

NEW FORMS OF WORK ORGANISATION

***THE BENEFITS AND IMPACT
ON
PERFORMANCE***

**Thematic Paper
Presented to
DG Employment & Social Affairs**

By

The European Work Organisation Network (EWON)

Contributors:

S.P. Gavroglou, National Labour Institute, Greece

C. Ford & P. Totterdill, ACAS & NTU, United Kingdom

P. Savage, IPC, Ireland

S. Sacquepee, ANACT, France

**Prepared & Edited by
Pat Savage**

April 2001

1. New Forms of Work Organisation (NFWO) – From Debate to Action

Adoption of NFWO in Europe - Macro Developments & Background

Four major economic blocs dominate the global economy in the developed world today, the United States, Japan, Europe and Asia. Europe is undergoing a major process of transformation as reflected in societal changes, economic integration, deregulation, growing consumerism, labour market constraints and the adoption of information and communications technologies (ICT). Allied to the worldwide movement towards free market economics these changes have profound implications for enterprises and employments operating traditional systems of work organisation that are generally deemed to be inflexible and less productive. Global economic investment trends have influenced a shift towards knowledge intensive employment and flexible systems of production and service delivery, best demonstrated by the so-called ‘new economy’ organisations. Notwithstanding the importance of the growing new economy and services sectors, the greater mass of European economic and employment activity is dominated by traditional economy manufacturing industries and the agri/food industry sector. Many Member State public service organisations and utilities also operate traditional systems of work organisation. New forms of work organisation (NFWO) are emerging as a key element in developing the innovatory and productive capacity of traditional organisations. NFWO initiatives are being undertaken by many individual enterprises and organisations, but most practitioners would agree that the overall pace of work organisation reform is disappointingly slow. Failure to adapt more quickly to new and more effective forms of work organisation represents a significant threat to productivity; competitiveness and job/wealth creation in Europe and can seriously undermine efforts to achieve higher non-inflationary growth rates.

Investing in the Reform of Work Organisation

Europe’s need to further improve employment and competitiveness has resulted in renewed efforts by the Commission of the European Communities and the Member States to create conditions conducive to modernising the organisation of work. In this regard ongoing investment by the Commission, governments and employers in developing human capital and reforming work organisation is essential.

The Commission’s Green Paper in 1997 – ‘Partnership for a New Organisation of Work’¹ made a significant contribution to stimulating a European wide debate and gave rise to a range of related initiatives and research activities. The Green Paper encapsulated a key priority for a more competitive Europe – “improving employment and competitiveness through a better organisation of work at the workplace, based on high skills, high trust and high quality”. The Green Paper acknowledged the crucial role of the Social Partners at firm, sectoral, national and European levels, and pointed to the importance of building a **partnership** for a new organisation of work. It is widely accepted that new forms of work organisation (NFWO) significantly help to improve the performance of companies. It is also generally accepted that such new systems provide employees with greater job security and enhanced job satisfaction while incorporating extensive levels of employee involvement in decision-making. Partnership approaches to NFWO can incorporate substantial investment in the development of people skills in the workplace leading to organisational flexibility, with up-skilled workers better adopting and applying new technologies.

¹European Commission Green Paper ‘Partnership for a New Organisation of Work’ 1997

This view was largely confirmed in consultations on the Green Paper with Social Partners and key interest groups conducted by the Commission across the Member States. Following that consultation process the Commission published an official Communication² emphasising the need for a positive and co-operative approach to CHANGE. This communication sought to further stimulate debate among the key actors and strengthen partnership approaches to work organisation. It also invited Europe's Social Partners at all levels to develop frameworks for action. The European wide debate, led by the Commission has clearly pointed to the need for further actions at the workplace level across the Member States. In this regard, the Commission is currently implementing innovative measures under Article 6 of the European Social Fund (ESF). These measures outlined in a recent communication³ are in support of the European Employment Strategy and focus on adaptation to the New Economy within the framework of Social Dialogue. The Article 6 measures will directly support work undertaken in the following thematic fields:

- ❑ *Innovative approaches to anticipation of economic and social change*
- ❑ *Innovative approaches to the use of IS tools in the framework of social dialogue*
- ❑ *New approaches to corporate social responsibility*
- ❑ ***Innovative approaches to the modernisation of work***
- ❑ *Innovative approaches to promote lifelong learning*

2. Why We Must Develop and Adapt NFWO

Traditional Work Organisations – Scope for NFWO

Europe cannot succeed in improving the living standards, employment opportunities and quality of working life for its peoples whilst many of its organisations maintain traditional systems of work organisation⁴ more suited to the Cold War era of mass production and low skills/pay. Most public policy makers, at all levels, would undoubtedly agree with this analysis. Yet many of our traditional organisations embrace low skill specialisation, standardised production processes with narrow occupational bands, and retain outmoded work practices reminiscent of the industrial revolution. Many of these organisations are prisoners of a turbulent past characterised by adversarial industrial relations and well organised resistance to Change which can occur from the boardroom to the shop floor. We believe considerable scope exists in such companies to develop and embrace NFWO utilising partnership approaches.

Focus on Inward Investment

Europe competes on world markets for mobile international investment and its Member States have much to gain economically and socially from attracting a greater share of the inward investment market. In global terms the most desirable inward investment tends to favour markets which offer well educated technically skilled workers, flexible and innovatory systems of work organisation, business friendly commercial environments and of course consumers. Technology based investment complements and fits the high skills, high quality, high trust and high reward

² European Commission Communication 'Modernising the organisation of work' 1998

³ European Commission Communication COM (2000) 894 Brussels 12.01.2001

⁴ Old work organisation systems and principles pioneered by F.W. Taylor have inherent deficiencies regarding performance requirements of today's enterprises – the scientific management approach fails to motivate workers, retards organisational flexibility, and are unresponsive to today's market/customer demands and sociotechnical change.

aspirations inherent in the European organisational model we aspire to. Adapting successfully to NFWO can significantly enhance Europe's ability to gain a greater share of global investment.

Workforce Europe – Balancing Work and Family life

Member State governments, large corporations and SME's are facing increasing demands for family friendly and flexible work arrangements and better more cost effective public services. Labour supply constraints and the retention of key employees have highlighted the need to develop more flexible systems of work organisation. Governments and Social Partners will be required to take the lead in providing support to workers in balancing working and family life. The Irish government together with its Social Partners has recently launched a comprehensive website⁵ which addresses issues such as family friendly working arrangements and working time.

3. Concern at Lack of Progress in Adopting NFWO

While workplace level practitioners can observe at first hand the benefits of NFWO a limited body of research/studies exists on the prevalence of NFWO and their impact on performance, productivity and competitiveness. Few surveys have actually been designed and implemented to ascertain cross – country comparisons of NFWO elements. The EPOC study⁶ which focussed on direct employee participation across ten European countries found that a very considerable gap exists between rhetoric and reality as far as NFWO are concerned. Controversially, the study states, “The rhetoric suggests that NFWO are widespread and inevitable. The reality is that some of even the most basic practices associated with these forms are absent in the majority of EU workplaces”

While we would acknowledge that some organisations have successfully introduced NFWO and others are striving to do so under intense competitive pressures, we can fully identify with this stark finding of the study. In a national survey⁷ of UK workplaces 65% of managers reported that teams are used within their workplaces. But only 5% said that team members work together, have responsibility for specific products or services and jointly decide how work is done⁸. A relatively recent DG Employment & Social Affairs report⁹ concludes that European companies have made only limited progress in adapting NFWO.

The Commission and Member States have every reason to be concerned at the lack of progress reported and urgently need to support initiatives to promote adoption of NFWO and help people at organisational level overcome the obstacles. In this regard the ESF Article 6 initiative by the Commission is both timely and necessary.

⁵ Irish Government and Social Partners *Family Friendly Website* Address: www.FamilyFriendly.ie

⁶ Sisson K. *'Direct Participation and the Modernisation of Work Organisation'* EPOC European Foundation for the Improvement of Living and Working Conditions, 2000

⁷ 1998 UK Workplace Employee Relations Survey

⁸ This is very disappointing as these are the key characteristics of semi-autonomous teams usually found in leading edge companies.

⁹ European Commission *'Government support programmes for new forms of work organisation'* 2000

4. Assessing and Measuring the Benefits NFWO

The Limitations

With reference to the limited volume of hard data available on the benefits deriving from NFWO, this clearly indicates that the subject is still relatively new in European Policy development and research terms. It also confirms certain difficulties associated with the collection of performance data from enterprises, many of whom are understandably reluctant to disclose detailed performance results. Despite the advances made in developing ‘Benchmarking’ models there are no estimates for performance of NFWO on an economy or sector wide basis. Most of the hard data is limited to the company or enterprise level.

Some of the following methodology issues are worthy of consideration, and highlight the differences across the Member States.

- ❑ Many different definitions of NFWO exist and it is therefore difficult if not impossible to compare company - level performance studies. This problem is exacerbated when definitions are not simply in variance but in opposition. There are for example real difficulties for many practitioners in reconciling ‘Lean Production’ with the concept of the ‘High Trust, High Performance’ organisation.
- ❑ Some of the studies available focus on the performance impact of a single ‘new’ work practice change, tool/technique or initiative rather than a holistic system of new working methods and processes or change.
- ❑ While the impact of short term cost reduction measures are more readily quantified (and often preferred for this very reason), measurement of the benefits that flow from broader organisational change programmes must allow for a period of consolidation and refinement.
- ❑ Key performance indicators (KPI’s) usually vary between studies in different organisations. Studies can range from impact on productivity, cost competitiveness, labour relations, joint problem solving, waste management, quality, innovatory capacity, market-place performance, competitive advantage to customer satisfaction etc.
- ❑ Many variables are usually present when seeking to measure and compare the impact of NFWO between organisations.

The lack of a uniform set of commonly shared definitions and terminology relating to NFWO has significantly hindered comparability studies on performance and benefits. Further definitional problems occur between European and North American experts on the subject. The European Work Organisation Network (EWON)¹⁰ addressed this difficulty in 1999 by adopting a glossary of terms and definitions¹¹ for Work Organisation. These definitions have contributed to a shared understanding of the terms and language of NFWO between EWON’s members and institutions.

¹⁰ The European Work Organisation Network (EWON) comprises a network of national NFWO experts drawn from government and Social Partner institutions and was established by the Commission’s DGV Employment & Social Affairs Directorate in 1997.

Within the scientific literature definition problems continue to re-occur and this issue needs to be addressed by the Commission and public policy makers in concert with academics, researchers and workplace practitioners.

Definition of New Work Organisation adopted by EWON

The European Work Organisation Network (EWON) adopted the following definition from the New Work Organisation in Ireland Programme¹²:

New Work Organisation is the application of principles and practices within enterprises which aim to capitalise on, and develop the creativity and commitment of employees at all levels in achieving competitive advantage and in meeting the business and service challenges posed by the social, economic and technological environment in which the enterprise exists.

In referring to new work practices a recent OECD report¹³ found that in many cases these involve a move towards a higher degree of labour-management co-operation, flatter management structures, increased recourse to team-working, and a shift to payment systems based on individual or team performance.

5. The Benefits of NFWO

Despite the foregoing limitations we can point to a body of reliable studies and research results that clearly demonstrate the benefits of NFWO on business and organisational performance at many levels.

Impact of NFWO on Productive Performance – Findings from a Sample of European Studies

- ❑ A national survey¹⁴ of 3,600 companies and their workers in the Netherlands on the current state of workplace reform found that companies using the high-tech sociotechnical production model produce the best performance
- ❑ A study¹⁵ of 700 Swedish private establishments found that participating organisations who made extensive use of continuous learning and task delegation achieved levels of labour productivity that were 29-60% higher than that found in other establishments.
- ❑ A survey¹⁶ of 1,300 German manufacturing companies reports that the (few) companies that made extensive use of NFWO such as teamwork, continuous improvement, kanban, and just-in-time production systems had 8-30% higher labour productivity (defined as

¹¹ EWON Glossary of Terms and Definitions on Work Organisation – EWON website
http://europa.eu.int/comm/employment_social/soc-dial/workorg/ewon/index_en.htm-empl-workorganisation@cec.eu.int

¹² Savage P. *The New Work Organisation in Ireland Programme* 1995-1999. IPC Dublin

¹³ OECD 'Knowledge, Work Organisation and Economic Growth' Feb 2001

¹⁴ TNO Work & Employment Study *Work in the Information Society*. Hoofddorp, TNO 1999

¹⁵ NUTEK 'Towards Flexible Organisations' (Swedish National Board for Industrial and Technical Development) 1996

¹⁶ Lay G., Shapira P., and Wegel J. eds. *Innovation in Production* (Technology, Innovation, and Policy) No. 8, 1999

New Forms of Work Organisation (NFWO) – Benefits and Impact on Performance

added value per person) than those that did not. The greatest productivity benefits were achieved by companies that integrated new practices into new work “systems”.

- ❑ A clear and positive link between NFWO and improved company performance is shown in a report¹⁷ to the European Commission, and its findings are verified and elucidated in related case studies.
- ❑ A survey¹⁸ of 5,800 managers from 10 European countries found that over 65% of the managers believe that the use of advanced forms of group delegation (such as self-directed teams) reduced throughput time.
- ❑ A French/UK study¹⁹ found that although changes in work organisation, as a whole, influence positively plant-level multi factor productivity (MFP), the effect is strongest when the incidence of skilled labour is high.
- ❑ The 1998 UK Workplace Employee Relations survey²⁰ which incorporated an extensive examination of UK workplaces, identified 16 new management practices and employee involvement schemes which led to rising levels of productivity as reported by managers.

Impact of NFWO on Productive Performance – Findings from a Sample of American Studies

- ❑ A US study²¹ found higher than average performance in unionised firms with new work practices. It concluded that a greater employee voice in decision-making is what seems to matter most for productivity, rather than Total Quality Management per se. It further found that labour productivity in unionised firms which adopt new work practices and use computers is estimated to be 20% higher than in baseline case (non unionised firms which have few new practices and do not use computers intensively). In unionised workplaces without employee involvement schemes, labour productivity is 15% lower than in the baseline case.
- ❑ In a further US study²² on the New Economy it was found that a positive correlation exists between new practices (regular meetings, re-engineering and profit sharing schemes) and labour productivity. Positive and significant correlation between new practices and wage rates were reported in this study.

¹⁷ Business Decisions Ltd, ‘New forms of work organisation and productivity’ DGV of European Commission 1999

¹⁸ European Foundation for the Improvement of Living & Working Conditions ‘Can Europe Realise its Potential’ EPOC Study 1998.

¹⁹ Caroli E. and Van Reenan J. “Skill Based Organisational Change ? Evidence from a panel of British and French Establishments” Couverture d’Orange CEPREMAP No. 9917

²⁰ Culley M. et al. ‘Britain at Work’ 1999, Routledge, London.

²¹ Black S.E. and Lynch L.M. ‘How to Compete: The Impact of Workplace Practices and Information Technology on Productivity’ National Bureau of Economic Research, WP No.6210

²² Black S.E. and Lynch L.M. “Whats Driving the New Economy: Benefits of Workplace Innovation” National Bureau of Economic Research, WP No. 7479

New Forms of Work Organisation (NFWO) – Benefits and Impact on Performance

- A US study²³ which focussed on information technology and workplace organisation found that new work practices are positively co-related with the performance of firms only when they are combined with heavy investments in either human capital or ICT.

Further national studies have confirmed a positive co-relationship between workplace reform and productivity. This is evidenced in the results of an Australian study²⁴ which found that workplaces having undergone workplace reforms have recorded a rise in relative labour productivity in both the 1995 Cross-section survey and the 1990-95 Panel survey.

From a European perspective it is interesting to note that in Australia, the index of workplace reforms includes formal training, semi-autonomous groups, income bonus schemes, quality circles or teambuilding, staff appraisal, TQM, computer integrated management, skills audits and just-in-time systems.

Impact of NFWO on Market Place Performance – Findings from a Sample of Studies

- A study²⁵ of 968 workplaces in the USA found that those that made the greatest use of new work practices designed to build employee capabilities and motivation enjoyed the highest rate of increase in sales turnover.
- A study²⁶ of 515 Danish manufacturing companies found that 81% of companies that had invested in new technology and introduced NFWO believed that they had achieved a greater ability to comply with specific customer demands.

Impact of NFWO on Innovation – Findings from a Sample of Studies

- A survey²⁷ of 2,100 Finnish companies found that only 3% of the workplaces classified as “traditional” had introduced new innovative products in the past three years, compared to more than 37% of “flexible” workplaces.
- A survey²⁸ of 7,000 French manufacturing companies found that companies using NFWO were more likely to innovate and to be more effective users of R&D than companies using traditional organisational methods.
- The German study referred to earlier reports that companies using at once simultaneous engineering, inter-departmental development teams, cooperation with suppliers, and continuous improvement were more than twice as likely to introduce innovative products as companies using none of these practices.²⁹

²³ Bresnahan T.F. et al. *Information Technology, Workplace Organization, and the Demand for Skilled Labour: Firm Level Evidence* National Bureau of Economic Research, WP No. 7136

²⁴ Crockett G. *Can We Explain Australian Productivity Growth? Some Evidence from the AWIRS* University of Tasmania School of Economics Discussion Paper 2000/04 (<http://www.comlaw.utas.edu.au>).

²⁵ Huselid M. *The Impact of Human resource Management Practices on Turnover, Productivity, and Corporate Financial Performance* Academy of Management Journal 38) 1995

²⁶ Danish Ministry of Business and Industry *Technological and Organisational Change-Implications for Labour Demand, Enterprise Performance, and Industrial Policy* 1996

²⁷ Government of Finland ‘Changing Workplace Strategies: Achieving Better Outcomes for Enterprises, Workers, and Society – Country Report for Finland’ (1996) and Government of Finland ‘Flexible Enterprises – Finnish Survey’ (1996)

²⁸ Greenan N. and Guellec D. *Organisation of the Firm, Technology, and Performance: An Empirical Study* (Proceedings of the Washington Conference on the Effects of Technology and Innovation on Firm Performance and Employment, 1996)

²⁹ Shapira and Wegel, op.cit

New Forms of Work Organisation (NFWO) – Benefits and Impact on Performance

- ❑ The MIT Motor Vehicle Program covered over 50% of world-wide production capacity and the major vehicle companies in Europe, Japan, and the USA. The study³⁰ documented a number of advantages enjoyed by Japanese producers that were linked to NFWO such as multi-functional teams, design for manufacturing, simultaneous development and

cooperation with suppliers. The Japanese, according to the study, needed 40% less manpower for “volume” cars. And 20% less time to develop a major new model.

Impact of NFWO on Advanced Technologies – Findings from a Sample of Studies

- ❑ A number of studies³¹ suggest that observed lags in productivity growth, despite investments in advanced technologies, can be explained by a lack of investment in NFWO, as traditional forms of work organisation are ill-suited to exploit the potential of new more complex and versatile equipment.
- ❑ A study³² of 515 Danish manufacturing companies documented the benefits of combining micro-electronic technologies and NFWO. Companies that made no investment in either physical equipment or NFWO achieved an annual growth in labour productivity of only 0,5% during the period 1990-1993. Companies that invested only in physical equipment witnessed a growth in productivity in the same period of 1,5% per year. But companies that invested in both new technologies and NFWO achieved an annual growth of labour productivity of over 2,7%.

Impact of NFWO on Managing Change and Fast Growth – Findings from a Sample of Studies

- ❑ A number of studies suggest that NFWO are positively related to the management of hyper-growth companies³³ and help significantly in the management of companies undergoing restructuring.³⁴

Impact of NFWO on Industrial Relations – Partnership Approach

- ❑ Radically different working relationships from the traditional adversarial model are evolving from the introduction of NFWO. These relationships are based on developing partnership approaches between trade unions, workforce and management, and in some cases customers and suppliers.
- ❑ The results of the New Work Organisation in Ireland programme³⁵ found that industrial relations improved dramatically in companies when the interest groups committed to a

³⁰ Womack J., Jones D. and Roos D. *'The Machine That Changed The World'* (1990)

³¹ Andreasen L., Coriat B., den Hertog F. and Kaplinsky R. eds. *'Europe's Next Step - Organisational Innovation, Competition, and Employment'* (1995) and Vickery G. and Wurzburg G. *'Flexible Firms, Skills, and Employment'* (OECD Observer, November/December 1996)

³² Danish Ministry of Business and Industry *'Technological and Organisational Change – Implications for Labour Demand, Enterprise Performance, and Industrial Policy'* (1996)

³³ Dutch Ministry of Economic Affairs *'Fast Growth Companies in The Netherlands'* (1998)

³⁴ *'New Forms of Work Organisation: Case Studies'* (1998, a report prepared for DG V of the European Commission)

New Forms of Work Organisation (NFWO) – Benefits and Impact on Performance

genuine buy-in to partnership at workplace level. The partnership approach adopted on this programme provided a framework for working together to achieve business success by focussing on the key performance indicators (KPI's). This involved joint problem solving, team-working, skills/technology training, expansion of job roles and

responsibilities, continuous improvement and empowerment and reform of job grading and pay/reward systems – some of the classic elements of NFWO. In a number of cases partnership agreements and pacts enshrining new co-operative principles and flexibilities replaced traditional industrial relations collective agreements.

Impact of NFWO on Quality of Working Life & Effectiveness

- The Swedish Work Environment Fund supported many change initiatives involving workplace re-alignments and development (and by implication quality of work life improvements) with productivity. Under the aegis of the Fund the Swedish Engineering Employers Confederation and the Swedish Metalworkers Union jointly sponsored an initiative aimed at minimising levels of strain injuries in manufacturing workplaces. This resulted in the establishment of a joint body AMBIV, (the Joint Committee for Action Against Strain Injuries in Industry). Reports on sub-projects undertaken by the AMBIV provide strong evidence of convergence between QWL and competitiveness. A summary of outcomes of published cases is contained below³⁶.

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 annum 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, production technology.	Number of strain injuries reduced from 150 per year (1980's) to zero at completion of project. Savings of 115% in indirect time. Increased individual flexibility.
Norwesco AB Oregrund	Industrial injuries; Mutual dissatisfaction over payments system.	Some team working in high-volume production. General extension of job content linked to product development.	Steady increase in productivity compared with constant level pre-project. Job widening and greater openness.
TVAB, Tocksfors	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	Need for creation of	Nine independent teams in	Improved psychosocial

³⁵ Savage P. 'The New Work Organisation in Ireland Programme' 1995-1999, IPC, Dublin

³⁶ Huzzard T. 'The Convergence of QWL and Competitiveness: A Current Swedish Literature Review' National Institute of Working Life, Stockholm, Innoflex Project, 2000.

New Forms of Work Organisation (NFWO) – Benefits and Impact on Performance

Lastvagnar, Umeverken	greater effectiveness in production; high levels of strain injuries.	the press shop each having 10-12 members. Teams had all direct manual duties and some indirect duties. Pace governed by human capacity and time to learn.	environment through greater skills development, job widening and delegation of responsibility. Inclusion of more indirect duties in the teams. Holistic view of operations and learning.
-----------------------	--	---	--

6. Implications of Continuing Economic Growth for both the Traditional and New Economy – The Role of NFWO

Recognising the New Situation – Investing in Human Capital

Economic growth can inadvertently make both the traditional and new economy workplace an increasingly frenetic and stressful environment. Increased competitiveness pressures lead to investors and employers demanding greater output, quicker and more flexible responses, better products, faster throughput, higher quality and lower costs. Already, in the faster growing economies we have seen considerable erosion in workers family time (together time), people are challenged by performance targets, are more customer driven, and are generally working harder and more flexibly. There is an urgent need to upgrade skills in order to enable workers and managers adequately cope with the demands of ICT and the new work environment. Human capital is clearly emerging as a key engine of economic growth, and it is evident from the results of many of the studies referred to in this paper that the skills and competencies of the workforce impact positively on productivity and competitiveness. In this regard investment in Europe's human capital would appear to be a pre-requisite to economic success in the medium term.

Changes in the Nature of Work

For very many people, precious additional time is now spent travelling to and from work (this can be off-set to a very limited degree by teleworking and more flexible working time arrangements). Notwithstanding business and economic cycles, all of the present indicators point to a fundamental change in the nature of work in both the old and new economy sectors. There is a pressing need to reform the organisation of work in line with group, team and organisational objectives balanced by an acceptable quality of working and private/domestic life. In this new situation NFWO offer unlimited potential to develop and maximise human capital and organisational competence in the interest of the firm, the employee, the consumer, the shareholder and not least the family.

New Forms of Work Organisation and ICT

Intensive exploitation and application of ICT's is frequently associated with new economy organisations. Successful organisations attract, retain and mobilise employees and their collective skills by integrating technologically efficient production/delivery processes using ICT (customer centred), and flexible forms of work organisation (employee & customer centred). Significantly, a recent OECD report³⁷ has found that positive predictions about the new economy are unlikely to materialise unless the appropriate policy environment is in place, notably as regards employment and human capital development policies.

The report also found that;

“organisational change, understood as the implementation of new work practices such as team-work, flatter management structures and job rotation, tends to be associated with higher

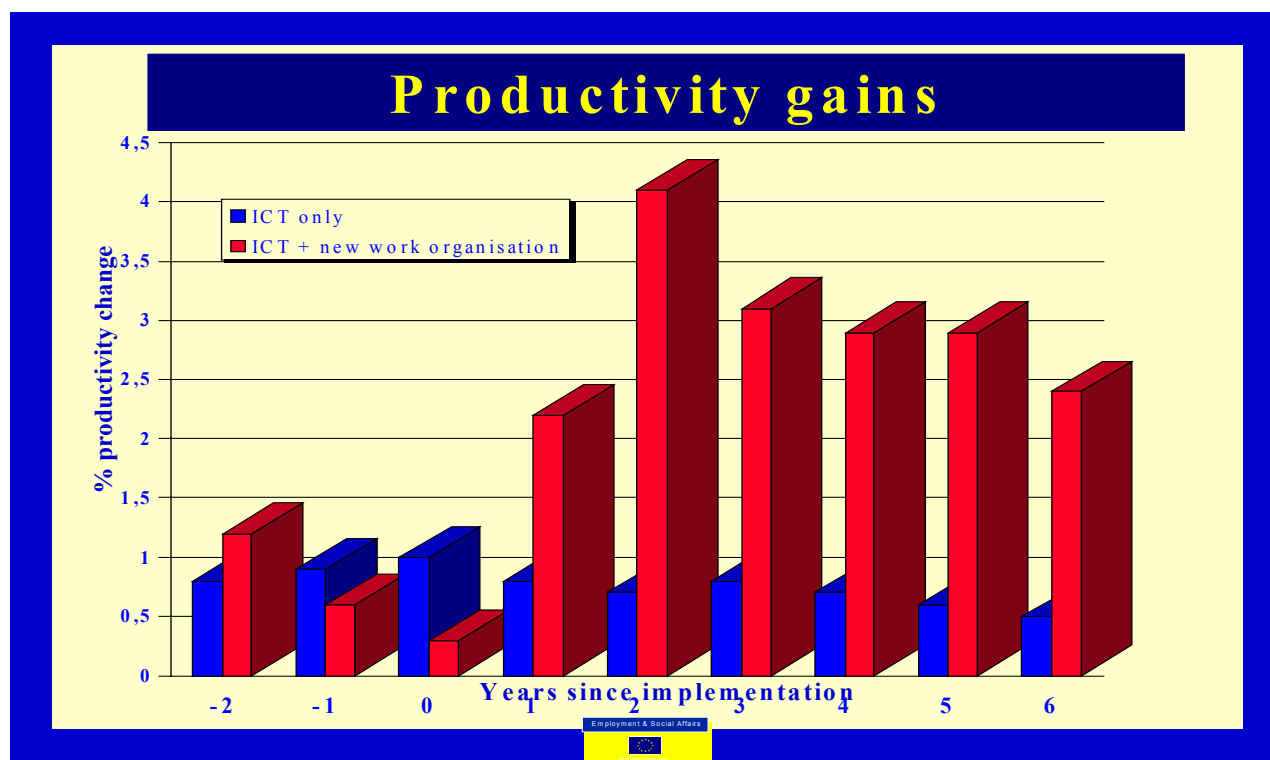
³⁷ OECD 'Knowledge, Work Organisation And Economic Growth' February 2001

New Forms of Work Organisation (NFWO) – Benefits and Impact on Performance

productivity growth. Interestingly, productivity gains of firms that combine new technology with organisational change are considerable, whereas there does not appear to be much economic benefit in implementing new technology alone. In other words, work needs to be re-organised to use ICT effectively;

We strongly concur with the foregoing OECD findings. The experience of our international network of researchers, consultants and work organisation practitioners in the field confirms a certain futility (in productivity improvement terms) of investing heavily in new technology in the absence of changing the organisation of work to maximise the potential of people and the new technology.

The following graph³⁸ perhaps best encapsulates the significance of NFWO for productivity. It illustrates, in particular, how the introduction of information and communication technologies (ICT) in itself does not result in significant productivity improvements, even some years after their introduction, unless it is accompanied by changes in the organisation of work:



Telework – A Future Element of NFWO in Europe

Teleworking has no universally accepted definition and covers a wide range of modern home-working and mobile working scenarios which are enabled through the expansion and adaptation of ICT's, the Internet, e-mail and advanced forms of telecommunications. The European Commission³⁹ defines telework as “work carried out by the use of computers and telecommunications, in order to overcome restraints in place or time of work. In the USA it is called Telecommuting. Teleworking is increasingly becoming an effective and efficient form of

³⁸ Source: Technological and Organisational Change Implications for Labour Demand, Enterprise performance and Industrial Policy, Country Report by the Ministry of Business and Industry, Denmark. Carried out in the framework of the OECD Jobs Strategy. November 1996.

³⁹ European Commission Status Report on European Telework, *Telework 1997*

working and is most widely developed in the US where in 1997 some 5.5 million people were teleworking (or telecommuting). As yet this form of working (and networking) is relatively underdeveloped in Europe where it was estimated that only 1% of the European workforce were teleworking in 1997. The expansion of the services sector and trend towards less centralised forms of work will see this figure grow substantially. Teleworking offers people and

organisations extraordinary advantages in communication, flexibility, speed, data collection, research, service, and general innovatory capacity. The physical workplace can become obsolete and transformed into a mobile virtual work system. Quality of Working Life can be greatly enhanced with the elimination of the stresses and strains of peak time travel as people work telematically with colleagues, clients and customers.

The Challenge for European Policy Makers

Achieving Sustainable Growth with an acceptable Quality of Working Life

NFWO Design Implications – Outstanding Questions

The impetus for NFWO and change is gathering in Europe, technology advances are extending traditional work organisation boundaries and the case for Policy Makers to support the efforts of employers and trade unions to overcome some of the barriers is undeniable.

A recent report⁴⁰ from ANACT (Innoflex Project) raises a key question regarding the socio-organisational changes taking place in the private and the public sectors in France. This same question is pertinent to all of the Member States and the European Commission. The question is - how do employees analyse the changes happening to them? The ANACT authors argue that it is possible to rule out a number of received ideas. Starting with the hypothesis that the dematerialisation of work, by being raised so often, has actually ceased to be questioned. In fact, many employees state that they still have heavy workloads whilst the relatively “classic” negatives, such as noise, exposure to dust or industrial pollutants continue to be an unpleasant feature of work situations. Clearly, the worst working conditions have disappeared thanks to automation and economic transformations (for example the virtual disappearance of miners). But new constraints emerge: the knowledge load involved in VDU working, the pressure from customers in organisations directed at customer satisfaction, strains, (RSI which became the first declared working illness), the lack of protection for self-employed and temporary workers, etc. We agree with the authors that the new topography of working conditions (in new and traditional economy organisations) is not a clean break with the past. Not only do many of the older risks persist (carrying heavy loads, for example) but new ones are appearing (the entire family of work related stress illnesses). In this regard poorly designed NFWO can contribute to undue (and in health terms unsustainable) intensification of work and unfair loading of accountabilities on individuals and teams – this approach is likely to prove unproductive in both human and organisational terms. To date insufficient research has been conducted in this area.

The design of NFWO needs to ensure that work is “bearable” for the health of individuals, which in turn impacts on the competence and health of the organisation. How best can we achieve this in a pan European context? The capacity of the European Commission and the Social Partners to objectively analyse both risk and benefits is crucial. NFWO must be designed to capitalise on technological adaptation, minimises work related health risks and maximises competitiveness.

⁴⁰ Sacquepee S. Dufau M. *‘The Convergence of Quality of Working Life, Competitiveness, and Organisational Change’* Innoflex Project, ANACT, France

The challenge of sustaining economic growth and quality of working life represents a massive programme of work for key European policy makers, researchers and practitioners with a close interest in the future of work in contemporary European societies.

Rationale for Adopting and Developing NFWO

Organisations seeking to be re-assured about the potential and proven benefits for performance deriving from NFWO should consider the approach adopted in Ireland.

The Irish NFWO programme⁴¹ (implemented Jointly by the Social Partners) determined that it was not a question of whether to introduce new forms of work organisation – but rather how best to do so.

The Social Partners (and Irish government) shared a desirability to develop NFWO on the basis of the combined evidence from best practice international case studies and work organisation approaches adopted by many of the global multi-national organisations operating in Ireland.

A European Wide Approach

In assessing the actual benefits of NFWO and their widespread potential, we must acknowledge that national differences between Member States make it difficult to envisage a harmonised approach to NFWO in the short term. Member States differ regarding industry support structures, industrial/labour relations systems, economic frameworks and social values. The progression of economic union and imminence of monetary union will undoubtedly create a more ‘level playing pitch’ and notwithstanding the momentum for change in the organisations themselves, the Commission, national governments and the Social Partners must play a central role in paving the way for NFWO.

In presenting this paper the author, and the EWON expert group have reviewed the available research results, consulted with some Social Partners institutions and drawn on their own, and EWON’s considerable shared experience and knowledge. The focus of the paper is on the benefits and impact of new forms of work organisation on the actual performance of companies and organisations. We were obliged also to comment on the barriers and obstacles encountered by research organisations in assembling information in this patently under researched field.

⁴¹ Savage P. Ed. New Work Organisation in Ireland Programme ‘Executive Summary Phase 1’ IPC Dublin