Whichever is closer to the truth, the fact remains that research in the area is fragmented and incomplete.

The substantial changes in the organisation of work in the latter part of the twentieth century in Sweden have in some respects led to improvements in the quality of working life. However, the 1990s saw an increasing level of stress, burnout and work intensification even in contexts of increased consumer demand as well as increased job insecurity (Bäckström, 1999; Barklöf, 2000; Palm, 2000). The doctrine of leanness appeared to take hold. Certain innovations such as call centres have actually ushered in a return to Taylorism rather than finally putting its ghost to rest. Furthermore, concessions by employers on granting greater autonomy and accepting partnership arrangements presented in terms of equality between stakeholders in pursuit of win-win solutions in a benign, pluralistic balancing act may in fact be deceptive. Such moves have been described by Brulin and Nilsson (1991) as a transition from societal corporatism to managerial corporatism. In such a version, firms, whilst espousing consensus, are in fact using innovations in work organisation as vehicles for mobilising employee loyalty through new forms of cultural and psychological control.

Figure 3: The high road and the low road – two contrasting paths of development.

High road organisations	Low road organisations
QWL-competitiveness convergence	QWL-competitiveness divergence
Long term decision making horizons	Short term decision making horizons
Dynamic performance measures	Static performance measures
Sustainable work systems	Intensive work systems

Accordingly, there appear to be two distinct discourses on organisational development, each positing two quite distinct options for the pursuit of competitiveness, the 'low road' and the 'high road'. Low road solutions focus on the traditional options in work organisation of cost leadership, flexibility, speed and quality. These solutions can be contrasted with high road solutions whereby organisational spaces are created that liberate human creativity in ways that achieve a dynamic balance between product and process innovation. As argued here, the evidence suggests that low road solutions, epitomised by leanness, short

term thinking and static performance measures involve a negative relationship between QWL and competitiveness whereas high road solutions based on longer term thinking and dynamic performance measures suggest a positive one. Given this, we can summarise the high road - low road contrasts as in figure 3.

From an IWS/SWS perspective, it is not just Taylorism that entails an imbalance between consuming resources and regenerating them. As pointed out in this paper and elsewhere (Docherty et al, 2002b), such imbalances appear to remain in many post-bureaucratic organisations. Human resources are consumed in bureaucracies by engulfing people in tightly defined roles and rules; but the removal of these to leave boundaryless, undefined jobs does not seem to work well either. The problem, rather, is one of not knowing when the job is complete or when it has been performed to an adequate standard. Accordingly, further research is called for on sustainable work that can be said to be commensurate with QWL. In turn, the concept of QWL itself is in need of further refinement.

A somewhat different interpretation of recent events is that attempts to improve the quality of working life have been based on conceptually flawed models. The sociotechnical approach, for example, has been criticised by Adler and Docherty (1998) for failing to pay attention to the creation of customer value, the external business environment or the dynamics of the sociotechnical system. In response, these authors suggest a shift from sociotechnical systems to what they call sociotechnical business systems that take greater account of business purpose, context and dynamics. Such an approach puts greater emphasis on the learning and developmental capabilities of the system in a context of ongoing environmental change and shifts the emphasis away from the closed systems assumptions that have generally pervaded STS thinking.

Whether and how a conceptual switch to sociotechnical business systems might impact on practice is unclear. The ideas of the IWS/SWS model (Kira, 2000), however, with its explicit emphasis on outcomes that benefit all stakeholders rather than privileging the interests of an elite group, could hold out the prospect of offering possibilities for convergence. In an early attempt to sketch out the conceptual contours of sustainability, Backström et al (2002) have suggested that sustainable work systems could be seen as composed of wholes or 'holons' whereby each stakeholder not only has a legitimate existence, but also exists and thrives in the context of relationships with others. Such others include not only other organisational stakeholders, but also external stakeholders such as the family and the neighbourhood.

It is accordingly argued here that stakeholder convergence, together with a dynamic approach to performance measures and longer-term thinking, is a prerequisite of organisational sustainability and the 'high road' trajectory of organisational development. It should be pointed out, however, that an explicit

policy of convergence inevitably involves a question of values in that the interests and perspectives of different stakeholders are seen, by all, as equally legitimate. No one set of stakeholders has a privileged claim on organisational resources or objectives.

The case for the rehabilitation of QWL should see the concept neither as an ideal in its own right nor as a potential performance outcome of the 'correct' prescriptive blueprint. Rather, QWL should be explored as a discursive tool for participative job redesign that is sustainable when there is convergence with competitiveness. It is probably more useful to conceptualise performance in terms of competitiveness than efficiency or cost leadership, as the latter are rarely bases for sustainable advantage in the longer run. The nature of contemporary business dynamics is such, however, that the focus of competitive advantage should be on the capacity of the organisation to innovate rather than finding cost leadership solutions (Porter, 1980). In increasingly fierce global markets there is continuous pressure to deliver faster and better products and services at lower prices. But these are no longer seen as sufficient means for adding value; they are mere 'entrance factors' to the competitive game and offer no guarantee of winning it. Rather, sustainable organisational change needs to embrace high road solutions that focus on liberating human creativity and facilitating innovation.

There is, however, a need to distinguish between different types of innovation. Moreover, as the research on organisational innovations suggests, the two contrasting low road and high road options imply radically different approaches to the organisation of work. Some innovations can of course be motivated by low road options such as rationalisation and downsizing. Such innovations are likely to reduce the demand for labour as well as the quality of working life. On the other hand, high road innovation strategies geared towards the development of new products, markets or processes are more likely to have the opposite effect. Such development in basic aspects of the business, moreover, occurs in parallel with individual development of employees. The type of work organisation associated with high road innovation, as opposed to the low road alternative, is therefore likely to consist of more functional flexibility including job enlargement and job enrichment as well as greater autonomy and empowerment. In other words, high road options potentially entail the convergence between improved competitiveness and improvements in the quality of working life.

By way of conclusion we can state that the price of competitiveness in Sweden has been an intensification in the pace and complexity of work. The challenge, therefore, is to design research activities with the aim of generating actionable knowledge for the development of sustainable work systems (Docherty et al, 2002a). At the heart of the idea of sustainability is that competitiveness cannot be sought at the expense of an individual's well-being, and the flexibility of a work

system cannot be based on the job insecurity of its employees. Moreover, organisational sustainability should not be compromised when trying to achieve individual sustainability. Processes of stakeholder interaction within a sustainable work system involve dialogue aimed at searching for optimal situations from the point of view of all stakeholders. The simultaneous presence of both order and chaos calls for a balance between tight and loose coupling and learning systems that support both the former and the latter.

Many researchers argue that action research interventions aimed at workplace development in Europe have been most successful where they were concept-driven and, above all, that the 'how' (process) of change has been of more significance than the 'what' (content) of change (Gustavsen et al, 1996). Research in the 1990s emphasised network building rather than field experiments (Gustavsen, 1998). But the challenge now is to enter a new phase where networks and other tools are created that enable workplace development in the new context of the knowledge-based economy and the business focus on high value markets. Above all, network building should be a means for facilitating inter-organisational learning not just on the content of new workplace innovations, but also, and probably more importantly, learning on the processes of how to learn from others.

The quality of working life concept disappeared from organisational discourses in the middle of the 1980s as a neo-liberal ascendancy sought to usher in a period of employer prerogative. Given that the competitiveness of Swedish organisations now rests upon harnessing people's competencies as the driver of innovation, it is time to develop new methodologies for workplace intervention by rehabilitating and reinventing QWL as a central plank in the high road strategy.

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