

In: I. Houtman (ed.), Work Life in the Netherlands (pp. 173-190). Hoofddorp: TNO Innovation for Life.

Chapter 8. Workplace innovation in the Netherlands

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Summary

Social innovation of work and employment is a prerequisite to achieve the EU2020 objectives of smart, sustainable and inclusive growth. It covers labor market innovation on societal level and workplace innovation on organizational level. This chapter focuses on the latter. Workplace innovations are social both in their ends (quality of working life, well-being and development of talents together with organizational performance) and in their means (employee participation and empowerment). Complementary to technological innovations they regard innovations in social aspects of organizations such as work organization, HRM and work relations. A specific variety of workplace innovation is the New Ways of Working (NWW) which focuses in particular on working unrestrained by geographic, time and organizational boundaries.

By introducing workplace innovation, improvement of quality of working life and organizational performance can be achieved simultaneously. A number of theories support this claim. The interventions in the framework of workplace innovation – such as creating job autonomy - are to a large extent the same as those to reduce psychosocial occupational risks.

From the beginning of this century workplace innovation has been on the agenda of the social partners, the government, a few research organizations and consultants in the Netherlands. Dilemmas of these stakeholders are discussed. A Dutch National Centre for Social Innovation was established in 2006 as a temporary agency to boost workplace innovation.

Research in the Netherlands shows that social innovative organizations perform better than not social innovative organizations. However, it can be regretted that quality of working life variables are only occasionally included in the research.

Workplace innovation is seen as a matter of urgency by those who understand the benefits and dare to change, even more so in times of economic recession. But it's not an easy thing to do. Some support from government might help.

8.1 Introduction

Continuous innovation and productivity growth cannot be achieved just by new technologies and by seeking competitive advantage by means of cutting costs. What is needed is the optimal utilisation of the competences and creativity of the workforce and an organisational structure and management culture that gives room for these talents. DSM Anti-Infectives is a very good example of what we nowadays call Workplace Innovation (See Box 1).

Why has workplace innovation become important, already before the financial and economic crises? There are four main reasons for the emerging attention for workplace development. The first one is the need to enhance labour productivity to maintain our level of welfare and social security in the near future with fewer people in the workforce due to the ageing population. The second reason is the need to develop and utilize the skills and competences of the potential workforce to increase added value as part of a competitive and knowledge-based economy. The third reason is that private and public work organizations can only fully benefit from technological innovation if it is embedded in workplace innovation (making technology work by means of proper organization). The fourth reason is that workplace innovation itself appears to be more important for innovation success than technological innovation does. Research by the Erasmus University/Rotterdam School of Management in industrial sectors shows that technological innovation accounts for 25% of success in radical innovation, whereas non-technological innovation, or social innovation – as it is called in the Netherlands – accounts for 75%. The success of incremental innovation can be based for 50% on each technological and non-technological innovation (Volberda et al., 2006 and 2010). The latest development in the Netherlands concerning workplace development and productivity is a two-tier ‘movement’ under the banners of ‘New Ways of Working’ and ‘Social Innovation at Work’.

Of course the Netherlands has, like other countries, a tradition of workplace development of almost 100 years, starting with ‘scientific management’ via ‘industrial democracy’, ‘socio-technical design’, ‘quality of working life’, ‘improvement of work and organisation’ to ‘social innovation’. Some of the present issues are the same, some are new but the circumstances are different, increasing the urgency for social innovation.

In this chapter definitions are presented that are used in the Netherlands as well notions and findings on how these definitions relate to the concept of ‘social innovation’ in the EU-policy. The next part is on the activities of the Dutch National Centre for Social innovation which is followed by theoretical support, dilemmas of stakeholders and research on dissemination and effects.

Box 1. Example of combining technological and social innovation

DSM Anti-Infectives in the Netherlands holds global leadership positions in active pharmaceutical ingredients such as penicillin. Key drivers of profitability are price and access to global markets. The key success factors are new technologies and operational excellence. Innovative ingredients are produced using enzymes in biotechnological processes. Operational excellence was achieved by the introduction of autonomous teams and the creation of a special job, that of the operation expert, who gears activities of different departments for one another. After the introduction of these changes, the plant produced 50% more with 50% fewer staff members in each shift. Its competitive position is among the first three of the world. For the employees learning opportunities and control capacity have increased considerably.

8.2 Workplace innovation

Whilst there is currently no uniform definition of workplace innovation in this report we will define workplace innovation as ‘workplace innovations are strategy induced and participatory adopted changes in an organisation’s practice of managing, organising and deploying human and non-human resources that lead to simultaneously improved organisational performance and improved quality of working life.’ (Eeckelaart et al., 2012)

Workplace innovation includes aspects of management and leadership, flexible organisation, working smarter, continuous development of skills and competencies, networking between organisations and the modernisation of labour relations and human resource management. Workplace innovation is not directed at and cannot be expected to have direct effects on diseases, injuries, absenteeism and accidents, although it might help indirectly. However, there is evidence that it may help to improve the quality of working life and productivity, especially as an effect of change projects that involve employee participation. Workplace innovation is regarded as complementary and conditional to technological innovation. Research indicates that through workplace innovation a simultaneous improvement in quality of working life and productivity is possible, in particular in projects with strong employee participation (Ramstad, 2009; Pot, 2011).

Workplace innovation does not cover the whole range of OSH topics and OSH performance, but it does include low stress risks, high job autonomy, lower physical workload, continuous development of competences, better labour relations (Pot and Koningsveld, 2009; Ramstad, 2009; Westgaard and Winkel, 2011). The latter can be described as a high ‘quality of working life’ (QWL). There is a need for more research to develop this association. The systematic review of Westgaard and Winkel (2011) is the first to give a broader overview of the possible relationship between workplace innovation and at least two major OSH topics (ergonomic and psychosocial risks inducing physical and mental health and other outcomes. In the Community Strategy for OSH 2007 – 2012 (European Commission, 2007) ‘improving quality and productivity at work’ is mentioned as an important goal. However, productivity in this document relates primarily to the

costs of absenteeism. Workplace innovation goes beyond cost savings. It is related to the enhancement of labour productivity and organisational learning or innovativeness.

8.3 New ways of working (NWW)

A specific example of social innovation at work or workplace innovation is the so-called New Ways of Working (NWW), originally called by Microsoft 'the new world of work'. Developments in Information and Communication Technology and more flexible ways of organising work processes have caused the work environment of knowledge workers to change substantially. This New Ways of Working means flexible work arrangements (e.g. mobile teleworking, from fixed to shared workspaces, flexible working hours), unrestrained by geographic, time and organisational boundaries and employees managed based on trust and results, causing a result oriented culture instead of the face-time culture where hours on the job are most important (Croon et al., 2005; Blok et al., 2010). NWW not only seems to meet business objectives, such as productivity growth caused by the expected increase of employee involvement, collaboration and reduction of square meter office space; it also provides greater opportunities for workers to effectively integrate the demands of work and personal life, reduction of unnecessary time travel and increased attractiveness of work for the organization (Hill et al., 2003; Blok et al., 2010).

The initiative was launched by real estate managers to cut the expenses for office buildings. HR joined in because of the changing work relations and management style (management by results). Of course support by the right ICT-tools and sound information management systems is important. Office buildings are redesigned into innovative office concepts that support communication and collaboration, adjusted to the needs of the flexible workers: from conventional office to telework office, from cellular lay-out to open plan offices, from fixed to shared workspaces. Later avoidance of traffic jams and care for the environment became additional motives. Nowadays some advocates of the NWW emphasize that the NWW is necessary because of the needs and wishes of the new generation of '2.0 employees'. Apart from cost savings it is expected that NWW can contribute to higher labour productivity, a better work-life-balance, higher work satisfaction, higher client satisfaction, a better company image on the labour market and even innovative behaviour and a sustainable economy.

8.4 Social innovation in the EU2020 Strategy

A growing number of countries is conducting or developing some kind of programme aimed at labour productivity, development of competences, quality of work, learning, and innovation (www.workinnet.org). Examples of programme titles are: work place development (Finland), innovative Arbeitsgestaltung; Innovationsfähigkeit (Germany), value creation (Norway), social innovation (Netherlands and Belgium), management and work organisation renewal (Sweden) and workplace innovation (Ireland and the UK). These

policies on the level of organisations and sectors are connected to policies on national and European levels concerning ‘flexicurity’ (employment, education and social security) and innovation. Key concepts are ‘dynamic management’ (absorption of external knowledge), ‘working smarter’ and ‘utilisation of skills and competences’.

According to the Innovation Union Flagship Initiative, social innovation concerns the creation of new solutions to social problems and new social capital; its modus operandi focuses on building new social relationships and models of collaboration with an emphasis on empowerment and engagement.

What happens in the workplace, in other words the ways in which work is organised and people are managed, has enormous social as well as economic implications. Work organisation strongly influences performance, productivity and innovation in products and services, preconditions for a stable and equitable economic base. Economic performance is the main factor in the growth of welfare, creating the new jobs and wealth that facilitate the solution of social problems. However work organisation also shapes social outcomes which lie at the heart of the Europe 2020 Strategy such as the health, skills, employability and inclusion of employees and the consequences of demographic change (Dhondt et al., 2011; Pot et al., 2012).

‘Social innovation at work’ or ‘workplace innovation’ is the process through which “win-win” approaches to work organisation are formulated – approaches which are good for the sustainable competitiveness of the enterprise and good for the well-being of employees. Workplace innovation also represents the ‘high road’ to economic performance: it is the inherently European way characterised by high wages and high productivity.

Most importantly, workplace innovation is an inherently social process. It is not about the application of codified knowledge by experts to the organisation of work. Rather it is about building skills and competence through creative collaboration. Workplace innovation is about open dialogue, knowledge sharing, experimentation and learning in which diverse stakeholders including employees, trade unions, managers and customers are given a voice in the creation of new models of collaboration and new social relationships. Workplace Innovation is also a European challenge. Only a European approach can guarantee that achievements can be shared and secured.

8.5 The Dutch National Centre for Social Innovation (NCSI)

The Dutch National Centre for Social Innovation (NCSI) was established in 2006 by a small number of employers’ associations (AWVN; FME-CWM), trade unions (CNV Vakmensen; FNV Bondgenoten), universities (Erasmus University RSM; University of Amsterdam) and TNO (Netherlands Organisation for Applied Scientific Research), Work and Employment. These parties were brought together by the former Innovation Platform, to gather their thus far separately executed plans on social innovation in order to reach synergy. The mission of the Centre was to put social innovation on the national agenda, to disseminate knowledge on the topic and stimulate action in companies and networks of companies,

trade unions and knowledge institutes (see Box 2). The NCSI was the Dutch representative in the former ERA NET 'Work-In-Net' of national programmes workplace development. However, in the Netherlands social innovation is much more like a 'national movement' rather than a 'national programme' as they exist in for example Finland and Germany. There are similarities in activities and partners. The NCSI was meant as a temporary booster for workplace innovation. After little more than five years the founding fathers and the sponsors considered the mission to be fulfilled and the project will end/is ended on the First of April in 2012. Some of the activities are accommodated by other agencies.

Box 2. Activities of the Centre

A growing number of organisations are developing their own activities in collaboration with the centre (training courses, workshops, applied research). Initiatives from the centre include for example: workshops on conditions for trust-based management; search conferences on regional labour markets; search conferences on flexible working hours; development capacity planning model for health care; experiment of network of innovative organisations; description of best practices bottom up innovation; design of the education institute of the future; experiment cross functional teams for innovation; experiments working with less legislation and less formal procedures; community of self-employed; innovation experiments with 'employees 2.0' or 'millennials'; workshops on different aspects of social innovation; contest for the most innovative office; trainee programme; monitoring; website with good practices, development of 'serious games' on employee 2.0 and to support brainstorming in teams about process innovations etc.

In the years of its existence companies and public organisations have supported the Centre financially (50 k euro per year). These sponsors had a seat on the Programme Council; they decided on the activities. The activities of the Centre were politically and to some extent financially supported by project subsidies (1 Million euros per year) of three ministries (Economic Affairs; Social Affairs and Employment; Education, Culture and Science).

Unlike other countries the government is not the co-ordinator nor represented in the Centre. The political philosophy accepted by all parties is that the social partners can and should be leading. Another difference is that in the Netherlands there is no prolonged programme as the 13 year programme of TYKES in Finland because Dutch subsidies and other financial means have to be acquired every year or every 2 years. Of course this loose connection with the government and the limited and temporary financial resources made the centre quite vulnerable. As we know from Frieder Naschold's 'best practice model' for national workplace development the strategic justification should primarily arise from macro-level industrial policy issues rather than the industrial relations system or the research and development system (Naschold, 1994).

8.6 Theoretical coherence of QWL, innovation and performance

Individual and group performance is not directly the result of employee satisfaction or motivation, but of involvement and commitment through workers' representation, HRM practices and work organisation. For instance organisational commitment can be brought about by an organisational design that provides job autonomy, possibilities of consulting others, learning opportunities etc. These are exactly the same measures that are recommended to reduce psychological stress risks as a way of 'prevention at the source' (Pot et al. 1994). People do not suffer from severe strain because of problems and disturbances in their work but because they are not able to solve them. This is about discrepancies for example between quantitative job demands and available time or staff, between qualitative job demands and education or training, between problems and disturbances on the one hand and support from supervisor and colleagues on the other hand, between complexity of the job and control capacity.

The 'job demands - control model' also argues that - to understand performance - a proper work organisation is more important than satisfaction (Karasek and Theorell, 1990). 'High demands and high control' provides opportunities for learning. On the contrary 'high demands and low control' is a stress risk and stress inhibits learning. However, in most research, control is only measured by job autonomy (freedom of action within a specific job). This could be called 'internal control capacity', which is related to 'single loop learning' (Argyris and Schön, 1978). But discussing work organisation and targets is even more important for innovation. It enhances 'double loop learning' and also contributes to well-being and the prevention of 'presenteeism' (being present but not very productive). This requires control on another level and could be called 'external control capacity' (participation in decision making) as is elaborated in Modern Sociotechnology (Sitter et al., 1997; Kira and Eijnatten, 2008), the 'action regulation theory' (Hacker, 2003) and in theories of the innovative firm (Sabel, 2006).

The same holds for ergonomic design of workplaces. This serves not only as the objective of reduction of physical workload, prevention of MSD (allowing better postures and movements; reducing lifting) and health improvement (physical exercise) but also that of productivity (easier and faster handling and processing; better lay-out), in particular if the design and implementation processes are participatory (Koningsveld et al., 2005; Vink et al., 2006).

8.7 Dilemmas of employees and management

However, although there are enough reasons to develop workplaces from the perspectives of prevention and performance, it is not an easy job to do.

There are a number of dilemmas for employees and their representatives to be involved and to develop commitment to social innovation. Examples of these are long-term and

short-term effects (employment), “getting 1 kilo of responsibility connected to 100 grams of co-determination only”, and flexibility and security.

The employers’/managers’ side faces dilemmas as well. Benefits of social innovation are apparent later than the results of short-term budget cuts; the amount of return-on-investment of social innovation is rather difficult to estimate; bonuses and shareholders’ interests stimulate short-term thinking; social innovation is more complex than technological innovation; sharing knowledge and power is not easy.

A favourable condition to cope with these dilemmas good starting point is that unions and employers’ organisations are working together in the good Dutch tradition of mutual consulting (the so called ‘polder model’). Much attention is drawn to ‘trust’ and how to translate trust in work organisation and work relations. The newest concept in collective bargaining is: reciprocal risk management.

8.8 Effects of workplace innovation

Unfortunately most research covers industrial and/or private sectors whereas many projects were and still are being carried out in sectors such as health care, schools and municipalities.

Research by the Economic Institute for SMEs in 2008 among 650 Dutch SMEs indicated that companies with workplace development projects achieve higher productivity and financial results compared to companies that do not implement this kind of projects. However, the outcomes regarding quality of working life have not been measured except for employment that in most cases had increased (Table 8.1, Hauw et al., 2009).

Table 8.1 Working Smarter and Performance

PERFORMANCE CRITERION	% CHANGE IN PERFORMANCE LAST 2 YEARS	
	SMEs WITHOUT WORKING SMARTER	SMEs WITH WORKING SMARTER
Company results	2	18
Company turnover	7	15
Productivity	5	14
Employment	6	11

Economic Institute for SMEs. **SOURCE:** Hauw et al., 2009

The *Erasmus Competition and Innovation Monitor* of the Erasmus University Rotterdam – edition 2010 -included 932 Dutch companies of different sizes in different private business sectors. The broad concept of social innovation of the ECIM covers dynamic management, flexible organisation, working smarter and external cooperation. Compared to non-social innovative companies the social innovative companies perform better regarding increase

in turnover, profit and market share, and regarding innovation, productivity, new clients and reputation. In our introduction, we already pointed out that technological innovation by means of R&D and ICT investments determines 25 % of innovation success, whereas social innovation (management, organisation and work aspects) determines 75 %. This result has been consistently been found in the different waves of the survey. Between 2008 and 2009 the number of social innovative forms had increased with 5,2 %. Between 2009 and 2010 the increase was 12,8 % (Table 8.2, Volberda et al., 2010).

Table 8.2 Social innovation and performance

PERFORMANCE	PERFORMANCE SOCIAL INNOVATIVE VERSUS
	NOT SOCIAL INNOVATIVE ORGANISATIONS
Increase in turnover	16% higher
Increase in profits	13% higher
Innovation	31% higher
Productivity	21% higher
New clients	17% higher
Reputation	12% higher
Contented employees	12% higher

Erasmus Competition and Innovation Monitor 2010. SOURCE: Volberda et al., 2010

In the Netherlands Employers Work Survey (NWCS, 2008) the Netherlands Organization for Applied Scientific Research (TNO) includes four aspects in social innovation: strategic orientation, product-market improvement, working flexibly and organizing more smartly. In different sectors, 3.468 employers with 10 or more employees filled out the questionnaire. Company performance was measured as a combination of an increase during the last two years in turnover, profit and labour productivity. This combined performance was significantly better in organisations with more social innovation. This is also the case for the four different aspects of social innovation. The employer respondents in innovative companies were more contented with the terms of employment and HR practices in their companies. Concerning the quality of working life: contrary to expectation, the first findings point to the fact that no correlation exists between social innovation and job autonomy, except for the determination of working times and breaks (for edition 2008: see Oeij et al., 2010; Oeij et al., 2011b). New data for 2010 (Oeij et al., 2011a) show a somewhat other picture. Some preliminary results indicate that social innovation correlates to a substantial degree with statements from employers about their satisfaction with their employees (Pearson correlation of .29). This satisfaction was computed by the average score on statements about the employees’ availability, commitment, flexibility in working times, preparedness to learn new things, quality of their output and labour productivity. Of course these evaluations by employers can only be seen as indirect indicators of the quality of work of employees. Social innovation also correlates with teamwork (.14), which can be regarded as an indicator for the types of workplace innovations that go

hand in hand with a better quality of jobs. A final indicator worthwhile to mention, is that social innovation correlates in a strong way with using talents of employees (.49). In general one can say that the quality of jobs seems to benefit from social innovation.

Maastricht University conducted research in the sector Technological Industry in 2008. Of all companies 82% implemented some kind of social innovation concerning 'organisation and management' or was planning to do this in 2009. This regards internal flexibility (50%), working in projects (50%), autonomous teams (23%) and other teamwork (40%). There is not a clear picture of changes in the hierarchy. One third of the companies was working on fewer management layers, 20% was decentralizing responsibilities and 20% was centralizing responsibilities (Kriechel et al., 2009).

Starting in 2008 organisations could apply for ESF-funds for workplace innovation. An evaluation of this first year shows that 9 out of every ten projects were actually implemented. However not without troubles concerning developing commitment, overcoming resistance to change and keeping the projects within the planned time schedule. An important condition appeared to be the involvement of employees and their supervisors from the very beginning. Generally the interviewed people reported more task variety, better image of company for the employees and better utilisation of skills and competences. An improved quality of work is expressed by more engagement, more direct participation and higher job autonomy (Bureau Bartels, 2011). But also without additional funding many organizations initiated workplace innovation. See for some examples Box 3.

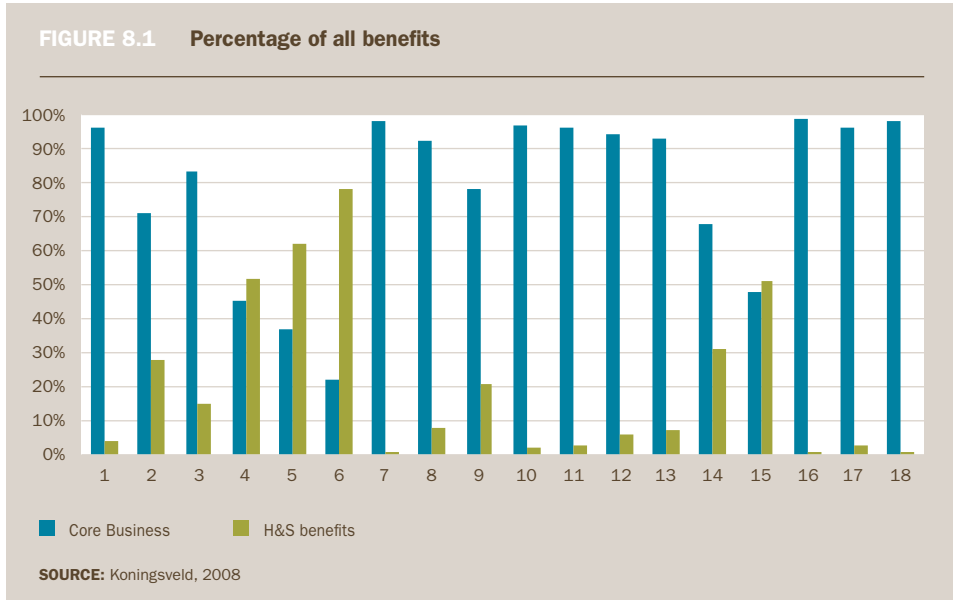
Box 3. Some examples of workplace innovation

Bronkhorst High Tech is a Dutch firm which holds a worldwide position on mass flow and pressure measurement and control for the process industry, life sciences, food, energy etc. Together with the employees and supported by TNO, the management implemented Demand Flow, Lean Manufacturing and training on the job. The results were higher productivity (20%), shorter throughput time (minus 30%), a more flexible work organisation and enthusiastic staff.

At Philips the management and the unions decided in January 2010 for a new collective agreement in which a process of social innovation was announced, apart from the NWW as described above. A new 'HR director diversity and social innovation' had been selected. A steering group of management, unions and works council initiated four focus groups: flexibility, employability, health & safety and trust. These groups prepared covenants that were approved of by the steering group and – at the time of writing – are part of the negotiations for a new collective agreement.

There has only been limited systematic research on the way workplace innovation helps profitability and quality of work. To overcome the anecdotal character of most research, Koningsveld (2008) reviewed eighteen cases to find out which factors could be convincing to invest in social innovation. The cases are diverse, ranging from ergonomically designed hand tools, via assembly work, and an integral health program, to job enrichment. In all these cases TNO performed as consultant. Seven of the eighteen cases show a payback time of less than 1 year, while two other have a payback time of a little more than one

year. Managers usually decide immediately to implement interventions with such a short payback time. All the other cases are profitable within 3 years; many companies consider three years as the maximum time period to take investments into serious consideration.



To assess the overall impact on core business values and on health and safety benefits, Koningsveld et al. tried to estimate the possible benefits on both dimensions. His systematic analysis helped to weigh both benefits in the same way and to show how the 18 projects fared in practice (Figure 8.1).

Despite the fact that almost all 18 projects start from the OSH perspective, in all but one case, both core business and OSH benefits occur as a result of the change project. A surprising result was that in hindsight the benefits for the core business values of fourteen of the eighteen cases exceeded those of the OSH benefits. In ten of these, the core business benefits represent more than 90% of the total benefits. Only in two cases do the OSH benefits exceed the core business benefits evidently.

This first review indicates that the prevention of unsafe working conditions and health impairment can go hand in hand with enhanced company performance. Of course we have to bear in mind that these cases are not a random sample of interventions.

Besides effects on organizational level we can also investigate the experiences of the working population. Looking at the European Working Conditions Survey (EWCS) the Netherlands has above EU-average scores on job autonomy as well as work pressure.

See also chapter 1 in this book. The European Company Survey 2009 shows that the Netherlands is third, behind Denmark and Sweden, regarding the percentage of establishments with autonomous team work (Eurofound, 2010:23). In the fifth EWCS of 2010 (www.eurofound.europa.eu) new questions have been included about influence on decisions (NL: 51%), consultation on targets (NL: 67%) and involved in improving work organization and work processes (NL: 65%), all of them being elements of external control capacity. It turned out that the scores of the Netherlands are among the highest in Europe. Furthermore employee representation on establishment level is rather well organized and compliant to general legislation. Whether and if yes, how the implementation of workplace innovation correlates with these variables cannot be concluded from the available research.

8.9 Dissemination and effects of NWW

The implementation of 'telework' as a specific example of workplace innovation is no longer a hype in the Netherlands. See Box 4 for some examples. It is a serious trend, certainly in some sectors of the Dutch economy. The consequences of the dissemination of NWW are still little researched or rather anecdotal in nature.

The Netherlands Working Conditions Survey (NWCS) shows that in 2010 only 16% of the working population was teleworker, compared to 12% in 2007. The typical teleworker appears to be a highly educated, often managerial man, living a long distance from his work. He has to do overwork regularly, feels time pressure quite often, but he has a good quality of work, especially high job autonomy. There is no indication for extra emotional exhaustion (burnout). Teleworkers can be found in particular in the ICT-sector (47%), higher education (30%), and commercial and financial services as well as the public sector. Of course industry, health care, agriculture and transport are less likely to implement 'telework' (Smulders et al., 2011). In the Netherlands Employers Work Survey (NEWS) 2010 57% of the respondents of government agencies indicate that their unit has implemented 'teleworking', being the highest percentage of all sectors (Oeij et al., 2011).

So far there is not much research on the effects of the NWW. Despite the growing interest, there is a lack of scientific proof for the effects of this new work concept, especially in relation to business goals. This is partly explained by the difficulty to measure the effects. First of all, there is a large variety of definitions on NWW. Secondly, organisations use NWW to reach a broad variety of business goals (i.e. reducing square meter costs, attracting talented employees, increase productivity) and they also differ in the way they monitor business objectives. Finally, it is difficult to assess the effects as the key indicators will be changing. For instance, old indicators such as hours on the job, do not indicate performance of the new work environment anymore (Croon et al., 2005; Blok et al., 2011). The little results available show small positive signs of NWW. Peters et al. (2011) analyzed the data of 1.017 employees and their supervisors in 90 job categories

in 30 organizations in the Netherlands. Teleworkers experienced more ‘flow’ than other employees. This was even better for employees who felt themselves empowered (trusted, job autonomy). An interesting result was that how the supervisor thinks about empowerment of their employees, is of no effect on what teleworkers experience.

Box 4. Some examples of New Ways of Working

A broad concept of mobile working was also introduced at Microsoft Nederland. One of the effects is that 49% of the employees reported higher productivity, 1% lower and 50% the same (presentation October 2010). The results have not yet been published in a scientific journal.

At Philips, workplace innovation was initiated in the real estate department to develop smarter offices and to economize on the number of office buildings. The current office space at that time was underutilised for 40% of the time. However, it very soon became clear that this ‘mobile working’ required changes in the work organisation, better ICT-support and changes in the way employees were managed: managing by output and not by presence. So the HR department joined in. The implementation of NWW is worldwide.

A problem in comparing research results and cases is that the change projects are most of the time more or less different although they share the ‘telework’-component. Some organizations implement ‘telework’ in a narrow sense (flexible working times, independence of work location, ICT-tools), others include employee empowerment, job enrichment, development of competences etc. The latter category applies what we have called above social innovation at work or workplace innovation.

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8.10 Mainstreaming NWW and workplace innovation

The work of NCSI will be continued/has been taken over by regional centres around universities of applied sciences, by a national consultancy agency for SME's (Syntens) and by many private consultants and last but not least by the founding fathers of the NCSI separately or working together cooperatively in projects. An example of the last mentioned is the 'Manifesto for new labour relations' of January 2011 that is signed both by an employers association and trade unions and in which workplace innovation is an important ingredient. They emphasize that workplace innovation is even more important in times of economic crisis.

But also the other associations and unions support this development as members of the Social and Economic Council of the Netherlands, the most important advisory body to the government, that published several advices on the NWW and workplace innovation from 2006 on.

Every year more 'social partners' decide on collective agreements with elements of the NWW and/or workplace innovation (Pot at al., 2008). However these concepts are competing with the concept of 'sustainable employability' since national policy is to work beyond the age of 65.

Branches of services and industry have developed their sector programmes workplace innovation, in particular health care, education and manufacturing. Financial and commercial services, ICT services and government agencies implemented the 'new ways of working'.

A programme 'SME Powerplant', initiated by the national Innovation Platform, reached more than 2000 SME's in 2010 and 2011, supporting them to work smarter.

The ministry of Social Affairs and Employment has allocated ESF-funding (42 million € for 2007 – 2013) to support workplace innovation in private and public organisations.

Universities and universities of applied science have developed curriculums on social innovation at work and appointed new lecturers for these programmes. TNO and three universities established the network INSCOPE Research for Innovation that organises seminars and congresses.

The NWW is advocated by a national taskforce (Platform working smarter travelling smarter) with social partners but also activist groups for the environment (reduction of CO2 emissions through less traffic).

In September 2011 some political parties proposed legislation for the right to work with flexible working times.

The Advisory Council for Science and Technology Policy, in an advice to the government in August 2011, pays substantial attention to the complementarity of technological and social innovation and the importance of workplace innovation. The government itself published in September 2011 its policy on the future of the Dutch economy and innovation. Workplace innovation for higher productivity and innovativeness was mentioned as well as the role of TNO to support organizations and branches of industry in this respect.

8.11 Conclusions

The new movement in the Netherlands is gaining importance slowly but with conviction. The NWW and workplace innovation are on the agenda. Taskforces, NCSI and ESF-funding have been playing a boosting role. Initial results of workplace innovation on company performance and quality of work are visible. But the boosting activities will be discontinued in the near future. The government had to cut the national budget and its general philosophy is that everybody is responsible for his own budget and should not be dependent on subsidies. Let's hope that these budget cuts and this philosophy do not appear to have been implemented too early. There are many visionary people in companies, the trades unions, employers' associations and science, but some continuation of support from government may help.

Literature

Argyris, C. and Schön, D. (1978). *Organizational learning*. Massachusetts: Addison-Wesley.

Blok, M., Groenesteijn, L., Formanoy, F., De Korte, E. and Vink, P. (2010). Innovative Ways of Working: A Comparison of a Traditional and a Flexible Office Environment on Office Space Use, Performance, Privacy and Satisfaction. In: Vink, P. and Kantola, J. (Eds.) *Advances in Occupational, Social and Organizational Ergonomics*. Boca Raton (etc.): CRC Press, 218-227.

Blok, M., Groenesteijn, L., Berg, C. van den, and Vink, P. (2011). New Ways of Working: A proposed framework and literature review. In: Robertson, M.M. (Ed.) *Ergonomics and Health Aspects, HCII 2011*. Berlin (etc.): Springer-Verlag, 3-12.

Bureau Bartels (2011) *Evaluatie tijdvak 1 actie E sociale innovatie van het ESF programma 2007 – 2013* (evaluation first year ESF funding social innovation). Amersfoort: Bureau Bartels.

Croon, E.M., de, Sluiter, J.K., Kuijper, P.P.F.M. and Frings-Dresen, M.H.W. (2005). The effect of office concepts on worker health and performance: A systematic review of the literature. *Ergonomics*, 48, 119-134.

Dhondt, S., Gramberen, M. van, Keuken, F., Pot, F., Totterdill, P. and Vaas, F. (2011). *Workplace innovation, Social Innovation Europe launch event*. Nottingham: UKWON.

Eeckelaert, L.; Dhondt, S.; Oeij, P.; Pot, F.; Nicolescu, G.I.; Webster, J. and Elsler, D. (2012), Review of workplace innovation and its relation with occupational safety and health. Bilbao: European Agency for Safety and Health at Work

Eurofound (2010). *European Company Survey 2009*. Dublin: Eurofound.

Hacker W. (2003). Action regulation theory: a practical tool for the design of modern work processes? *European Journal of Work and Organisational Psychology* 12(2), 105-130.

Hauw, P.A., van der, Pasaribu, M.N. and Zeijden, P.T. van der (2009). *Slimmer werken: gebruik, mogelijkheden en opbrengsten in de praktijk (Working smarter: application, opportunities and proceeds in practice)*. Zoetermeer: EIM.

Hill, E.J., Ferris M. and Mårtinson V. (2003). Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life. *Journal of Vocational Behavior* 63, 220-241.

Karasek, R.A., Theorell, T. (1990). *Healthy work; stress, productivity and the reconstruction of working life*. New York: Basic Books.

Kira, M., Eijnatten, M. van (2008). Socially sustainable work organizations: a chaordic systems approach. *Systems Research and Behavioral Sciences* 25, 743-756.

Koningsveld, E.A.P., Dul, J., Rhijn, J.W. van and Vink, P. (2005). Enhancing the impact of ergonomic interventions. *Ergonomics* 48(5), 559-580.

Koningsveld, E.A.P. (2008). Factors of competitive advances through ergonomics interventions. In: Sznalwar, L.L., Mascia, F.L. and Montedo, U.B. (Eds.) *Human Factors in Organizational Design and Management - IX*. Santa Monica, Ca., IEA Press, 265-270.

Kraan, K., Dhondt, S. and Jong, T. de (2011). *How Do Use of Social Media and Company-broad ICTs Affect Innovative Work Behavior and Employee Well-being?*, Paper presented at the APA-NIOSH 9th International Conference on Occupational Stress and Health 'Work, Stress, and Health 2011: Work and Well-Being in an Economic Context', Orlando, Florida, May 19-22, 2011.

Kriechel, B., Grip, A. de, Breugel, G.van. and Coenen, J. (2009) *Arbeidsmarktmonitor Metalektro*. Editie 2008 (Labour market monitor Technological Industry. Edition 2008). Maastricht: ROA, Maastricht University

Naschold, F. (1994). The politics and economics of workplace development. In: Kauppinen, T. and Lahtonen, M. (eds.) *National action research programmes in the 1990s*. Helsinki: Ministry of Labour. Labour Policy Studies 86, 109-155.

Oeij, P., Dorenbosch, L., Klein Hesselink, J. and Vaas, F. (2010), *Slimmer werken en sociale innovatie (Working smarter and social innovation)*. Den Haag: Boom Lemma.

Oeij, P.R.A., De Vroome, E.M.M. de, Kraan, K. and Goudswaard, A. (2011a). *Netherlands Employers Work Survey (Werkgevers Enquête Arbeid) 2010: Methodology and descriptive results*. Hoofddorp: TNO (in Dutch).

Oeij, P., Dhondt, S. and Korver, T. (2011b) Social innovation, workplace innovation and social quality, *International Journal of Social Quality* 1, 2, 38-49.

Peters, P., De Bruijn, T., Bakker, A. and Van der Heijden, B. (2011). Plezier in het nieuwe werken (Fun in the new ways of working) *Tijdschrift voor HRM* 14, 1, 31-47.

Pot, F., Peeters, M., Vaas, F. and Dhondt, S. (1994) Assessment of stress risks and learning opportunities in the work organisation, *European Work and Organisational Psychologist* 4 (1), 21-37.

Pot, F., Xavier, M. and Peltzer, F. (2008) Sociale innovatie en de rol van sociale partners (Social innovation and the role of social partners). In: Dhondt, S. and Vaas, F. (red.) - *Waardevol werk. Van arbeidskwaliteit naar sociale innovatie (Valuable work: from quality of work to social innovation)*(pp. 19-38). Den Haag: Lemma.

Pot, F.D. and Koningsveld, E.A.P. (2009) Quality of working life and organizational performance – two sides of the same coin? *Scandinavian Journal of Work, Environment and Health*, Vol 35, No 6, 421-428.

Pot, F.D. (2011) Workplace innovation for better jobs and performance. *International Journal of Productivity and Performance Management*, Vol. 60, No.4, 404-415.

Pot, F., Dhondt, S. and Oeij, P. (2012) Social innovation of work and employment. In: Franz, H-W. and Hochgerner, J. (Eds.) *Challenge Social Innovation*. Berlin: Springer.

Ramstad, E. (2009). Promoting performance and the quality of working life simultaneously, *Internal Journal of Productivity and Performance Management* Vol. 58, No 5, 423-436.

Sabel, C.F. (2006) A real-time revolution in routines. In: Heckscher, C. and Adler, P. (Eds.) *The firm as a collaborative community*. Oxford: Oxford University Press, 106-156.

Sitter, L.U. de, Hertog, J.F. and Dankbaar, B. (1997). From complex organizations with simple jobs to simple organizations with complex jobs. *Human Relations* 50(5),497-534.

Smulders, P., Kraan, K. and Pot, F. (2011). Telewerkers vormen een elite (Teleworkers are an elite category) *ESB* 96(4616), 493-495.

Vink, P., Koningsveld E.A.P. and Molenbroek J.F. (2006). Positive outcomes of participatory ergonomics in terms of greater comfort and higher productivity. *Applied Ergonomics* 37:537-546.

Volberda, H.W., Bosch, F.A.J. van den. and Jansen, J.J.P. (2006). *Slim managen & innovatief organiseren (Organising smartly and innovatively)*, Rotterdam: Eiffel.

Volberda, H. et al. (2010) *Sociale innovatie: nu nog beter! (Social innovation, today even better!)* Rotterdam: INSCOPE.

Westgaard, R.H. and Winkel, J. (2011). Occupational musculoskeletal and mental health: Significance of rationalization and opportunities to create sustainable production systems – A systematic review. *Applied Ergonomics*, Vol. 42, Issue 2, 261-296.