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SPECIAL ISSUE ON WORKPLACE INNOVATION, VOLUME 1, 2017



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EDITORIAL

Diana Rus

Creative Peas, The Netherlands

d.rus@creative-peas.com

This Special Issue of EWOP In-Practice focuses on workplace innovation (WPI). Over the past few decades, workplace innovation has come to be widely adopted across countries and industries, given its potential to help organizations generate value while simultaneously creating the necessary conditions for employees to be involved in improving the quality of working life. Indeed, within certain circles of researchers, policy-makers and practitioners, workplace innovation has come to be seen as key in helping organizations nimbly adapt to the challenges presented by a turbulent world.

Workplace innovation has been studied and practiced through the lens of multiple disciplines, such as management, sociology, economics, policy-making and work and organizational psychology. This interdisciplinary focus has resulted in a variety of different conceptualizations of WPI, which, on the one hand, could enrich our knowledge of WPI, whereas on the other hand, they could potentially create misunderstandings for practitioners interested in implementing WPI in their organizations. Whereas the definitions of WPI differ substantially, there seems to be agreement regarding the potential effects of WPI, namely improved organizational performance and improved quality of working life. Surprisingly, Work and Organizational Psychologists have largely stayed away from discussions surrounding WPI, although they could contribute enormously to an understanding of the factors surrounding the effects of WPI on organizational performance and quality of working life.

Therefore, the aim of this Special Issue on workplace innovation, is two-fold: a) to provide a platform for researchers and practitioners to showcase research and organizational practices on WPI; and b) to discuss and debate the role of Work and Organizational Psychologists in promoting the application of WPI. Given the large number of high quality submissions we received to our call, we have decided to divide the Special Issue into two volumes, both to be published in 2017. Volume 2 will be forthcoming in November, 2017. Below, I will provide a short overview of the articles included in Volume 1 of this Special Issue on Workplace Innovation.

The six articles included in Volume 1 of this Special Issue represent a multi-disciplinary collection that combines theory, empirical research and practice. As such, the articles draw on a variety of disciplines (e.g., work and organizational psychology, sociology), showcase a range of different types of contributions (e.g., reviews, empirical papers based on survey research, international case studies, practical design approaches, opinion pieces) and settings (e.g., various European countries).

We open with a fascinating paper, by **Arianna Costantini**, **Riccardo Sartori** and **Andrea Ceschi**, who present an overview of recent studies on WPI from a work and organizational psychology perspective and discuss the advantages of taking such a perspective on WPI. After examining the intersections between work and organizational psychology and WPI, they show how three critical concepts, namely, job autonomy, job flexibility, and participation in organizational life, can have an effect on WPI outcomes, such as, quality of working life and

organizational performance. The authors conclude with some practical implications for Work and Organizational Psychologists interested in WPI implementation.

Next, we continue with an excellent opinion piece by **Maria Karanika-Murray** and **Peter Oeij**. They argue that the expertise of Work and Organizational Psychologists is greatly underused in WPI practice. By taking an integrative, critical approach, they discuss the potential role that they could play to strengthen the practice of WPI. To this end, the authors propose a multidisciplinary, integrative perspective on WPI that takes into account the interplay between strategy, structure, and culture. Moreover, they outline paths in which WPI practice can benefit from knowledge generated in the field of work and organizational psychology as well as how Work and Organizational Psychologists can broaden their focus to provide a unique contribution to WPI practice.

We follow with a piece by **Pierre Van Amelsvoort** and **Geert Van Hootegem** who present a coherent set of design approaches aimed at creating a framework for stakeholders interested in redesigning organizations for WPI. They start from a sociotechnical design perspective for the design of core work processes, which they subsequently broaden by including other approaches, such as Lean Thinking, Total Productive Maintenance, and Human Resource Management theories, to address issues related to the design of control, coordination and support systems. They conclude with outlining an avenue towards combining these approaches to develop a systemic concept of Total Workplace Innovation (TWIN).

The following three contributions stem from a larger team of researchers commissioned by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) to conduct research on why and how companies apply WPI across Europe in order to offer recommendations to European policy makers on how to stimulate WPI. They all rely on data from a large-scale, multiple case study on WPI implementation among 51 companies across 10 European Union countries.

Peter Oeij, Steven Dhondt, Rita Žiauberytė-Jakštienė, Antonio Corral and **Paul Preenen** present empirical evidence on why, how and with what effects, companies implement WPI based on the Eurofound study. They show that successful WPI implementation results from an interplay between management-driven business goals and employee-driven quality of work goals. In addition, they find that, whereas, companies take different paths in implementing WPI, one key success factor for WPI is constructive cooperation between management, employees and employee representatives. They conclude that a systemic approach focusing on the interplay between strategy, structure, and culture is most likely to lead to successful WPI implementation.

We continue with an essay by **Fietje Vaas, Rita Žiauberytė-Jakštienė** and **Peter Oeij** who argue that practitioners interested in implementing WPI can benefit from being exposed to case examples of WPI best practices as a supplement to more abstract definitions of WPI. Based on international cases from the Eurofound study, the authors develop three criteria for a case to be a good example for practical purposes: a) the company should have implemented substantial WPI practices, b) the case description should provide actionable information, and c) the narrative should be inspiring. The authors underscore their argument by providing numerous and lively WPI case descriptions.

Last but not least, **Peter Totterdill** and **Rosemary Exton**, present three case studies from the UK showcasing the role of enterprise leadership for successful WPI implementation. Whereas the three case studies outline journeys towards WPI from different starting points, all three demonstrate how a consistent approach to shared leadership can stimulate employee

empowerment and bottom-up initiative, which, in turn, lead to successful WPI interventions. The authors highlight the importance of taking a systemic approach, a focus on long-term, small incremental changes as well as consistent values and leader behaviours for WPI success.

We hope this collection of articles on workplace innovation will stimulate your interest in the topic and your thinking about its potential application to your own practice. Volume 2 of this Special Issue will present a few more interesting cases and practical tools aimed at the implementation of workplace innovation.

Best wishes for the upcoming summer. We look forward to seeing you at the EAWOP Congress in Dublin in May, 2017 and bringing you more articles about the application of work and organizational psychology.

Dr. Diana Rus, Editor Special Issue on Workplace Innovation, EWOP In-Practice

Dr. Angela Carter, Co-editor a.carter@sheffield.ac.uk

Dr. Colin Roth, Co-editor colin.roth@blackboxopen.com

REVIEWING PSYCHOLOGICAL FACETS OF WORKPLACE INNOVATION

Arianna Costantini

*Department of Human
Sciences, University of Verona,
Italy*

arianna.costantini@apreso.org

Riccardo Sartori

*Department of Human
Sciences, University of Verona,
Italy*

Andrea Ceschi

*Department of Human
Sciences, University of Verona,
Italy*

About the authors

Arianna Costantini is a Ph.D. Candidate in Psychology at Verona University, Department of Human Sciences, Italy. Her field of work is workplace innovation, reward management, and organizational behaviour.

Riccardo Sartori is an assistant professor in work and organizational psychology at Verona University, Department of Human Sciences, Italy. His field of work is organizational innovation and the assessment processes linked to this topic, including psychological assessment and human resources management.

Andrea Ceschi is a post-doc in work and organizational psychology at the Verona University, Department of Human Sciences, Italy. His field of work deals with organizational dynamics related to decision-making processes in the workplace.

Abstract

In this article, we present a review of recent studies on workplace innovation (WPI) from a work and organizational psychology (WOP) perspective, with the aim of showing the potential advantages of taking a WOP perspective on WPI. We first outline a few different conceptualisations of WPI and of its main outcomes, that is, quality of working life and organizational performance. Next, we examine the intersections between research in WOP and WPI, specifically focusing on how an understanding of organizational and work-related dynamics can influence the effectiveness of WPI practices. Third, in an attempt to facilitate the integration of research on WOP and WPI and to disentangle the mechanisms underlying the effective implementation of WPI policies, we present evidence on three critical concepts in WOP and their relationship to WPI: job autonomy, job flexibility and participation in organizational life. Finally, we discuss some practical implications for Work and Organizational Psychologists interested in WPI implementation.

Introduction

The European Workplace Innovation Network (EUWIN) has defined workplace innovation (WPI) as a bundle of practices and programs involving changes in business structure, Human Resources Management (HRM), in the relationships with clients and suppliers, or in the work environment itself. Based on this perspective, WPI is characterised by the improvements it is supposed to beget, such as higher motivation at work, better working conditions for employees, increased labour productivity, innovation capability, market resilience, and overall business competitiveness. That is, according to this definition, all enterprises can benefit from WPI.

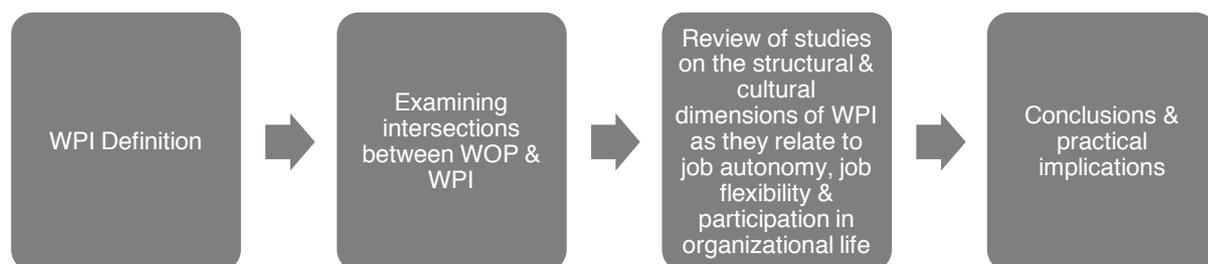
Given these potential benefits of WPI for organizational performance and employee well-being, it is not surprising that WPI has received substantial interest from policy-makers, practitioners and scholars from different fields. Indeed, it has come to be seen as a fundamental factor to

rely on in order to face intensifying global competition and technological advancement (Boxall & Purcell, 2016). In particular, the multidisciplinary perspective to the study of WPI is evidenced in the simultaneous attention to the effects of introduced innovations on individuals (e.g., in terms of motivation, attitudes, engagement), and on the organization as a whole.

However, this multidisciplinary focus on WPI has led to a variety of different conceptualisations based on the framework of study adopted. Even though such a heterogeneous body of literature may be considered important to increase the understanding of WPI as a whole, it can create misunderstandings for practitioners who want to foster WPI inside organizations and need evidence of policy outcomes to rely on when making implementation decisions (Beauregard & Henry, 2009).

In order to deepen our understanding of the effects of innovations in the workplace, a new integration between developments in theoretical and practical knowledge among different disciplines (Dhondt & Van Hootegem, 2015) is needed. In this respect, one area of study, i.e., work and organizational psychology (WOP), can provide important insights to promote a deeper understanding of the factors influencing the effective implementation of WPI because it focuses on employee motivations, attitudes, and cognitions in the workplace. In other words, integrating findings from research in WOP with findings from research on WPI could help us better define the linkages and the mechanisms through which innovations in the workplace affect employees' attitudes and behaviours, as well as organizational performance. In particular, validated theoretical models and evidence from research in the WOP field provide a wide body of knowledge devoted to understanding how individual motivations, attitudes, and behaviours develop and change according to environmental and contextual influences. In turn, this could represent a relevant and valuable contribution to the understanding of WPI. That is, merging findings from studies investigating WPI and research in WOP could significantly advance both the research and the applied agendas regarding the design, implementation, and evaluation of WPI inside organizations.

Figure 1. Overview of the structure of the present contribution



Therefore, this article aims to present an overview of studies on WPI (see Figure 1) with a specific focus on showing how WOP can contribute to this discussion. In order to do so, we will first address the definition of WPI, then we will examine the intersection between WOP and WPI and, subsequently, we will present evidence on three critical concepts in WOP and their relationship to WPI: job autonomy, job flexibility and participation in organizational life. Finally, we will discuss and address practical implications for Work and Organizational Psychologists interested in WPI implementation.

What is WPI: Defining a fuzzy concept

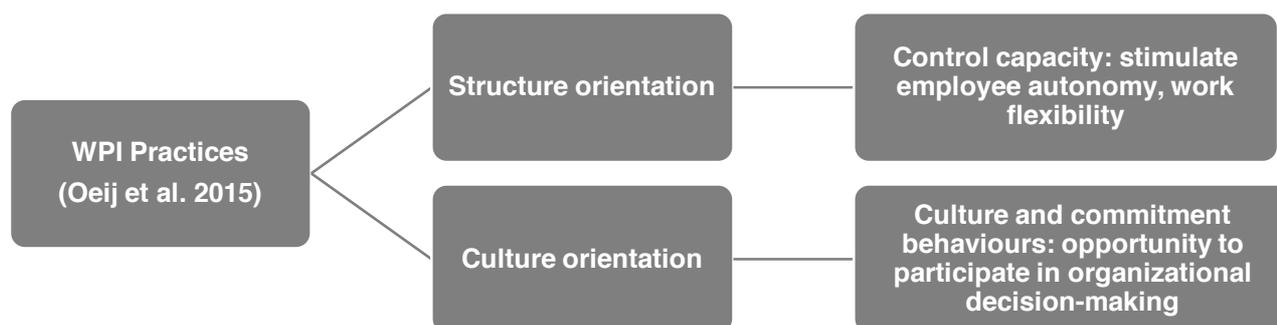
The conceptualisation of WPI has been characterised by definitional variety among both academics and practitioners. Nevertheless, one common feature found across these various

conceptualisations has been a tendency to define WPI in terms of its outcomes, specifically quality of working life and organizational performance (Pot & Koningsveld, 2009). This focus on defining WPI by means of its outcomes rather than by its contents (i.e., practices, policies and initiatives per se), appears tautological because it does not question whether or not and how WPI interventions are indeed effective in fostering better working experiences and higher organizational performance. On the contrary, it merely assumes that innovations have a positive impact on workers and organizations (Boxall & Macky, 2007)¹.

A notable exception to this is the definition of WPI proposed in the report of the Third European Company Survey, which focuses on actual practices, in contrast to expected outcomes of WPI. It defines WPI as a “developed and implemented practice or combination of practices that either structurally (through division of labour) or culturally (in terms of empowerment of staff) enable employees to participate in organizational change and renewal and hence improve the quality of working life and organizational performance” (Oeij et al., 2015).

Paying particular attention to the interventions constituting WPI, this conceptualisation identifies two main types of processes pertaining to the introduction of innovations in the workplace: The former concerns structural changes related to production systems and the design of the organizational model; the latter focuses on social aspects fostering positive work behaviours and attitudes, and promoting higher motivation at work. In this article, we will adopt this particular conceptualisation of WPI (see Figure 2).

Figure 2. Adopted conceptualization of WPI



Even though such a definition is useful to disentangle the different dimensions involved in WPI implementation, it must be noted that the factors constituting both of the proposed dimensions are naturally intertwined, in that institutions are embedded in culture and individuals are embedded in both culture and institutions. That is, the willingness to implement structural changes in the organization is grounded in values and norms, which are elements of the organizational culture. Likewise, implemented practices aimed at developing and fostering a particular vision of the organizational culture need structural support in order to be implemented. Such an understanding of the interdependent nature of organizational culture and structure is crucial, if WPI implementations are to be effective².

That being said, the clear distinction between processes that are related to structure and processes that are related to culture allows researchers to unpack which specific features of WPI may benefit from being investigated within a specific research field rather than within another. In this context, WOP researchers and practitioners could provide important insights in

¹ An in-depth analysis of the several conceptualisations of WPI is out of the scope of the present contribution. For a discussion, see Oeij & Dhondt (2017).

² We wish to thank Marta Strumińska-Kutra for this precious argumentation.

understanding and supporting the culture orientation dimension of WPI, for example, by means of job redesign interventions aiming at fostering positive organizational outcomes, such as work engagement and organizational commitment. On the other hand, scholars and practitioners from other research fields, such as management science and sociology, may have more to contribute to our understanding of the structure orientation dimension of WPI.

However, although useful for describing and defining WPI, the distinction between these two main dimensions represents an artifice. Indeed, the structure and culture orientations are deeply intertwined and result, to different extents, in the aforementioned outcomes: Quality of working life (QWL) and organizational performance (OP).

Despite definitional agreement in identifying QWL and OP as the two main expected outcomes of WPI, very limited attempts have been made to clearly define indicators for QWL and OP. Although QWL is a rather old concept (Davis & Cherns, 1975), there is still debate regarding its nature (Martel & Dupuis, 2006), and no commonly accepted definition has emerged. Studies investigating the QWL-WPI relationship have primarily measured it in terms of organizational commitment or job satisfaction (Dhondt, Pot & Kraan, 2014; Oeij, Dhondt, Kraan, Vergeer, & Pot, 2012). We are unaware of studies investigating how work engagement or work-life balance may be affected by the introduction of WPI. In this respect, taking a WOP perspective on WPI can provide potential advantages because evidence from research in this field offers important explanations of the factors enhancing positive work and organizational attitudes, which constitute important dimensions of QWL.

Intersections between WOP and WPI

It has been argued that, in order to foster the success of proposed innovation policies in the workplace, it is necessary to consider and imagine how the pattern of multiple proposed actions would be linked to the achievement of pursued outcomes (Delery & Doty, 1996). That is, given that a policy aimed at fostering innovation in the workplace is introduced within an already established organization, it is crucial to consider how the whole range of factors already present in the organization could impact the effectiveness of the policy, as well as interact with it.

In this regard, WOP research, in particular theoretical models developed to investigate how organizational design is related to work attitudes and behaviours, could provide a valuable framework for WPI-policy design. In fact, they would provide not only a strong evidence-based approach to policy design but also the opportunity for being tailored to the unique needs of the organization. Accordingly, some WPI literature has already adopted a WOP perspective to the study of organizational design aimed at understanding how it can influence employees' health and QWL.

Current studies have mainly referred to the Job Demand-Control Model (JDC) developed by Karasek (Karasek, 1979; Karasek & Theorell, 1992). The JDC assumes that work organization, and, in particular, high control in performing tasks and activities at work, is a key-factor in transforming job demands into opportunities for learning as opposed to risks and stress drivers (Holman et al., 2012). Although the WOP literature has provided considerable support for the hypothesis that the combination of high job demands and low job control is an important predictor of psychological strain and illness (Schnall, Landsbergis, & Baker, 1994), support for the hypothesis that control can moderate the negative effects of high demands on well-being is less consistent (de Jonge & Kompier, 1997; Van der Doef & Maes, 1999).

Hence, although the JDC might be useful to gain an understanding of the relevance of organizational design on employee well-being and organizational sustainability, support for the model has been relatively mixed. Moreover, within WOP research more recent organizational

models have emerged that factor in a wider range of organizational resources and demands than just job control and work overload (Bakker & Demerouti, 2007). To our knowledge, it appears that the literature on WPI has never established a connection with these more recent models.

The Job Demands-Resources Model (JD-R) (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) could provide an important theoretical basis for the design, implementation and monitoring of WPI practices inside organizations. The JD-R assumes that, whereas every occupation may have its own specific risk factors associated with job stress, these factors can be clustered into two broad categories, i.e., job demands and job resources. Hence, it goes beyond the limits of the JDC, which basically considers only a limited amount of the several factors influencing employees' work outcomes (i.e., work overload, time pressure, and job control) and may be applied to several occupational settings, irrespective of specific professional demands and resources (Bakker & Demerouti, 2007).

Job demands refer to organizational features requiring employee physical and psychological effort that can result in psychological stress, whilst job resources refer to all those elements in the work environment that help individuals achieve their goals, stimulate personal growth and reduce job demands by facing them. In addition, the JD-R posits that two different, underlying psychological processes play a role in the development of negative (job strain) and positive work outcomes. Specifically, it argues that chronic job demands lead to employees' feelings of exhaustion whilst job resources have a motivational potential that foster higher work engagement, individual performance, and work motivation.

Research on the JD-R has found strong empirical support for the idea that job demands are predictors of negative work outcomes such as burnout and exhaustion, whilst job resources have been found to predict higher levels of work engagement, extra-role performance, organizational commitment, and lower absence duration (Bakker, Demerouti, & Verbeke, 2004; Bakker, Demerouti, de Boer, & Schaufeli, 2003; Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Schaufeli & Bakker, 2004). Moreover, there is evidence that job resources have positive effects on the relationship between job demands and well-being. Specifically, studies have shown that higher autonomy, feedback, perceived social support, and a high-quality relationship with the supervisor can buffer the negative effects of work overload, emotional and physical demands, and work-home interference (Bakker, Demerouti, & Euwema, 2005).

These results suggest that the JD-R could represent an important tool for policy-makers and WOP professionals who want to foster WPI inside organizations, because it provides a clear framework for the implementation of innovations in the workplace. Besides providing an evidence-based account for understanding the relationships between resources, demands and work and organizational outcomes, this model provides a paradigmatic approach to the study of organizational variables that influence employees' attitudes and behaviours when introducing WPI. For example, it can represent a reliable means to identify which organizational resources are in specific need of innovations, or, what job demands need to be rethought in order to render them challenging rather than exhausting.

Further, a focus on the positive outcomes related to high job resources permits to shed light on the nature of QWL, which, as previously mentioned, remains a debated concept in need of further clarification. In this respect, applying the JD-R to the study of several organizations operating in a wide range of sectors provided evidence of effects deriving from the demands-resources relationship that are relevant to both QWL and OP. For what concerns the former, the study of organizations through the lens of the JD-R shows that job resources represent one

of the most important drivers of work engagement (Bakker & Demerouti, 2008), which is defined as a positive, fulfilling, work-related state of mind characterised by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Moreover, studies have found that engaged employees have high levels of energy, are enthusiastic about their work and are often fully immersed in it (May, Gilson, & Harter, 2004).

Given that QWL constitutes a relatively vague concept related to the well-being of workers, work engagement seems to be a more concrete concept that could constitute one core-dimension of QWL. In addition, work engagement may also potentially affect OP. For instance, research investigating the link between work-engagement and OP, despite the substantial heterogeneity in the way in which performance was measured and conceptualised, found support for the higher engagement-higher performance link (Demerouti & Bakker, 2006; Salanova, Agut, & Peiró, 2005; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

Given the above research evidence from a JD-R perspective and given that QWL and OP are defined as the two major outcomes of WPI, the JD-R framework appears to be an effective approach to promote WPI practices that foster high QWL and, subsequently, higher OP. Moreover, since policies aiming to foster work engagement must be well-integrated and connected in order to be effective (Gruman & Saks, 2011), investigating ways to promote WPI through the JD-R may be effective in not only designing innovative policies aimed at improving job resources but also at harmonising job demands and resources, thereby, promoting higher QWL and OP.

In an attempt to facilitate the integration of research on WOP and WPI and to disentangle the mechanisms underlying the effective implementation of WPI policies, in the following section, we present evidence from research on three main concepts and their relationship to WPI: job autonomy, job flexibility and participation in organizational life. Specifically, based on our adopted definition of WPI (see Figure 2) we will discuss job autonomy and job flexibility as they relate to the WPI-structure orientation and participation in organizational life as it relates to the WPI-culture orientation.

Method

The rationale for sampling the concepts of job autonomy, job flexibility and participation in organizational life was inspired by the definition of WPI as consisting of a structure and a culture orientation. Nevertheless, as previously stated, it must be noted that such a theoretical distinction represents an artifice when it comes to actual practices in organizations. However, assuming this distinction for research purposes helps us understand how interventions specifically aimed at changing organizational design or organizational climate could have an effect on QWL and/or OP.

Peer-reviewed publications on WPI of the last two decades were identified via a computer-based search (i.e., PsycINFO, Web of Science, Google Scholar database). Based on the definitional distinction proposed in the Third European Company Survey we searched for the main psychological constructs related to the cultural and structural dimensions of WPI in relation to job autonomy, job flexibility and participation in organizational life. Specifically, we used the following keywords in relation to job autonomy, job flexibility and participation in organizational life (i.e., by using “and” as a search option): WPI, workplace innovation, quality of working life, high-involvement work systems, organizational innovation, high performance work systems, strategic human resource management, HPWS, organizational climate. In order to be focused on a transcultural level of analysis, we decided to include only English language

sources in our search. Moreover, the keywords were supposed to appear in the title and/or in the abstract.

We acknowledge that these inclusion/exclusion criteria have excluded a large body of WOP research on the three core-constructs considered here (i.e., job autonomy, job flexibility, and participation in organizational life). However, this contribution aims at introducing a link between WPI and WOP focusing on the current state of the art in WPI research. Such an approach aims at fostering future investigations that focus on understanding how WOP could enrich WPI, and, thereby, prompting future more exhaustive contributions of WOP to WPI.

Table 1. Overview of studies included in the review specifying the relationships among the different dimensions of WPI and QWL and OP

References	Methodology		WPI Dimensions			Measured outcomes	
			WPI-Structure		WPI-Culture	QWL	OP
	Quantitative	Qualitative	Job Autonomy	Job Flexibility	Participation		
<i>Bond & Flaxman, 2006</i>	X		X				+
<i>Dhondt et al., 2014</i>	X		X		X	+	
<i>Holman et al., 2009</i>	X		X				+
<i>Humphrey et al., 2007</i>	X		X			+	+
<i>Oeij & Vaas, 2016</i>	X			X			+
<i>Oeij et al., 2012</i>	X		X	X		+	+
<i>Oeij et al., 2014</i>	X	X	X	X	X	+	+
<i>Oeij et al., 2015</i>		X	X	X	X	+	+
<i>Parker et al., 1997</i>	X		X				+
<i>Preenen et al., 2015</i>	X			X			+
<i>Preenen et al., 2016</i>	X		X				+
<i>Taris et al., 2003</i>	X		X				+
<i>Zhou et al., 2011</i>	X			X			+

Note. QWL = Quality of Working Life; OP = Organizational Performance; + = Positive relationships found

Regarding the papers eventually considered for the analysis (13; see Table 1), it appears that the majority of the identified WPI studies were published in journals in the fields of economics, management, and sociology, with limited references to journals in the field of applied psychology. This limited number of identified articles is most likely due to our adoption of the definition of WPI as constituted by two main dimensions and the three specific constructs under investigation, which could also be interpreted as a signal of the need for more definitional clarity in the field of WPI.

Results

Based on our adopted definition of WPI (see Figure 2), we will divide the rest of the review into two main sections. The first part presents studies related to the structural orientation of WPI that investigate how different means to promote employees' control capacity and job flexibility may foster higher QWL and OP. Specifically we will focus on the role played by job autonomy and job flexibility. The second part presents studies related to the cultural orientation of WPI that investigate how the promotion of employees' participation inside organizations, such as by means of participation in organizational decision-making, supports the achievement of a better QWL and improved OP.

The structure orientation of WPI: Enabling control capacity and flexibility

Job Autonomy

Job autonomy is defined as the amount of discretion employees have to carry out tasks, to establish methods of work and the speed or rate of it (Hackman & Oldham, 1976; Oldham, Hackman, & Pearce, 1976). Overall, the positive effects of job autonomy on employee well-being, motivation (Karasek, 1979; Parker, 2003; Singh, 2000), and performance have been found to lead to positive organizational outcomes, especially when combined with other organizational practices (Appelbaum, Bailey, Berg, & Kalleberg, 2000). Below, a selected number of studies will be reported that provide an overview of findings regarding the relationship between job autonomy and organizational outcomes in terms of QWL and OP.

Preenen, Oeij, Dhondt, Kraan, and Jansen (2016) investigated the relationship between employees' job autonomy, self-reported company performance (in terms of revenue and profit), and the moderating role of company maturity among 3311 companies in The Netherlands. They found a main effect for the job autonomy-company revenue relationship. In addition, they found that company maturity moderated the job autonomy-organizational performance link. Specifically, job autonomy was positively associated with employees' perception of company revenue and profit growth, but only for young companies, aged two to five years. Such a moderating role of company age is of interest given that, generally, job autonomy is hypothesised to be positively related to organizational outcomes, regardless of the company's maturity. Overall, these findings support the assumption that job autonomy is a key feature to foster positive perceptions of a company's growth (Preenen et al., 2016).

In another study among 2359 call centres in 16 countries, Holman, Frenkel, Sørensen, and Wood (2009) explored how decisions about work design affect organizational outcomes. They found empirical evidence that job autonomy was negatively associated with voluntary turnover and labour costs, indicating that higher job autonomy enabled employees to better manage and cope with task demands.

Regarding the relationship between job autonomy and indicators of QWL, such as active learning behaviours and higher involvement within the work environment, a longitudinal study conducted within the JDC framework among 876 teachers found a positive effect of job

autonomy in promoting high levels of learning (Taris, Kompier, De Lange, Schaufeli, & Schreurs, 2003). This finding is in line with arguments made by Parker, Wall, and Jackson (1997) whereby job autonomy seems to be a mechanism allowing hands-on learning which gives employees the opportunity to interact with their environment and, at the same time, become more involved in and more knowledgeable about it. Moreover, as noted by the authors, such experience might then potentially lead to a broader ownership of problems and a more proactive view of performance, interpreted, for example, in terms of the learning process itself (Parker et al., 1997).

In another longitudinal study among call centre workers in the UK, job control, along with individual psychological flexibility and the interaction between these two factors was shown to predict people's ability to learn a new ITC application, employees' mental health and job performance (Bond & Flaxman, 2006).

Overall, research evidence suggests that autonomy, beyond fostering job satisfaction and well-being, could also enhance performance, for example, by enabling quicker responses to problems, due to a more developed understanding of roles (Parker et al., 1997). Finally, job autonomy appears to be an essential element in allowing workers to establish how to pursue their goals and to redefine or optimise paths toward goal accomplishment (Humphrey, Nahrgang, & Morgeson, 2007).

Job Flexibility

Defining flexible work as a dimension of WPI directed at optimising personnel availability, Oei and Vaas (2016) investigated the role of WPI on perceived organizational performance and on sickness absence. In this study, WPI was conceptualised as a special capacity of the organization consisting of four sources (i.e., strategic orientation, smarter organising, flexible working, and product market improvement). Using data collected from a sample of Dutch for-profit and non-profit organizations, they found that, among all sources considered, flexible work and organising smarter were those that contributed the least to perceived organizational performance. As an explanation for this surprising finding, the authors suggest that externally oriented resources, such as strategic-orientation and product-market improvement, might be more visible to employees than their counterparts, i.e., flexible work and organising smarter. This availability bias, in turn, could lead to an overestimation of the effects of the externally oriented sources and an underestimation of the effects of the internal sources on performance. Overall, even though reporting a weak effect of flexible work on OP, this study represents an important contribution to the understanding of WPI due to its focus on the differential effects of various sources. Such an approach permits to investigate how different dimensions of WPI do or do not contribute to expected organizational outcomes, i.e., QWL and OP. Moreover, this study found that organizations that are more active with WPI reported higher perceived organizational performance than organizations less active with WPI. In addition, this relationship was strongest for organizations that were active on more than one of the cited resources simultaneously, confirming the importance of taking a systemic approach to the introduction of WPI.

In another study, using longitudinal firm-level data, Zhou, Dekker, and Kleinknecht (2011) investigated the role of flexibility on innovation. Specifically, they found that functional flexibility (i.e., the ability of firms to reallocate labour in their internal labour markets, by relying on training that allows personnel to carry out a wider range of tasks) was positively associated with innovation by reducing barriers to knowledge sharing and allowing the building of multiple competencies among employees (Zhou, Dekker, & Kleinknecht, 2011), which may represent elements for improving QWL.

Focusing on internal labour flexibility practices (ILFPs), which reflect the measures that companies take to help their employees in flexibly performing different tasks and roles in their organization, Preenen, Vergeer, Kraan, and Dhondt (2015) investigated the relationships between these and labour productivity and innovation performance at the company level, in two studies, conducted among 4648 companies in The Netherlands. Results showed that ILFPs stimulate labour productivity and company innovation as reported by directors or HR managers.

Taken together, these findings support the value of a deeper investigation of how flexible policies may represent a resource for companies in adjusting to constant dynamic circumstances, by stimulating innovative and creative behaviour along with other positive organizational outcomes such as commitment, learning and knowledge sharing (Preenen et al., 2015), which may constitute dimensions of QWL.

The cultural orientation of WPI: The role of participation in organizational life in promoting commitment behaviours

Workplace participation, usually defined as the degree to which employees influence decision-making in organizations, is recognised as one of the major drivers of positive outcomes for organizations, such as generic organizational efficiency and workers' well-being and health (Knudsen, Busck, & Lind, 2011).

Studies carried out to investigate the role of participation in the workplace identified different ways in which it can be exercised, such as by individual employees, teams and by employee representatives (Hagen & Trygstad, 2009; Walters & Nichols, 2007). Nowadays, organizations need to find a more dynamic way of conceptualising workplace participation in terms of new job configurations, so as to be able to face the needs and challenges posed by new work and career patterns. That is, more recent HRM practices developed on the basis of the current trends in WOP research tend to promote organizational innovations fostering bottom-up approaches to deal with the needs of the current workforce (Demerouti, 2015), which, in turn, improve working conditions by means of higher job control. This type of approach is necessarily based on higher employee participation in organizational life, since individuals are encouraged to adjust their work environment in order to promote and achieve higher QWL and OP.

Knudsen et al. (2011) explored whether employee participation influenced the quality of the work environment and worker well-being at 11 Danish workplaces. Findings from interviews with employees and managers and from questionnaires administered to employees revealed that only democratically governed workplaces led to the experience of a high quality of the psychosocial work environment among employees. Nevertheless, this study also suggests that, when control systems in the workplace systematically demand more from employees than what they can deliver, participation cannot buffer the negative effects of the control system on employees' psychosocial well-being (Busck, Knudsen, & Lind, 2010). These findings suggest that there is a need to consider the level of job control to allow for the positive effects of participation to emerge.

In addition, the role of organizational level decision latitude on organizational commitment, which may represent a facet of QWL, has been investigated in a study among 2048 employees from six different European countries. Using data from the European Working Condition Survey of 2010, Dhondt et al. (2014) found empirical evidence that among the three different dimensions of job control, i.e., job autonomy, functional support and organizational level decision latitude (OLDL), job autonomy is related to subjective well-being only in combination with OLDL. This suggests that organizations would need to consider all three dimensions in order to foster QWL. Moreover, they also found that functional support and OLDL are related to

organizational commitment more strongly than job autonomy, and that organizational commitment was highest when all three dimensions were present at the same time (Dhondt et al., 2014). That is, to enhance organizational commitment and well-being, which represent two dimensions of QWL, the different dimensions of job control should be aligned and promoted congruently.

Conclusions

This contribution aimed at proposing a conceptual integration of the domains of WPI and WOP, in order to deepen our understanding of the potential advantages offered by such an integrative perspective to innovation in organizations. Drawing on the conceptualisation of WPI as composed of two dimensions, i.e., a structural and a cultural orientation, we identified three main constructs that represent organizational practices at the basis of WPI interventions: job autonomy and job flexibility (i.e., the structural orientation of WPI), and participation in organizational life (i.e., the cultural dimension of WPI).

According to Klein, Conn, and Sorra (2001), a strong climate for innovation implementation, created by the support of management through a clear and strategic vision for it, represents a fundamental factor in order to create an institutional context informing employees that implementation of innovation is important and even rewarded (Choi & Chang, 2009). This reasoning is aligned with the vision of an innovation environment where institutions, organizational cultures and individuals are intertwined and reciprocally influence each other. That is, it suggests that higher QWL and OP are simultaneously achievable when all these different levels of analysis are considered as potential factors influencing the introduced innovations. Based on these premises, the first practical issue to be addressed when designing WPI interventions refers to the creation of a supportive implementation context in which management support and encouragement toward innovation can foster employees' positive beliefs in this regard (Purvis, Sambamurthy, & Zmud, 2001; Russell & Hoag, 2004). In achieving this, the contribution of WOP research is particularly relevant.

To conclude, evidence from research reported in the cited studies shows the intertwined nature of organizational factors in promoting higher QWL and OP. Indeed, it supports the need to simultaneously consider a multitude of features affecting WPI processes aimed at improving QWL and OP, which, in turn, implies taking a systemic perspective on WPI implementation.

References

- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, NY: ILR Press.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*, 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International, 13*, 209-223.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*, 170-180.
- Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior, 62*, 341-356.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. (2003). A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of Stress Management, 10*, 16-38.
- Bakker, A., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources model to predict burnout and performance. *Human Resource Management, 43*, 83-104.
- Beauregard, T. A., & Henry, L. C. (2009). Making the link between work-life balance practices and organizational performance. *Human Resource Management Review, 19*, 9-22.

- Bond, F. W., & Flaxman, P. E. (2006). The ability of psychological flexibility and job control to predict learning, job performance, and mental health. *Journal of Organizational Behavior Management*, *26*, 113-130.
- Boxall, P., & Macky, K. (2007). High-performance work systems and organizational performance: Bridging theory and practice. *Asia Pacific Journal of Human Resources*, *45*, 261-270.
- Boxall, P., & Purcell, J. (2016). *Strategy and Human Resource Management* (4th ed.). Basingstoke: Palgrave Macmillan.
- Busck, O., Knudsen, H., & Lind, J. (2010). The transformation of employee participation: Consequences for the work environment. *Economic and Industrial Democracy*, *31*, 285-305.
- Choi, J. N., & Chang, J. Y. (2009). Innovation implementation in the public sector: An integration of institutional and collective dynamics. *Journal of Applied Psychology*, *94*, 245-253.
- Davis, L. E., & Cherns, A. (1975). *The Quality of Working Life. Problems, Prospects, and the State of the Art*. London: Collier Macmillan Publishers.
- de Jonge, J., & Kompier, M. A. (1997). A critical examination of the demand-control-support model from a work psychological perspective. *International Journal of Stress Management*, *4*, 235-258.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, *39*, 802-835.
- Demerouti, E. (2015). Design your own job through job crafting. *European Psychologist*, *19*, 237-247.
- Demerouti, E., & Bakker, A. B. (2006). Employee well-being and job performance: Where we stand and where we should go. In J. Houdmont & S. McIntyre (Eds.), *Occupational health psychology: European perspectives on research, education and practice* (Vol. 1, pp. 83-111). Maia: ISMAI Publications.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*, 499-512.
- Dhondt, S., & Van Hoetegem, G. (2015). Reshaping workplaces: Workplace innovation as designed by scientists and practitioners. *European Journal of Workplace Innovation*, *1*, 17-24.
- Dhondt, S., Delano Pot, F., & O. Kraan, K. (2014). The importance of organizational level decision latitude for well-being and organizational commitment. *Team Performance Management*, *20*, 307-327.
- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, *21*, 123-136.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior & Human Performance*, *16*, 250-279.
- Hagen, I. M., & Trygstad, S. C. (2009). Local flexicurity: Resolving the conflict between direct and representative participation. *Transfer: European Review of Labour and Research*, *15*, 557-577.
- Holman, D., Frenkel, S., Sørensen, O. & Wood, S. (2009). Work design variation and outcomes in call centers: Strategic choice and institutional explanations. *Industrial and Labor Relations Review*, *62*, 510-532.
- Holman, D., Totterdell, P., Axtell, C., Stride, C., Port, R., Svensson, R., & Zibarras, L. (2012). Job design and the employee innovation process: The mediating role of learning strategies. *Journal of Business and Psychology*, *27*, 177-191.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, *92*, 1332-1356.
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, *24*, 285-308.
- Karasek, R. A., & Theorell, T. (1992). *Healthy work, stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Klein, K. J., Conn, A. B., & Sorra, J. S. (2001). Implementing computerized technology: An organizational analysis. *Journal of Applied Psychology*, *86*, 811-824.
- Knudsen, H., Busck, O., & Lind, J. (2011). Work environment quality: The role of workplace participation and democracy. *Work, Employment & Society*, *25*, 379-396.
- Martel, J.-P., & Dupuis, G. (2006). Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. *Social Indicators Research*, *77*, 333-368.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational*

Psychology, 77, 11-37.

- Oeij, P. R., & Dhondt, S. (forthcoming 2017). On the theory of Workplace Innovation. In P. R. A. Oeij, D. Rus, and F. D. Pot (Eds.) *Workplace Innovation: Theory, Research and Practice*. Volume in the series 'Aligning Perspectives on Health, Safety and Well-Being'. Heidelberg etc.: Springer Publishing Company.
- Oeij, P. R., & Vaas, F. (2016). Effect of workplace innovation on organizational performance and sickness absence. *World Review of Entrepreneurship, Management and Sustainable Development*, 12, 101-129.
- Oeij, P. R., Dhondt, S., Kraan, K., Vergeer, R., & Pot, F. (2012). Workplace innovation and its relations with organizational performance and employee commitment. *LLinE, Lifelong Learning in Europe*, 4.
- Oeij, P., Žiauberyté-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. (2015). *Workplace innovation in European companies*. Luxembourg: Publication Office of the European Union.
- Oldham, G. R., Hackman, J. R., & Pearce, J. L. (1976). Conditions under which employees respond positively to enriched work. *Journal of Applied Psychology*, 61, 395-403.
- Parker, S. K. (2003). Longitudinal effects of lean production on employee outcomes and the mediating role of work characteristics. *Journal of Applied Psychology*, 88, 620-634.
- Parker, S. K., Wall, T. D., & Jackson, P. R. (1997). "That's not my job": Developing flexible employee work orientations. *Academy of Management Journal*, 40, 899-929.
- Pot, F. D., & Koningsveld, E. A. (2009). Quality of working life and organizational performance-two sides of the same coin? *Scandinavian Journal of Work, Environment & Health*, 35, 421-428.
- Preenen, P. T., Oeij, P. R., Dhondt, S., Kraan, K. O., & Jansen, E. (2016). Why job autonomy matters for young companies' performance: Company maturity as a moderator between job autonomy and company performance. *World Review of Entrepreneurship, Management and Sustainable Development*, 12, 74-100.
- Preenen, P. T., Vergeer, R., Kraan, K., & Dhondt, S. (2015). Labour productivity and innovation performance: The importance of internal labour flexibility practices. *Economic and Industrial Democracy*, 1-23.
- Purvis, R. L., Sambamurthy, V., & Zmud, R. W. (2001). The assimilation of knowledge platforms in organizations: An empirical investigation. *Organization Science*, 12, 117-135.
- Russell, D. M., & Hoag, A. M. (2004). People and information technology in the supply chain: Social and organizational influences on adoption. *International Journal of Physical Distribution & Logistics Management*, 34, 102-122.
- Salanova, M., Agut, S., & Peiró, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90, 1217-1227.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schaufeli, W., & Bakker, A. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schnall, P., Landsbergis, P., & Baker, D. (1994). Job strain and cardiovascular disease. *Annual Review of Public Health*, 15, 381-411.
- Singh, J. (2000). Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing*, 64, 15-34.
- Taris, T. W., Kompier, M. A., De Lange, A. H., Schaufeli, W. B., & Schreurs, P. J. (2003). Learning new behaviour patterns: A longitudinal test of Karasek's active learning hypothesis among Dutch teachers. *Work & Stress*, 17, 1-20.
- Van der Doef, M., & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research. *Work & Stress*, 13, 87-114.
- Walters, D., & Nichols, T. (2007). *Worker representation and workplace health and safety*. Basingstoke: Palgrave Macmillan.
- Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2007). How job and personal resources influence work engagement and financial turnover: A diary study in a Greek fast-food company. *International Journal of Stress Management*, 14, 121-141.
- Zhou, H., Dekker, R., & Kleinknecht, A. (2011). Flexible labor and innovation performance: Evidence from longitudinal firm-level data. *Industrial and Corporate Change*, 20, 941-968.

THE ROLE OF WORK AND ORGANIZATIONAL PSYCHOLOGY FOR WORKPLACE INNOVATION PRACTICE: FROM SHORT-SIGHTEDNESS TO EAGLE VIEW

Maria Karanika-Murray
Nottingham Trent University, UK
maria.karanika-murray@ntu.ac.uk

Peter R. A. Oeij
TNO, The Netherlands Organization for Applied
Scientific Research

About the authors

Maria Karanika-Murray is an associate professor in occupational health psychology. Her research seeks to understand the determinants and conditions that can support work-related well-being and performance, with a focus on workplace design, intervention evaluation, presenteeism (attending work while sick), employability, and older workers.

Peter R.A. Oeij is a senior researcher/consultant at TNO, The Netherlands Organization for Applied Scientific Research (Leiden, The Netherlands). The main topics of his work are innovation management, workplace innovation, social innovation, productivity, flexibility, working smarter and team work.

Abstract

This paper is premised on the observation that the potential of Work and Organizational (WO) Psychologists to successfully implement workplace innovation (WPI) practices and, in turn, improve the quality of work and organizational performance is greatly underused. One reason for this is that WPI practice often adopts a more specialised approach and single discipline focus rather than an integrated perspective. An integrated approach would imply understanding WPI from the strategy, structure, and culture perspectives. We outline ways in which WPI practice can appreciate and use the potential of WO psychology as well as how WO Psychologists can broaden their focus and strengthen their contribution to WPI practice.

Introduction

The increasing adoption and implementation of workplace innovation (WPI) practices in business organizations poses a number of challenges for the role of Work and Organizational (WO) Psychologists in WPI. Here, by Work and Organizational Psychologists we refer to researchers and practitioners in the fields of occupational psychology, occupational health psychology, industrial and organizational psychology, and cognate areas, whereas we use the term WPI to refer to innovations in deploying human talent and organising work processes that should result in good work and better performance. WPI, as explained in more detail later, is renewal through deploying human talents and organizational design, aiming at both better performance and better jobs. The implications of WPI practice for WO Psychologists are the need to find synergy in people and organizational issues on the one hand, and the need to communicate the value and potential of WPI to stakeholders with different backgrounds, on the other. Challenges that emerge from the meeting of WO psychology and WPI practice include, for example, WO Psychologists being called to provide rigorous evidence for relevant practice, often having to move between increasingly varied roles as both reflective practitioners and action researchers, and being required to communicate with diverse groups of stakeholders with different agendas and understandings. Unless such challenges are successfully

addressed, they can become barriers for the successful utilisation of WO psychological knowledge in the implementation of WPI practice.

These challenges are not unique to the field. Rather, they reflect a long-standing concern about a practitioner-researcher divide in WO psychology and in business and management (e.g., Anderson, 2005; Anderson, Herriott, & Hodgkinson, 2001). The practitioner-researcher divide denotes the phenomenon of practitioners and researchers operating in isolation from each other: research advancements are often ignored by practitioners and practical problems are often ignored in research. More broadly, a practitioner-researcher divide is also afflicting a range of fields including personnel selection (Anderson, 2005), nursing practice (Arber, 2006), education practice (Fraser, 1997), design (Wampler, 2010), occupational health and safety (Zanko & Dawson, 2012), and even foreign policy (Nye, 2008). Others too have called for management scholars to place practice and the pragmatic concerns of practitioners on their agenda (Zanko & Dawson, 2012). Nevertheless, a recent upsurge in the solutions proposed to bridge this divide encourages optimism about the chances of success for using WO psychology to support WPI practice.

In this paper, we discuss how the practitioner-researcher challenges for WO Psychologists are framed within WPI practice. We then identify a range of ways in which WO Psychologists can demonstrate the value of the field to WPI and examine ways in which the role of WO Psychologists can be strengthened for successful WPI practice. By examining the transaction between WO psychology and WPI practice, with this position paper we address the question “what is the role of work and organizational Psychologists for workplace innovation practice?”. To achieve this, we draw from a range of literatures, such as WO psychology, WPI, Human Resource Management (HRM), and industrial relations, taking a necessarily integrative and critical rather than a systematic approach.

What challenges is WO psychology called to deal with in WPI practice?

WPI practice poses unique challenges for WO psychology and, at the same time, WO psychology can offer opportunities for bolstering WPI practice. In practice, there is a risk for the practitioner-researcher divide to be exacerbated unless we can identify ways for the two fields to converge. Here, we discuss the meaning and practice of WPI and what challenges this context poses for WO psychology research and practice.

The applied definition of workplace innovation (WPI) that we employ here is that of: “*developed and implemented practice or combination of practices that structurally (structure orientation or a focus on division of labour) and/or culturally (culture orientation or a focus on empowerment) enable employees to participate in organizational change and renewal to improve quality of working life and organizational performance*” (Oeij et al., 2015, p. 8, 14).

Importantly, the *structure-* and *culture-oriented WPI practices* are part of a broader comprehensive organizational *strategy* that provides the framework for implementing WPI in the specific organizational context and with the available resources. The *structure orientation* contains practices that structure work organization and job design (De Sitter, Den Hertog & Dankbaar, 1997; Oeij et al., 2015). Structure-oriented practices can stimulate employee control and autonomy (De Sitter et al., 1997). These practices concern the division of labour, the division of controlling (or managing) and executing tasks, and providing employees with decision latitude or capacity for control. For instance, do employers allow employees a genuine say in organizational change initiatives by providing them with task autonomy and voice in decisions; or do they only offer a token to employee empowerment and employability by inviting ideas but not acting on them (Herriot, 2001)? Such an approach goes beyond HR-dominated

streams of practice (such as high performance work practices and high involvement work practices), because it is rooted in the choices made on how to design the production system. Hence, it goes beyond HR practices by supporting and improving the underlying causes of engagement and not merely softening the possible negative effects of non-engagement.

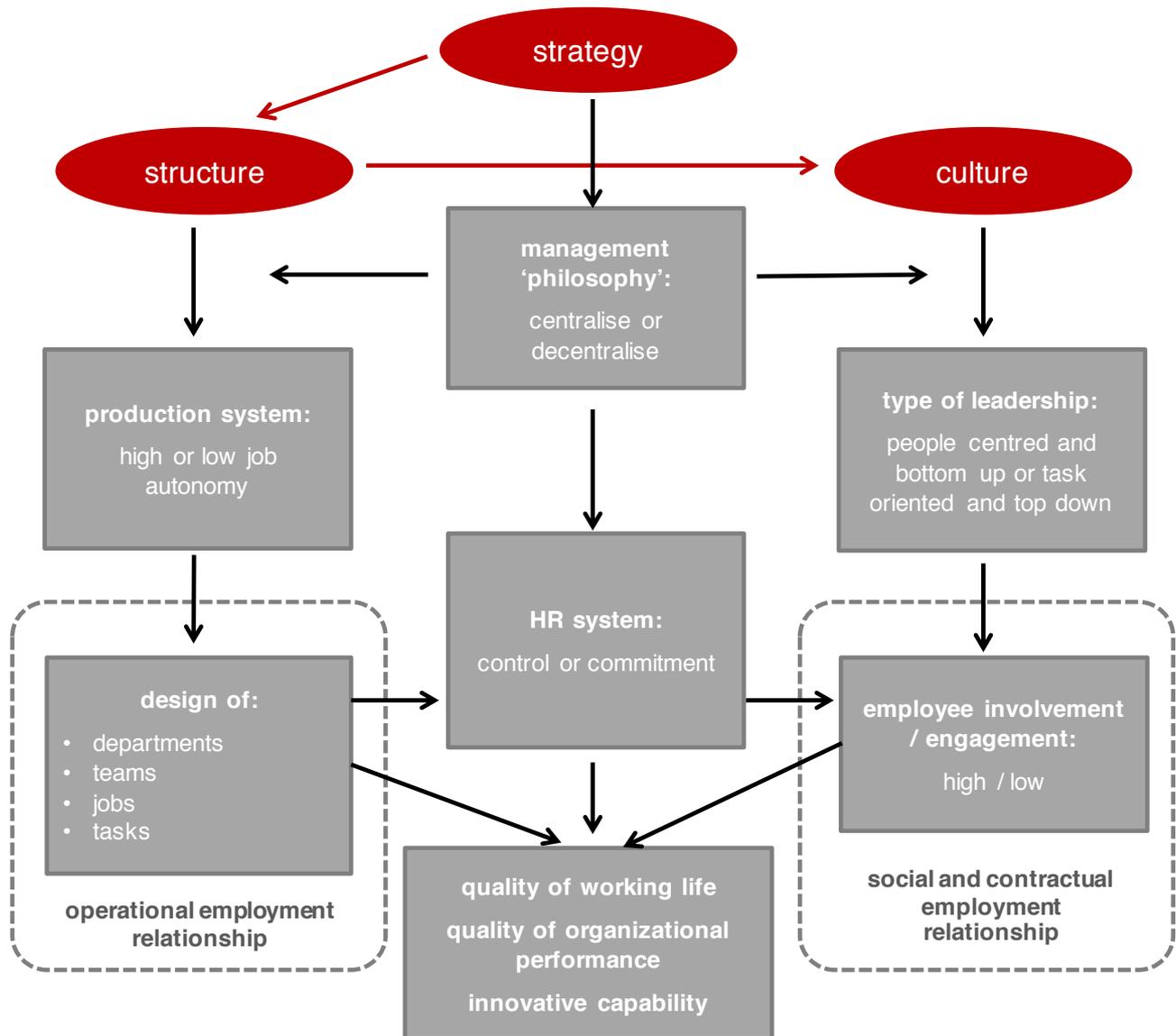
The *culture orientation*, on the other hand, includes practices that provide opportunities for employees to participate in various ways such as, for example, in organizational decision-making (Oeij et al., 2015). Participation is more than being listened to; rather, employees co-decide on the issues that concern them and affect their day-to-day work and well-being (Oeij et al., 2015). Participation is not limited to employees but also applies to employee representatives engaging in dialogue and collective bargaining. Culture-oriented practices can stimulate commitment and provide employees and employee representatives with voice (Totterdill & Exton, 2014). As such, not only do they allow for voice in contract negotiations and pay for performance decisions, but also consist of psychological rewards, such as appreciation, recognition and professional acknowledgement. Genuine commitment and voice find expression in 'formal' rewards and in the psychological contract and employee relations.

The practice of WPI poses four challenges that the field of WO psychology is in a very good position to address. First, in order to practice WPI successfully and reap the benefits associated with it, one needs to *look at the organization as a whole and consider the reciprocal effects of strategy, structure, and culture* (Howaldt, Oeij, Dhondt, & Fruytier, 2016). Although not uncontested, it was Chandler (1962) who coined the adage that structure follows strategy, to which we add that culture follows structure (see Figure 1). Strategy determines the design of the production of products or services, based on the central purpose of the organization. The evolving production system reflects a design built on a certain division of labour, which can be characterised in terms of high or low job autonomy, i.e., decentralised versus centralised. From here follows the nature of operational employment relationships (in particular, dealing with the degree of the division of managing and executing tasks and the splitting up of responsibilities and decision latitude in the working process), which is mirrored in the design of departments, teams, jobs, and tasks. Meanwhile, the management philosophy (i.e., centralised vs. decentralised) determines not only the production system, but also the type of HR system applied to support the production system. As such, the HR system can focus on either control or commitment. Third, strategy and structure set the boundaries for the organizational behaviour exhibited by leaders/managers and employees. A preference for centralised or decentralised production systems breeds a type of leadership that is either task-oriented or people-oriented (i.e., transactional and more top-down, and transformational and more bottom-up leadership, respectively), and lays foundations for employee engagement. Such behaviour is further stimulated or facilitated by the HR system. Ultimately, the HR system defines the social and contractual elements of the employment relationships and the features of the economic and psychological contract, described as employee involvement. Finally, strategy, structure, and culture together lead to a number of outcomes including quality of working life (autonomy, stress, motivation etc.), organizational performance (efficiency, effectiveness, customer satisfaction, market share, etc.), and innovative capability (resilience, creativity, resourcefulness, right to play, future proofing, etc.).

Figure 1 below displays this reasoning. The absence of a direct arrow from strategy to culture does not imply absence of a relationship between the two. Rather, it highlights the fact that managers design structures that stimulate certain behaviours. In other words, managers design organizations and, in turn, organizational design largely determines people's behaviour. In turn, behaviour and structures define the culture of the workplace itself. For example, people tend to

behave differently within a top-down/centralised structure, which reflects a control strategy, as opposed to a bottom-up/decentralised structure, which reflects a commitment strategy.

Figure 1. Structure follows strategy, and culture follows structure



WO Psychologists are in a good position to help understand the causal links among strategy, structure, and culture, which are too often overlooked (De Sitter et al., 1997; MacDuffie, 1997). For example, few managers may consider how strategy impacts structure and consequently employee behaviour, as described in the example above. Few are also able to understand the multi-causal nature of several of these elements. For example, organizations that are run top-down can turn more democratic when stakeholders become more powerful to initiate bottom-up renewal, or when external powers force an organization to be redesigned. Unfortunately, in practice, WO Psychologists tend to be marginalised, and viewed as peripheral, even juxtaposed to the primary purpose of the organization, and this tends to limit their opportunities for access to board level decision-making (Karanika-Murray & Weyman, 2013). In many organizations, WO Psychologists, especially those who are more practice-focused, are often too much of an island and for various reasons also unable to link their role to broader human resource

management issues. In the next section, we explore how WO Psychologists can position themselves differently and add value.

Second, *WPI is by nature multidisciplinary*: it brings together a range of stakeholders and draws from a range of knowledge and practice domains. WPI is not solely about worker engagement, workplace health, job design, or human resource management. Rather, it is about integrating a range of perspectives such as business and operations management. Too often, however, WPI seems to be approached as a solely human resource management topic. As a consequence, many underestimate the potential of WO psychology to contribute to WPI, which may result in underusing the potential of WPI (Howaldt et al., 2016). Well-known examples come from the work-related stress literature. For instance, many practitioners and researchers tend to limit themselves to the application of stress management programmes that deal with the effects of stress, but overlook the causes of stress that are deeper within the organization's structure (Cox, Griffiths, & Rial-González, 2000; Cox, Karanika, Griffiths, & Houdmont, 2007; Karasek & Theorell, 1992; Kompier & Kristensen, 2001; Oeij et al., 2006).

Third, because WPI practice necessarily involves the organization in its entirety, it also poses *communication challenges for those involved in its implementation*, including managers, researchers, practitioners, and other stakeholders. In practice, human resource, line, and operational managers seem to function within separate silos within organizations. Indeed, this communication issue is known (Petronio, Ellemers, Giles, & Gallois, 1998; Roehling et al., 2005; Stone, 2004; Sutcliffe, Lewton, & Rosenthal, 2004). By appreciating the stakeholders' different perspectives, WO Psychologists can help to identify and address their different needs and facilitate dialogue among them. For example, by understanding both research and the needs of the business and its commitments to customers, they are able to better translate research findings into practice and align these to business priorities. By understanding leadership theory and employee motivation, they are able to appreciate the challenges that managers have, identify the motivational needs of employees, and smooth communication between the two. And by getting acquainted with the basics of operations management, they are able to become better partners for engineers and shop floor managers.

Fourth, although WPI is necessarily an affair among multiple stakeholders, the hierarchical nature of organizations often means that *power rather than relevance or expertise determine the influence of specific stakeholders* and this is especially the case in WPI practice. Power in most organizations is asymmetrically distributed (Buchanan & Badham, 2008), which means that owners and managers have higher decision-making power than those carrying out the work. Often, management fads, opinions, and desires feed change, rather than rigorous evidence and evidence-based good practice. How managers think largely influences how the organization is or should be run. A management philosophy, for instance, to centralise or decentralise, may strongly affect whether an organization is led more top-down or bottom-up, respectively. Convincing examples stem from the literature on lean management. Originally, lean management saw high quality of working life and genuine team autonomy as key drivers for enhancing the quality of performance (Suzaki, 1987; Womack & Jones, 1996; Womack, Jones, & Roos, 1990). However, the practical application of lean thinking has been dominated by a drive to improve cost-efficiency at the detriment of the quality of jobs, essentially increasing workload (Oeij, Kraan, & Dhondt, 2013). In this case, the potential of WO psychology to take a whole-systems approach can be beneficial. The context of WPI makes collaboration between practitioners and researchers and between WO Psychologists and other professionals extremely important. In the next section, we make the potential value of WO psychology more tangible.

How can WPI practice recognize the untapped potential of WO psychology?

Achieving a more substantive use of WO psychology in WPI practice relies on two conditions: that WPI recognises the potential that WO psychology can offer and, at the same time, that WO Psychologists broaden their role in WPI practice. For WPI to recognise the potential of WO psychology, two recommendations can be made.

First, it is necessary that all WPI stakeholders develop a recognition that WPI practice is multidisciplinary and involves a strategic focus on the whole organization. Power and influence is important only to the extent that it is functional and can help to achieve an agreed common goal. In this case, the common goal is to successfully implement WPI, which can only be achieved if all the elements of WPI are met and if all stakeholders and WPI practitioners (Psychologists, HR specialists, and social science practitioners) collaborate.

In addition, because of their training, WO Psychologists are in a good position to deliver the evidence in evidence-based management practice. Chartered WO Psychologists are trained intensively in all EU countries, but this training rarely includes a focus on organizational strategy and structure. Integrating this focus in WO Psychologists' training would help to contextualise their knowledge, make it more easily applicable in practice, and strengthen its transferability in a range of settings. This is all the more relevant in the context of WPI, given that WPI research falls into the realm of applied science and involves offering solutions to problems ((mode 2 of research) rather than developing 'scientific inquiry' (mode 1 of research) (cf. Anderson et al., 2001; Gibbons et al., 1994). This is in line with Argyris's (1996) notion of a need for actionable knowledge, that is, knowledge that can be used practically to improve the functioning of organizations. For instance, he points out that, whereas there is much work in the empirical literature on the relevance of trust in managing, little attention has been paid to how managers can create trust. Mobilising, translating, adapting, and applying research findings in order to develop relevant practice that is based on solid evidence is a strength that WO Psychologists bring.

All WPI practitioners could consider the fact that in practicing WPI, *culture* is dependent on both *structure* and *strategy*, and that these are determined by management, marketing, business and sales, and (technical/operational) engineers. This requires adopting a more pluralistic approach to collaboration. Indeed, team innovativeness is dependent on both team climate and team structure (Anderson, Potočnik & Zhou, 2014). Adopting a pluralistic approach is a matter of self-reflection for all those involved in WPI practice in order to make the most of everyone's skills, knowledge, and expertise.

How can WO Psychologists strengthen their contribution to WPI practice?

WO Psychologists too can implement some changes in order to claim a place or develop a stronger foothold in WPI practice. Here we present our recommendations on how this can be achieved.

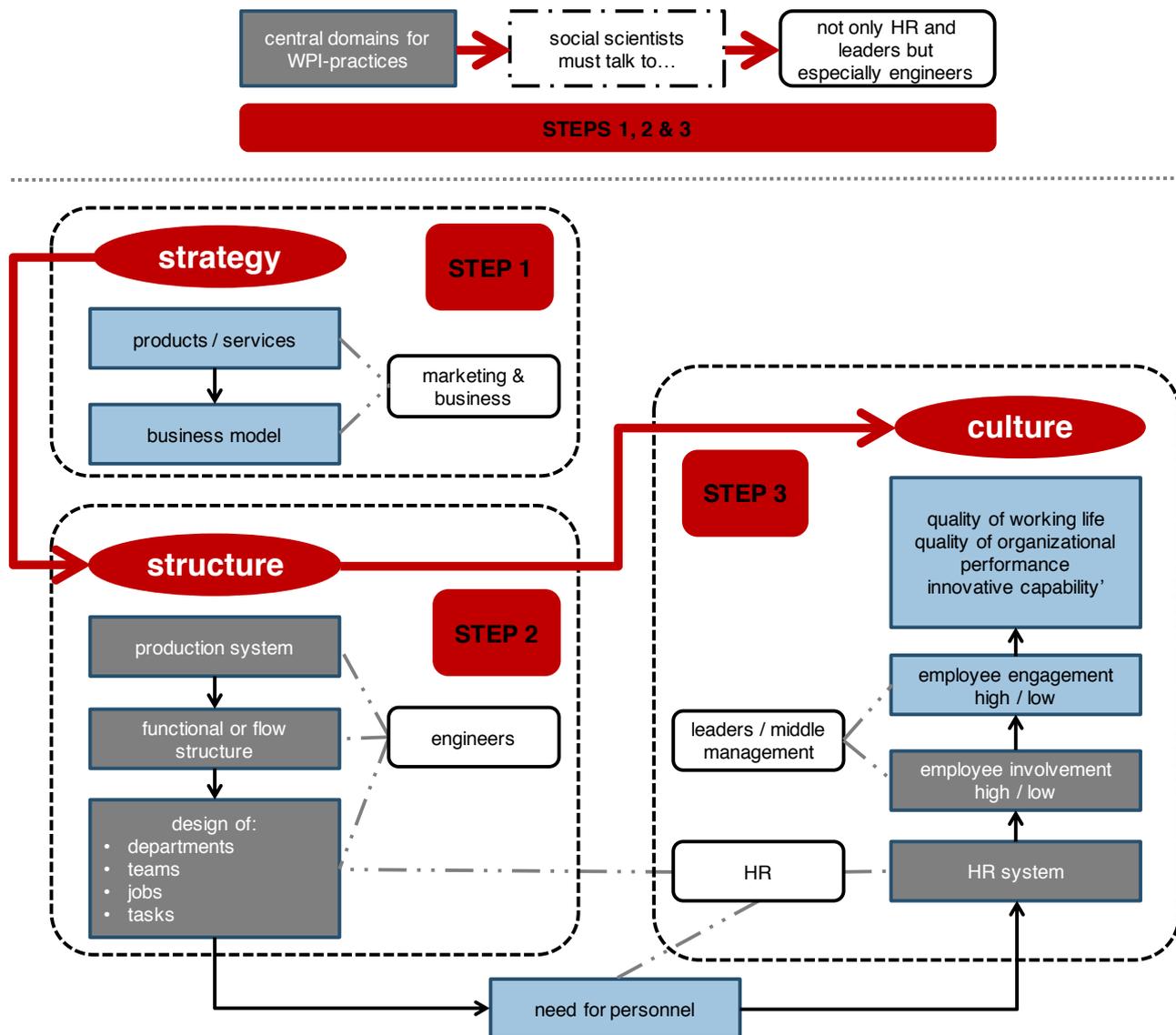
First, for WO Psychologists to influence WPI, they must surpass HR management and *become acquainted with production systems design*. This means that they should understand the relationship between operational systems and job tasks and how these job tasks relate to human resource issues. Adopting such a role would enable them to partake in improving both performance and the quality of working life. It is thus possible to broaden the immediate focus of WO psychology (from human resource management issues, individual health, and job design, for example) and become acquainted with organizational strategy, structure, production systems design, marketing, and IT systems. As Figure 2 below indicates, the role of WO Psychologists can be expanded beyond human resource staff or 'general' managers (such as

engineers, marketers, and technical managers) to that of consultancy partners or interlocutors of functionaries. Engineers, IT designers, and operational managers design the (technological) production system, which defines whether job autonomy will be centralised or decentralised. Marketers develop products in conjunction with manufacturing that determines how production orders flow through the organization, namely with or without a say of internal production experts. Human resource staff design human resource systems as 'supporting' or 'advising the business', which has consequences for workers in becoming docile or proactive task executors. Finally, managers and team leaders may wish their employees to follow what markets demand or to absorb market knowledge themselves from customers. Consequentially, employees may become trivial task executors or co-innovators of the firm's products or services. Whether WO Psychologists embrace their role as active consultants or accept a secondary dependent role largely determines how their expertise is used and developed. If WO Psychologists choose the first avenue, WO psychology can become more 'organizational' in relation to WPI practice. This is a matter of self-learning and expanding the WO psychology knowledge base.

In addition, it is important for an organization's management to understand that *WO Psychologists' expertise can contribute to both better jobs and better performance* (De Sitter et al., 1997; Pot, 2011; Ramstadt, 2014). The two are inseparable. WO Psychologists are also able to help achieve a balance between a focus of WPI at the organizational level with a focus of WPI at the individual level. This implies balancing business values and corporate economic objectives with humanistic and societal values (Lefkowitz, 2008). This is a matter of WO Psychologists adopting a new role and becoming allies with top management, decision-makers, and business owners, rather than simply acting as researchers or consultants in the process of WPI implementation. Those who make the decisions need expert input on matters on which they are not as knowledgeable. A combination of knowledge and decision-making authority can lead to more responsive practice and this can only be achieved by delegating a more strategic role to WO Psychologists in organizations practicing WPI.

WO Psychologists also *have a catalytic role for evidence-based management practice* (Cascio, 2007; Rousseau & McCarthy, 2007). By sharing their expertise, they can demonstrate how research can provide solutions to broader strategic challenges. By communicating and translating research findings they can help practitioners solve problems (Shapiro, Kirkman, & Courtney, 2007). For example, Aguinis et al. (2010) described how Psychologists can demonstrate rigour and relevance of research for specific groups in specific contexts by collecting additional quantitative data or more localised qualitative data to supplement existing knowledge. This can be achieved by striving for a balance between the particular (relevance) and the general (rigour) and for strong research that is relevant for the aims and practices of business organizations. Neither overemphasising relevance at the expense of rigour (Aram & Salipante, 2003) nor pushing for rigorous research whose findings are not readily applicable to organizational practice (Anderson et al., 2001) is useful.

Figure 2. Flowchart to conversations about the design of strategy, structure, and culture from the WO psychologist's (or social scientist's) perspective



Note: **White boxes** represent the interlocutors of the WO psychologist/consultant. **Grey boxes** represent central domains for the implementation of WPI practices. **Blue boxes** represent domains less central to the design of WPI practices, but with consequences for WPI practices or how WPI practices play out (e.g., related to technical interventions in Step 1; team design and staffing in Step 2; reward systems in Step 3). **Red lines and grey dotted lines** suggest that WO Psychologists are not allowed to ignore that they must talk to White box interlocutors about Grey WPI issues if they want to steer on causes, and not just on effects ('symptoms').

The WO psychologist is the spider in the web that links the conversation about strategy, structure, and culture, who is – on purpose - not depicted as he/she provides advice to the change leader who is supposed to be really central and link the White Box stakeholders to engage about the Grey issues when WPI interventions are being developed and implemented.

Step 1: At the strategic level, talk to marketing and business, who are responsible for products/services and the business model.

Step 2: At the structure level, talk to engineers, who are responsible for designing the production system into smaller segments like departments and tasks; align the talking to engineers with the talking to HR (links with Step 3), who are responsible for staff, and the co-design of departments, teams, jobs and tasks, and the HR system.

Step 3: Concerning culture, continue to talk to HR and leaders/managers about involving and engaging organizational members. Leadership styles and mature ways of communication with bottom-up inputs are options for choice.

Note that the order of Steps 1–3 suggest linearity; in a change process, this is never the case. The steps will likely iterate. Not depicted either in this scheme for reasons of simplicity, are employees / employee representatives. and top management, but they, of course, do play either a direct role or indirect role (via representatives).

Furthermore, where the evidence is scarce, WO Psychologists can apply their research skills to investigate specific practitioner-oriented research issues (Shapiro et al., 2007). The generation of such evidence has to be problem-initiated rather than a purely intellectual activity, transcend

epistemological doctrinaire views, and geared at testing the validity of research as “utilization of the knowledge in the world of practice” (Aram & Salipante, 2003, p. 203). The essential question is: can this research evidence or new knowledge be immediately applied into practice? In line with this, Hirschhorn and Geelan (2008) suggested that creating research translation roles is one of the four essential solutions for closing the research-practice gap (the others being: fixing the researcher, fixing the practitioner, and fixing the research). Creating a role for the ‘research translator’ who “would be adept at speaking the language of both practitioners and researchers and would be able to translate research findings into a form that is comprehensible, plausible, and appears potentially fruitful to practitioners, as well as to convey the interests and concerns of practitioners to researchers” (Hirschhorn & Geelan, 2008, p. 11) would also be useful.

Of course, meeting these challenges and redefining these roles can only be achieved by no other than WO Psychologists themselves who ought to be equipped with specific tools. We use ‘tools’ rather than ‘skills’ to emphasize practical immediacy and application in organizational practice. *One of the most important tools in this respect is political acumen.* Indeed, “evidence-based management is an inherently political project” which masks “underlying fundamental differences of interpretation, purpose, and power among the various stakeholders situated on both sides of the academic practitioner/policy divide” (Hodgkinson, 2012; p. 404). WO Psychologists need to “engage in political activity in order to reduce or redirect the influence of the key stakeholders” (Anderson et al., 2001). As Anderson et al. (2001) observe, the push and pull between two groups of stakeholders, powerful academics and organizational clients, drives practitioners towards either pedantic or populist science and away from the ideal of pragmatic science. By exercising political acumen and taking a more strategic approach to collaboration, WO Psychologists can help to balance practical relevance with methodological rigour (Anderson et al., 2001; Buchanan & Badham, 2008; Cascio, 2007).

Furthermore, redistribution of power and influence necessarily involves the *development of communities of practice* who can be crucial for translating and adopting research into practice and for highlighting practical problems to guide research. If participatory action research is essential for WPI, communities of practice can offer the bridges by which WO Psychologists can produce knowledge *for* WPI practice. As Bartunek (2007) notes, “the most frequent means of creating academic practitioner relationships is through engaged scholarship, or collaborative research”, which implies “relationships between researchers and practitioners that jointly produce knowledge that can both advance the scientific enterprise and enlighten a community of practitioners” (p. 1328). Thus, ‘engaged scholarship’ as a mode of linking research and practice can both boost the relevance of research to practice and also contribute to enhanced domain knowledge (Van de Ven, 2007; Van de Ven & Johnson, 2006; also see McKelvey, 2006). Developing communities of practice may be difficult, but it is possible. It may necessitate aligning researchers’ and practitioners’ disparate beliefs about science and the relevance of the scientific method for the workplace (McIntyre, 1990). Because WO Psychologists in academic and applied settings tend to differ in their work values, (Brooks, Grauer, Thornbury, & Highhouse, 2003), developing communities of practice may also necessitate acknowledging and being more tolerant of these differences. For example, Brooks et al. (2003) showed that autonomy and scientific research were more important for academics, whereas affiliation, money, and a structured work environment were more important for practitioners. By applying his or her specialised analytical background into real-world practical settings, the experienced academic practitioner is in a position to appreciate differences in values and priorities, and align the needs of practice with the values of research.

Concluding thoughts

There has been increasing concern in WO psychology about the divide between research and practice, which is clearly evident in the context of WPI. In this essay, we have highlighted a range of ways to achieve a meaningful and productive engagement between the two. Although a small minority believe that the researcher-practitioner divide is too challenging to bridge (e.g., Kieser & Leiner, 2009) or that the scientist-practitioner model too challenging to adopt (e.g., Brooks et al., 2003; Murphy & Saal, 1990), we have highlighted many reasons to be optimistic. As some scholars note, researchers and practitioners are more alike than different (e.g., Bartunek & Rynes, 2014) and bridging the gap “is already happening” (Hodgkinson & Rousseau, 2009). Appreciating the underused potential of WO psychology is essential for enabling Psychologists to make a unique contribution to WPI practice. Bridging the gap requires WO Psychologists to further expand their knowledge by learning from other fields such as business and operations management. Only by embracing an ‘integral perspective’ (De Sitter et al., 1997; MacDuffie, 1997; van Amelsvoort & Van Hootegem, 2017) can WO Psychologists become good interlocutors for management, and good service providers for both employees and managers. Both these key organizational stakeholders can benefit from the WO Psychologists’ input in order to perform productively in their jobs and, at the same time, enable healthy and challenging workplaces. Moreover, by offering such input, WO Psychologists can bring together their natural focus on people and behaviour (i.e., culture and leadership) and their developing understanding of systems and institutions (i.e., strategy, structure, and power).

References

- Aguinis, H., Werner, S., Abbott, J. L., Angert, C., Park, J. H., & Kohlhausen, D. (2010). Customer-centric science: Reporting significant research results with rigor, relevance, and practical impact in mind. *Organizational Research Methods*, 13(3), 515-539.
- Amelsvoort, P. van, & Van Hootegem, G. (2017). Towards a total workplace innovation concept based on sociotechnical systems design. [Special issue]. *EWOP In- Practice*, 32-47.
- Anderson, N. (2005). Relationships between practice and research in personnel selection: Does the left hand know what the right is doing. In A. Evers, N. Anderson, & O. Smit-Voskuil (Eds.), *The Blackwell Handbook of Personnel Selection* (pp. 1-24). Oxford: Blackwell Publishing.
- Anderson, N., Herriot, P., & Hodgkinson, G. P. (2001). The practitioner-researcher divide in Industrial, Work and Organizational (IWO) psychology: Where are we now, and where do we go from here? *Journal of Occupational and Organizational Psychology*, 74(4), 391-411.
- Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations a state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297-1333.
- Aram, J. D., & Salipante, P. F. (2003). Bridging scholarship in management: Epistemological reflections. *British Journal of Management*, 14(3), 189-205.
- Arber, A. (2006). Reflexivity: A challenge for the researcher as practitioner? *Journal of Research in Nursing*, 11(2), 147-157.
- Bartunek, J. M. (2007). Academic-practitioner collaboration need not require joint or relevant research: Toward a relational scholarship of integration. *Academy of Management Journal*, 50(6), 1323-1333.
- Bartunek, J. M., & Rynes, S. L. (2014). Academics and practitioners are alike and unlike: The paradoxes of Academic-Practitioner Relationships. *Journal of Management*, 40(5), 1181-1201.
- Brooks, M. E., Grauer, E., Thornbury, E. E., & Highhouse, S. (2003). Value differences between scientists and practitioners: A survey of SIOP members. *The Industrial-Organizational Psychologist*, 40(4), 17-23.
- Buchanan, D., & Badham, R. (2008). *Power, politics, and organizational change: Winning the turf game*. London: Sage.
- Cascio, W. F. (2007). Evidence-based management and the marketplace for ideas. *Academy of Management Journal*, 50(5), 1009-1012.
- Chandler, A.D. Jr. (1962). *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. Cambridge. Boston, MA: MIT Press

- Cox, T., Griffiths, A., & Rial-González, E. (2000). *Research on work-related stress*. Bilbao: European Agency for Safety and Health at Work.
- Cox, T., Karanika, M., Griffiths, A., & Houdmont, J. (2007). Evaluating organizational-level work stress interventions: Beyond traditional methods. *Work & Stress*, 21, (4), 348-362.
- De Sitter, L. U., Den Hertog, J. F., & Dankbaar, B. (1997). From complex organizations with simple jobs to simple organizations with complex jobs. *Human Relations*, 50, (5), 497-534.
- Fraser, D. M. (1997). Ethical dilemmas and practical problems for the practitioner researcher. *Educational Action Research*, 5 (1), 161-171.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage Publications.
- Herriot, P. (2001). *The Employment Relationship: A Psychological Perspective*. Hove, East Sussex: Routledge.
- Hirschhorn, M. & Geelan, D. (2008). Bridging the research-practice gap: Research translation and/or research transformation. *The Alberta Journal of Educational Research*, 54(1), 1-13.
- Hodgkinson, G. P. (2012). The politics of evidence-based decision making. In D.M. Rousseau (Ed.) *The Oxford Handbook of Evidence Based Management*, 404-419.
- Hodgkinson, G. P., & Rousseau, D. M. (2009). Bridging the rigour–relevance gap in management research: It's already happening! *Journal of Management Studies*, 46(3), 534-546.
- Howaldt, J., Oeij, P.R.A., Dhondt, S. & Fruytier, B. (2016). Workplace innovation and social innovation: An introduction. *World Review of Entrepreneurship, Management and Sustainable Development*, 12(1), 1-12.
- Karanika-Murray, M., & Weyman, A. K. (2013). Optimising workplace interventions for health and well-being: A commentary on the limitations of the public health perspective within the workplace health arena. *International Journal of Workplace Health Management*, 6(2), 104-117.
- Karasek, R., & Theorell, T. (1992). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic books.
- Kieser, A., & Leiner, L. (2009). Why the rigour–relevance gap in management research is unbridgeable. *Journal of Management Studies*, 46(3), 516-533.
- Kompier, M. A. J., & Kristensen, T. S. (2001). Organizational work stress interventions in a theoretical, methodological and practical context. In: J. Dunham (Ed.), *Stress in the workplace: Past, present and future* (pp. 164-190). Philadelphia, PA, US: Whurr Publishers.
- Lefkowitz, J. (2008). To prosper, organizational psychology should... expand the values of organizational psychology to match the quality of its ethics. *Journal of Organizational Behavior*, 29(4), 439-453.
- MacDuffie, J.P. (1997). The road to “root cause”: Shop-floor problem-solving at three auto assembly plants. *Management Science*, 43(4), 479-502.
- McKelvey, B. (2006). Van De Ven and Johnson's “engaged scholarship”: Nice try, but... *Academy of Management Review*, 31(4), 822-829.
- McIntyre, R. M. (1990). Our science-practice: The ghost of industrial-organizational psychology yet to come. In K. R. Murphy & F. E. Saal (Eds.), *Psychology in organizations: Integrating science and practice* (pp. 25–48). Hillsdale, NJ: Erlbaum.
- Murphy, K. R., & Saal, F. E. (1990). What should we expect from scientist-practitioners? In K. R. Murphy & F. E. Saal (Eds.), *Psychology in organizations: Integrating science and practice* (pp. 49–66). Hillsdale, NJ: Erlbaum.
- Nye, J. S. (2008). Bridging the gap between theory and policy. *Political Psychology*, 29(4), 593-603.
- Oeij, P. R. A., Kraan, K. & Dhondt, S. (2013). *Work teams and psychosocial risks and work stress*. OSH Wiki. Retrieved 31 December 2015, https://oshwiki.eu/wiki/Work_teams_and_psychosocial_risks_and_work_stress
- Oeij, P. R. A., Wiezer, N. M., Elo, A.-L., Nielsen, K., Vega, S., Wetzstein, A., & Żońmierczyk, D. (2006). Combating psychosocial risks in work organizations: Some European practices. In S. McIntyre & J. Houdmont (Eds.), *Occupational health psychology: European perspectives on research, education and practice* (Vol. 1, pp. 233-263). Maia, Portugal: ISMAI Publishing.
- Oeij, P., Žiauberytė-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. (2015). *Workplace Innovation in European companies*. Study commissioned by Eurofound. Luxembourg: Office for Official Publications of the European Communities.

- Petronio, S., Ellemers, N., Giles, H., & Gallois, C. (1998). (Mis) communicating Across Boundaries Interpersonal and Intergroup Considerations. *Communication Research*, 25(6), 571-595.
- Pot, F. D. (2011) Workplace innovation for better jobs and performance. *International Journal of Productivity and Performance Management*, 60(4), 404-415.
- Ramstad, E. (2014). Can High-involvement Innovation Practices improve Productivity and Quality of Working-life simultaneously? Management and Employee Views on Comparisons. *Nordic Journal of Working Life Studies*, 4(4), 25-45.
- Roehling, M. V., Boswell, W. R., Caligiuri, P., Feldman, D., Graham, M. E., Guthrie, J. P., ... & Tansky, J. W. (2005). The future of HR management: Research needs and directions. *Human Resource Management*, 44(2), 207-216.
- Rousseau, D. M., & McCarthy, S. (2007). Educating Managers from an Evidence-Based Perspective. *Academy of Management Learning & Education*, 6(1), 84-101.
- Shapiro, D. L., Kirkman, B. L., & Courtney, H. G. (2007). Perceived causes and solutions of the translation problem in management research. *Academy of Management Journal*, 50, 249-266.
- Stone, F. (2004). Deconstructing silos and supporting collaboration. *Employment Relations Today*, 31(1), 11-18.
- Sutcliffe, K. M., Lewton, E., & Rosenthal, M. M. (2004). Communication failures: an insidious contributor to medical mishaps. *Academic Medicine*, 79, (2), 186-194.
- Suzaki, K. (1987). *The new manufacturing challenge: Techniques for continuous improvement*. New York: The Free Press.
- Totterdill, P., & Exton, R. (2014). Defining workplace innovation: The Fifth Element. *Strategic Direction*, 30(9), 12-16.
- Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and research knowledge*. New York: Oxford UP.
- Van de Ven, A. H., & Johnson, P. E. (2006). Knowledge for theory and practice. *Academy of Management Review*, 31(4), 802-821.
- Wampler, J. S. (2010). *Methods and strategies for bridging the design practitioner-researcher gap*. Unpublished Masters' Thesis, University of Missouri-Columbia.
- Womack, J. P., Jones, D., & Roos, D., (1990). *The Machine That Changed the World: The Story of Lean Production*. New York: Rawson/Harper Perennial.
- Womack, J. P., & Jones, D. T. (1996). *Lean thinking: Banish waste and create wealth in your organization*. New York: Simon and Shuster.

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TOWARDS A TOTAL WORKPLACE INNOVATION CONCEPT BASED ON SOCIOTECHNICAL SYSTEMS DESIGN

Pierre van Amelsvoort

ST-Groep, Belgium

pierrevanamelsvoort@ziggo.nl

Geert Van Hootegem

*Catholic University Leuven, K. U. Leuven,
Belgium*

About the authors

Pierre van Amelsvoort is an expert in sociotechnical systems design and organizational change. He is a partner of the consulting firm ST-Groep. Between 1994-2007 he was professor by special appointment at the Nijmegen School of Management (The Netherlands). Since 2010 he is guest professor at the Catholic University Leuven, K.U. Leuven (Belgium).

Geert Van Hootegem is professor at the Centre for Sociological Research at the Catholic University Leuven, K.U. Leuven, since 2000, teaching organizational design and change management. He is the founder of Flanders Synergy, a Belgian network of organizations that promote workplace innovation. In 2013 he co-founded Prepared Mind, a consulting firm focussing on Total Workplace Innovation.

Abstract

This article aims at developing a more comprehensive design theory for stakeholders who are involved in design processes aimed at workplace innovation, by starting from sociotechnical design and by exploring how we can broaden that perspective with other approaches, to also cover issues such as Information Technology-design and Human Resources-design. This article will focus on sociotechnical design (STS-D) theory for the design of the division of labour as developed in the Lowlands (Netherlands and Belgium). In addition to STS-D theory, other theories and practices for designing control, coordination and support systems have been developed, such as Lean Thinking, Total Productive Maintenance, Human Resource Management (HRM) theories, Relation Coordination theory, Information and Communications Technologies (ICT) theories, the practice of the New World of Work (time and place independent work) and Sociocracy for participative strategic decision making. In this article, we will outline a start for combining these approaches with STS-D theory to develop a systemic concept of Total Workplace Innovation (TWIN). As such, this article is an essayist and conceptualising approach to organizational design theory.

Introduction

Given growing global competition and the predicted shortages in the labour market, organizations, nowadays, face the dual challenge of creating workplaces that are, on the one hand, more productive, flexible, and innovative, and on the other hand, healthy places to work. There seems to be a need for workplace innovation (WPI) to transform traditionally monolithic bureaucratic organizations into modern organizations that meet these challenges. A workplace innovation (WPI) is a developed and implemented practice or combination of practices that either structurally (through division of labour) or culturally (in terms of empowerment of staff) enable employees to participate in organizational change and renewal and, hence, improve the quality of working life and organizational performance (Oeij et al., 2015). WPI is based on

flexible instead of bureaucratic ways of organising, and, therefore, WPI-practices could help to transform bureaucratic, inflexible organizations with limited innovative capability. Bureaucratic organizations, however, are defined by and embedded in their structures, support systems, decision making systems, facilities and IT systems. Bureaucracies are, due to their focus on maximising the division of labour and central control of the work processes, designed for stable environments and mass production. Hence, they are not well-suited to respond to the need to be agile in a dynamic environment with ever changing customer demands. Therefore, to realise new ways of organising through workplace innovation, an integrated approach to systemic change in the organization is needed. We call this Total Workplace Innovation, which we define as a renewal of the organization of work with an integrated view on the division of labour, working relations and the supporting systems, with the dual aim of improving both performance and quality of working life. This definition is in line with the main starting points of STS-D theory, as will be shown later.

In this contribution, we suggest the concept of Total Workplace Innovation (TWIN) as a potential way to create common ground among researchers and practitioners interested in understanding and implementing workplace innovation (WPI). We hope to change the discussion around workplace innovation from a scattered focus on identifying one best approach to developing an integrated framework that takes the whole organization into account. Indeed, we aim at developing a more comprehensive theory for stakeholders who are involved in design processes for workplace innovation, by starting from sociotechnical design (STS-D) and by exploring how we can broaden this perspective with other approaches (see Table 1), to also cover issues such as IT-design and HR-design. We need a combination of core systems and support systems to develop a complete alternative for the bureaucratic monolithic organization.

Table 1. Additional theoretical concepts to complete TWIN

Lean Thinking	<i>Provides guidance and tools for creating quick response (Just in time) logistics systems for the different order streams</i> <i>Provides guidance and tools for continuous improvement to increase job control aimed at coping with interference and waste</i>
Total Productive Maintenance	<i>Provides guidance and tools for autonomous maintenance in whole task groups (teams)</i> <i>Provides guidance and tools for improving the collaboration between operators and maintenance staff</i>
Relational coordination theory	<i>Provides guidance and tools for horizontal coordination in the control structure and job control</i>
New World of Work	<i>Provides practices and tools for designing the infrastructure of facilities regarding job demand</i>
HRM	<i>Provides guidance and tools for recruitment, rewarding and developing employees for humane and productive organizations</i>
Archipelago ICT	<i>Provides guidance for designing IT systems based on variety and job control</i>
Sociocracy	<i>Provides guidance for democratic strategic decision making to complete the design of the control structure and to increase job control possibilities</i>

Although STS-D theory and WPI have much affinity, they are not the same and could mutually reinforce each other. In this article, we regard STS-D as a design approach that focuses mainly on the design of the core work process. If we add elements from other theories to this design,

then we slowly but surely broaden the STS-D design perspective in a manner that advances the goals of WPI. Therefore, we selected a number of different theoretical approaches and practices that complement STS-D in addressing the design of various support systems. Notably, this selection is based on the fact that all of these approaches take the core work processes as a starting point but add an important ingredient in terms of support systems. Moreover, they are explicitly focused on improving employee engagement, which is a core feature of WPI approaches. A focus on employee involvement remains rather implicit in the design steps of STS-D, which sees job quality as logically emerging from choices made in the design of the structure of production and the distribution of management tasks. Therefore, these additional theoretical perspectives could complement STS-D theory (Kuipers, van Amelsvoort, & Kramer, 2010).

We will first discuss sociotechnical systems design (STS-D) theory and its control structure as a base for the design of the core work processes, that is, the primary process. STS-D theory and practices emphasize the joint optimisation of the technical and social aspects of the organization, with a simultaneous focus on achieving improved productivity and improved quality of working life. STS-D also strives for employee participation. STS-D has a long tradition in the design of the division of labour with the aim of creating innovative and humane organizations (Pot & Dhondt, 2016). Indeed, although STS-D practices show variation across different regions of the world (Baxter & Sommerville, 2011; Mohr & van Amelsvoort, 2016; Mumford, 2006; van Eijnatten, 1993), the applied basic theory regarding the division of labour remains the same, namely, creating conditions for increasing the speed in the production flow, job control or self-organization for employees, teams, units and communities of work. The overall aim is to help organizations become more agile with the help of engaged employees. However, STS-D theory only addresses the design of core work processes, whereas a systemic approach to redesigning the organization for TWIN also requires a focus on the design of support systems. Examples of support systems in organizations are ICT-systems, HR, sales & marketing, purchasing, distribution and dispatch, and maintenance.

Because the starting point for the design of an organization is its core work process, we start with STS-D. To aid our discussion on the design of the support systems we add a number of other theoretical concepts, such as: Lean Thinking (focuses on logistics and quality management); Total Productive Maintenance (stresses the integration of operations and maintenance); HRM theories (put a to focus on human resources policies); Relational Coordination theory (focuses on improving lateral communication); ICT theories (focus on the design of the information infrastructure); the concept of the New World of Work (underlines the notion of working independent of time and place and the need to create flexible facilities); Sociocracy (focuses on participative strategic decision-making and policy).

The article is structured as follows. First, we will describe STS-D theory, followed by a presentation of its design principles and the design sequence as it relates to TWIN. Second, we will discuss the complementary approaches mentioned above. Finally, we will end with some concluding thoughts.

STS-D theory as the base for TWIN

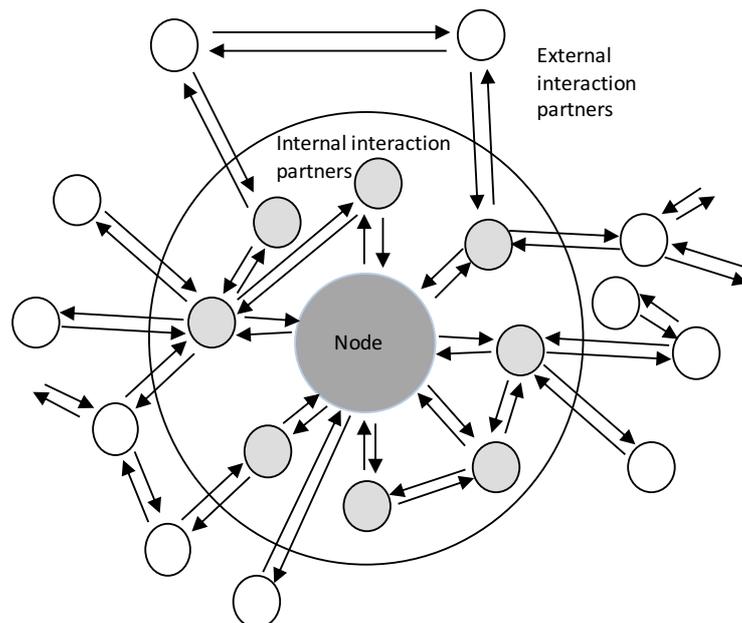
An organization's core work process is the primary process of an organization, such as, making goods or providing services. How these goods or services are produced, i.e., how the core work processes are organised, largely determines the extent to which the organization's products or services create added value for customers. Hence, orchestrating an organization's shift towards workplace innovation-related goals – performance and quality of work – typically requires a redesign of the core work process. In this respect, STS-D theory provides a valuable

framework, given that core work processes are rooted in a dynamic systems-theoretical perspective of work and organization (Kuipers, van Amelsvoort, & Kramer, 2010; de Sitter, 1994; de Sitter et al., 1997). The design of the core work processes determines the needed degree of (central) coordination and the possibilities for (shop floor) self-organising capabilities. A maximum division of labour creates the need for central coordination and hierarchical control whereas a minimum division of labour creates conditions for self-organization and horizontal coordination (i.e., more job autonomy). Given that organizations are complex social systems, a systemic view as offered by STS-D is helpful in redesigning organizations when required by changing economic circumstances. Bureaucracies have difficulties in coping with economic changes, while flexible, flow-based organizations are better equipped to handle change and turbulence (Kuipers et al., 2010).

STS-D theory suggests that, as a result of the division of labour, the organization is an interacting network of people executing tasks and roles, using (ICT-) technological instrumentation, tools and machines. These tasks and roles are thus allocated to individuals, teams, departments and business units. STS-D makes the distinction between production and management in the following manner:

- a) the structure of executing activities (the *production structure* of the core work processes—PS) and
- b) the structure of control activities to manage the core work processes (the *control structure*—CS).

Figure 1. The interaction network with nodes (Kuipers et al., 2010)



In STS-D a role or task is the work that needs to be done, which is often related to the work of other people. All these roles and tasks together constitute the whole of the core work process. In other words, all these roles and tasks together complete the whole task of, for example, a team or an organization. The notion of whole tasks implies, in theory, that there is no division of labour at all, such as for example, when a team is making a complete end-product from start to finish. This is, however, almost never the case, and therefore, roles can be seen as nodes interacting with other interdependent nodes to complete the core work process (see Figure 1). A node is a point where several inputs and outputs from different interaction partners come together to do the work.

In STS-D, as an offspring of systems theory, inputs are transformed into outputs as in the input-throughput-output model. The core work processes function in a similar vein at every level, such as, at the level of tasks, jobs, teams, departments, and the organization as a whole. At the nodes, inputs are therefore transformed into outputs or outcomes, meaning that resources are transformed into products or services. Interaction between nodes, for example, the collaboration of individuals in a team, is necessary for a number of reasons, such as, the exchange of information, knowledge creation, planning and/or coordination, and deliberation. Team members are, for example, dependent on each other's task execution. At the nodes, interactions happen with both internal and external interaction partners. In order to ensure productivity either directly or indirectly, these various interactions between nodes need to be established at the right time, between the right jobs, with the right material or information and at the right place. Otherwise, production gets delayed or mistakes become a risk. Figure 1 illustrates this point.

However, these planned interactions between nodes can suffer from interference due to variance that is not accounted for in the original planning of the production in the core work processes. For instance, in the building and construction industry, different parties have to collaborate to get the job done as they are connected in specific supply-chain models. If one of the parties withholds information or drops out of the project unexpectedly, this will interfere with the other parties' capability to get the job done. In this sense, a node has to cope with two types of variance:

- a) *external variance*: such as lack of information, communication errors, changing customer demands, incomplete input, conflicting, ambiguous or competing demands;
- b) *internal variance*: human errors, technical disturbance, invalid and inflexible capabilities, shortage of resources.

The key question that arises is how can organizations deal with these types of variance at the nodes in ways that do not disrupt the production process? According to STS-D, to deal with such variance, organizations should on the one hand, redesign the division of labour in such a way that the complexity of the interaction network can be reduced, and on the other hand, increase job control possibilities so that variances can be controlled at the source. In this respect, De Sitter suggested to create simple organizations but make jobs complex, meaning that jobs become rich and varied (De Sitter et al., 1997). In other words, bureaucracies create jobs that are too simple for the complex changes in the environment. TWIN and STS-D create complex jobs so that organizations can deal with that complexity in flexible ways (Mohr & van Amelsvoort, 2016).

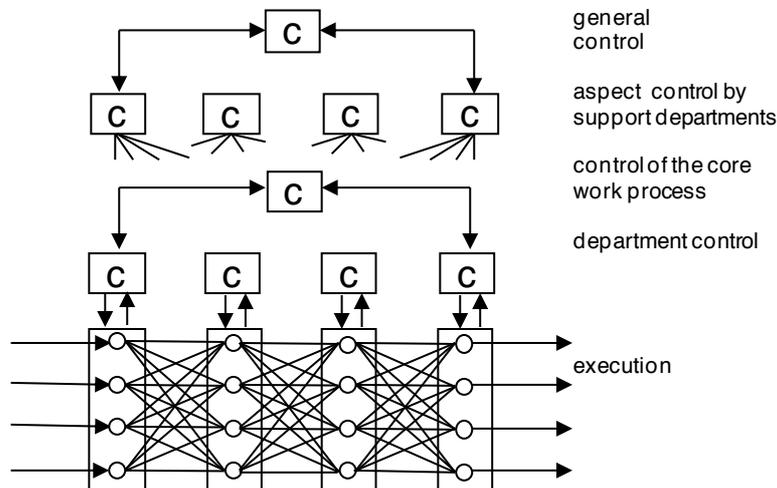
The relation between the division of labour and productivity

The productivity of an organization is related to its capability to cope with strict external demands, namely, business and customer demands for variety (product mix), and uncertainty about both short- and long-term planning. Therefore, the capability to meet these external demands, is contingent upon the needed internal variety, namely meeting requirements in relation to efficiency, quality, flexibility, and innovation. Only if organizations can internally vary how they operate, are they able to meet the external requisite variety (Ashby, 1969).

Bureaucratic organizations are based on the principle of maximum division of labour, which, in turn, leads to complexity and rigidity (Achterbergh & Vriens, 2009). This maximum division of labour can be counterproductive for a number of reasons. First, bureaucratic organizations (see Figure 2) tend to be characterized by 1) simple jobs, i.e., the formation of silos between functional departments, each pursuing fragmented goals and interests, and 2) complex

interactions, i.e., long hierarchical communication lines, central decision-making, and a large number of rules and meetings. Bureaucracies have many nodes, and are therefore exposed to the risk of much interference in the core work processes when the work cannot be performed as initially planned. Figure 2 indicates that the performance of the core work processes requires several dependencies in terms of control (c) and execution.

Figure 2. The bureaucratic regime (Kuipers et al., 2010)



Hence, if external pressures on the organization that threaten the planned process increase, the bureaucratic organizational design will rapidly lead to productivity problems. These problems can be manifested for instance as (Kuipers & Van Amelsvoort, 1990; de Sitter, 1994):

- unreliable and long lead times due to poorly harmonized processes;
- slow response times;
- difficulty in quality assurance due to insufficiently managed processes and poor communication;
- poor cost control because actual (hidden) costs cannot be monitored and (too) much interference occurs;
- slow and blind decision-making;
- expensive coordination and control mechanisms;
- lack of employee involvement;
- lack of innovative capability due to poor communication between the business functions, and a lack of initiative.

In general, the traditional, bureaucratic response to these problems is to tighten control (centralisation) and implement more stringent rules and procedures. These measures are counterproductive, because the root cause of these dysfunctions is, in fact, deepened. In contrast, STS-D aims to reduce complexity by minimising the division of labour (see the section on STS-D principles below).

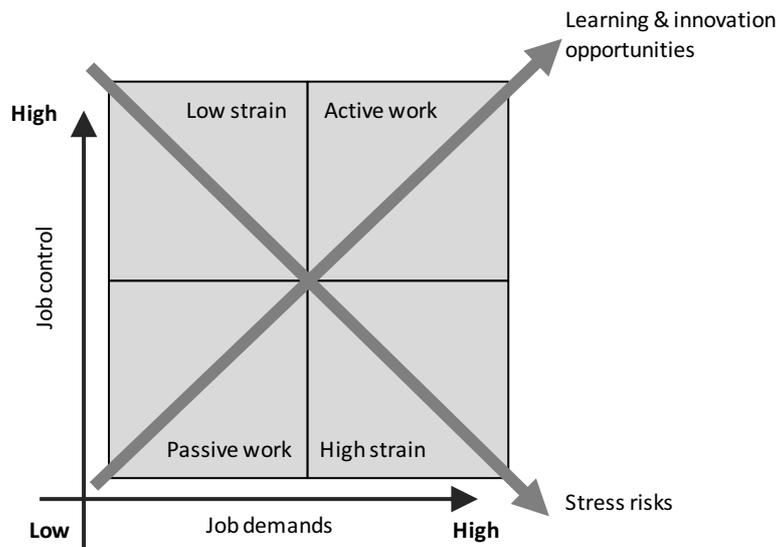
The relation between the division of labour and employee involvement

The division of labour does not only affect productivity but also the quality of working life. For instance, Karasek's *Job Demand-Control* model (Karasek, 1979; Karasek & Theorell 1990) (see Figure 3)¹ suggests that work organization, specifically, high control (autonomy) in performing

¹ The Job Demand-Job Control model has affinity with the Job Demands-Resources model (Bakker & Demerouti, 2007; Demerouti et al., 2001). However, we see resources as an element of job control, namely in the way that job design should include the possibility to deploy one's resources. For example, the degree of decision latitude determines whether

tasks is crucial in transforming job demands from risks and stress drivers into learning opportunities.

Figure 3. The Job Demand Job Control model of Karasek (1979; 1990)



In this model, job demands are seen as stressors such as work overload, unpredictable demands, time pressure, role ambiguity, interference, as well as emotional and physical demands. Job control is the combination of autonomy, decision latitude, instrumental support from colleagues, constructive performance feedback, craftsmanship, flexible resources, leaders' appreciation and support, accurate information, and communication. In this respect, there is evidence that high job demands and low job control are important predictors of psychological stress and illness. In addition, De Sitter (1994) claims that job control leads to involvement and motivation, which translates into positive effects on indicators such as absenteeism, turnover and stress. Moreover, there is evidence that a combination of high job demands and high job control in the form of active work is a predictor of an innovative organization (De Sitter, 1994).

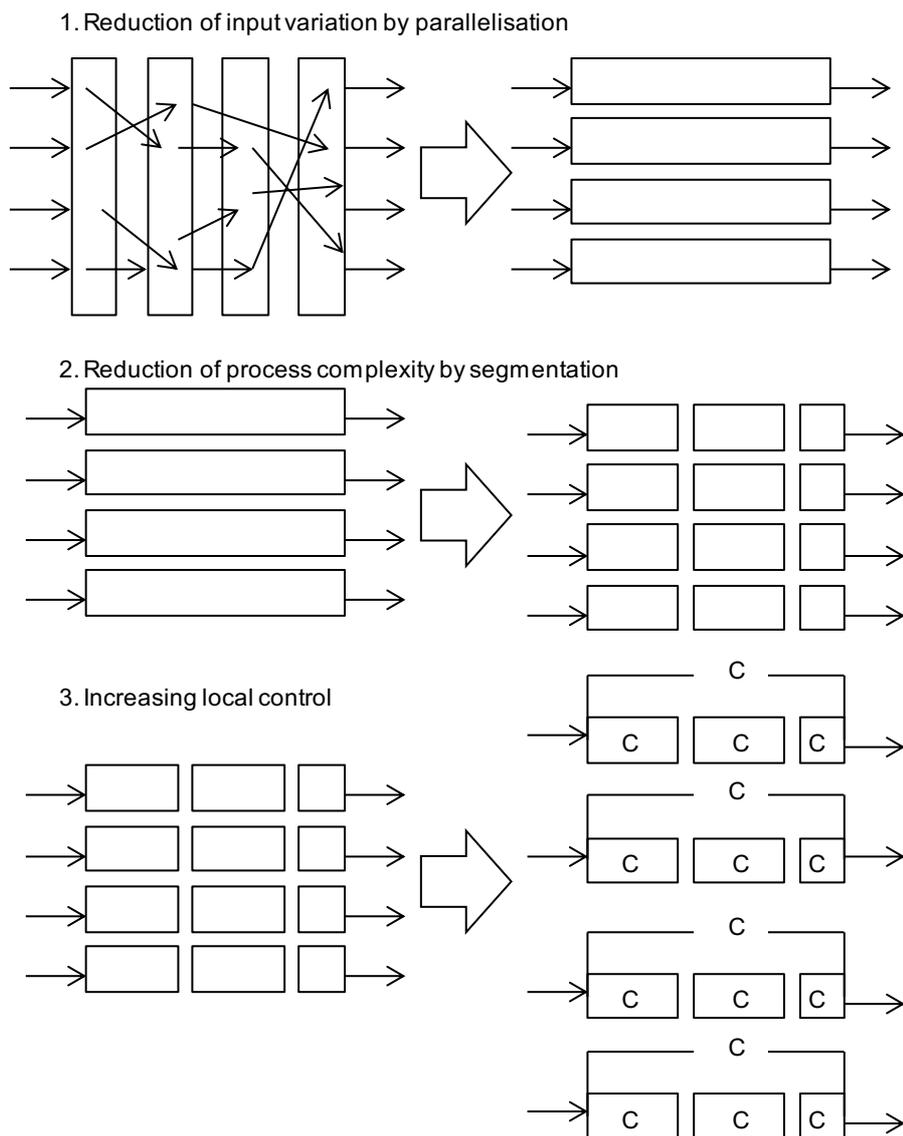
In sum, job control is an important predictor for employee involvement and, as such, a precursor to workplace innovation. Indeed, STS-D proposes that, by increasing job control, employees are stimulated to learn, better equipped to deal with interference and, thereby, better prepared to respond to challenges arising from job demands. This increased level of job control does not only affect employee involvement but also serves the organization by affording the possibility to better mobilise the use and development of human talent (De Sitter, 1994), and thereby enable the goals of workplace innovation.

STS-D design principles

As previously stated, we take the STS-D perspective as a base for designing the structure of an organization for TWIN (see Figure 4). To reduce the shortcoming of bureaucracies, De Sitter (1986, 1994) developed a three-step design sequence for reorganising the core work processes. First, one designs the production structure, second the control structure, and third the information structure.

persons can apply their knowledge and talents to solve problems. De Sitter (1994) has pointed out that employees do not get stress from problems in their work, but from the limited autonomy to solve these problems within their designed jobs.

Figure 4. The design sequence of STS-D (Kuipers et al., 2010)



Within STS-D, there is a specific design sequence for the design of organizations (De Sitter et al, 1986).

1. *The design of the production structure, or how an organization produces its goods or services:* If we assume that strategic positioning, such as the need for flexibility, innovation and healthy work, has been carried out, one needs to first design the core work process. This is done by focusing on the overall picture and then on the details (i.e., first on the whole, then on the parts). Based on the different customer families (see principle 1 in the upcoming robust organization design section), this means that one starts with creating the different (business) units, then the different departments within these units, and finally, ends with the design of the work teams and jobs.
2. *The design of the control structure, or how the core work process and supporting processes are managed.* The second step is a redistribution of control capabilities through the design of the management structure. This control structure is designed in reverse order, in other words, from the parts to the whole (i.e., bottom-up and not top-down). That is, first one determines what can be controlled at the (lowest organizational) local level (i.e., team and

job level), subsequently what can be organized at the level of a larger organizational operating unit (above that level), and finally what needs to be controlled at the (highest) organizational level. Next, the consultation and decision-making structure can be further elaborated in detail. The principle here is that emerging problems require autonomy to solve them at the level where those problems occur. This implies that the task of managing the core work processes should as much as possible migrate to the lowest organizational level.

3. *The design of the information structure (and other support systems), or how information streams support production and management.* Thirdly, the various (technical and support) systems are embedded in the new organizational architecture (see next paragraph). These systems include IT and support systems. Here the rule is that these systems should support and not control the production and control structure, hence, this information structure should not be designed too soon, and never before step 1 and 2.

We now turn from the sequence of steps to the design rules. Here, again we touch upon the design of the production structure, control structure and information structure, but now in more detail, as the design goes from a crude design to a fine-grained design. This consists of four steps, namely parallelisation, segmentation, local control, and support systems (Figure 4).

The STS-D approach avoids the shortcoming of bureaucracies because it results in a far more flexible design that enables a proper response to change and turbulence. We discuss this design approach in the following from both a strategic and an operational point of view.

Design as a strategic issue

Now that we have explained the general design sequence of STS-D, we address its strategic relevance first. In the next section, we discuss how these strategic choices can result in an operationally robust design. Robust means that interferences in the core work process are minimised. According to the open-system principle, the design of organizations needs to be strategic and should include *all* stakeholder perspectives. This is in stark contrast to the focus on shareholder value alone often witnessed in traditional organizations (Achterbergh & Vriens, 2009). From an STS-D perspective, in line with the open-system principle, diagnosing, designing and changing organizations needs to be done by taking into account environmental conditions and strategic business choices. These strategic choices, in turn, impose requirements on the organization, the “burning platform”, and dictate the desired direction (see also Adler & Docherty, 1998). Moreover, it is highly recommended that the design is drafted in co-creation with the different stakeholders. Indeed, the best guarantee for success is to *fetch the whole system into the room* (Weisbord, 2004). This points to the importance of employee involvement, a hallmark of workplace innovation.

Robust organization design

Apart from strategic choices, we need robust organizations which can cope with the demands of flexibility and innovation in a dynamic world. Hence, from the STS-D perspective, robust organization design is based on the following three principles (see Figure 4; van Amelsvoort, 2000):

1. *Reduce complexity in the division of labour in the core work processes (PS) by focusing on customer order families.* Reducing complexity can be achieved by the introduction of parallel processing (i.e., factory in a factory). Parallel processes a) afford a better business focus, and (b) create the conditions for decentralized control (see also principle 2). Parallelisation is defined as creating parallel streams of orders based on different customer families (e.g., markets, type of product). According to this principle, the design of the core

work processes is based on the *type* of customers and their orders. This implies identifying customer families (orders) that show homogeneity in terms of business demands, and, therefore, impose identical constraints on the manner in which the production process must be carried out. Identifying these customer families involves finding criteria to divide customers into relatively homogeneous subsets with different strategic demands. For example, a construction company builds tangible products. However, renovating a house or building a hospital represents completely different core work processes with different strategic demands. Hence, a miniature organization can be formed around these subsets of customer orders (i.e., one for house renovations and another one for commercial buildings) that each complete the process from a to z for this group of customer orders. In other words, the whole task is performed by a relatively self-organising group (i.e., autonomous work teams). We refer to the process as *parallelisation* (Figure 4). In other words, parallel order streams are created, with each being maximally interdependent within the stream, but minimally dependent across streams. This implies the design of whole tasks and the creation of self-organising groups, units and communities of work which are smaller in scale. *Segmentation* (Figure 4) of the core work processes can help to reduce process complexity and create teams of 8-10 people. Segmentation is defined as cutting the flows of orders into parts, in such a way that a whole task of activities with high interdependency is created (i.e., De Sitter's complex jobs at team level).

2. *Increase the local (job and team) control capability by decentralization: self-organization and a healthy control structure* (Figure 4). In an effective hierarchy designed to deal with turbulence, the different levels of control (i.e., layers of the organization) have added value in terms of operational and strategic control. That is, flexible and innovative organizations are structured in such a way that they can react fast both at an operational and at a strategic level. To achieve operational control, work teams are self-organised at the operational level. Operational control is the combination of internal control (job autonomy, decision-making authority, technological variation possibilities, flexible access to means) and external control (coordination, team members' support, recognition, feedback, and influence). According to Ashby's law of requisite variety, control capability at a node (in this case, the self-organised team) is necessary in order to resolve interference at the place where it occurs and to prevent or reduce quality problems, delivery time deviations, or productivity losses (Ashby, 1969). To achieve strategic control, different (business) units are set in place. Strategic control is necessary to reduce frequent interference among self-organising units and to explore innovations. Moreover, in dynamic situations, both operational and strategic control imply learning. The preconditions for control and learning are: participation in goal setting and purpose definition as well as effective feedback mechanisms for inspiration and learning, as in the JDJC-model (but now on the level of a team for example).
3. *Congruent infrastructure (technology and facilities) and HR systems: minimum critical specification* (Cherns, 1987). Because the units in the organization have different business demands they will also have different support demands (Figure 4). A supporting HR system, for example, should differ between teams of technically-skilled employees operating on the shop floor and administrative teams skilled in financial issues working in the office. Therefore, the design of the different support systems and technology should follow the first two principles mentioned above. Moreover, their design should be based on diversity instead of 'one size fits all' and should be focused on providing support instead of controlling. (See the next paragraph for a discussion of support systems).

Complementary approaches to STS-D for TWIN

So far, the STS-D approach has focussed mainly on the design of the production structure and control structure, i.e., the division of work into tasks and roles for TWIN (i.e., how to produce and how to manage). However, a systemic approach to redesigning the organization for TWIN also requires the design of support systems (i.e., the information structure). Below, we will discuss each of these different approaches as they relate to TWIN (see also Table 1).

Lean Thinking

Lean Thinking and its associated toolbox mainly focus on the reduction of waste. Similar to STS-D, it takes into account the whole core work process, starting with product development and ending with the delivery and subsequent support of a product to the customer (Womack, Jones, & Roos, 1990). Lean Thinking's contribution to TWIN is twofold: the principle of Just in Time (JIT), more recently reframed as Quick Time Response (Suri, 1998; 2010), and the concept of continuous improvement. Specifically, we propose that the Lean JIT principle can be used to design the logistics systems for TWIN. The continuous improvement element of the Lean toolbox focuses on eliminating all forms of waste. We argue that continuous improvement is an excellent way to enhance job control if applied at the level of individual employees, which in turn, would enable employees to cope with interference, stimulate learning and enhance employee involvement.

Total Productive Maintenance (TPM)

The TPM approach primarily deals with the organization of equipment maintenance in the production industry. Specifically, TPM focuses on the optimal cooperation between the production and maintenance department, which is in line with the aim of TWIN to increase employee job control possibilities. In TPM an important objective is involving all maintenance employees as well as having the operation teams implement practical solutions for further improvement (Nakijama, 1988). TPM has added value to STS-D for achieving TWIN, because it increases job enrichment with the focus on the task of autonomous maintenance, i.e., maintenance by operators.

Relational Coordination theory

In large organizations and networks there is a need for horizontal coordination between teams, units and communities of work. In this respect, *Relational Coordination* theory, developed by Gittell (2003), can complement the TWIN model. The theory has been used to examine what sets productive complex organizations, like airlines and hospitals, apart from their less productive competitors. The results suggest that it is the horizontal, informal relationships between employees that make the difference (Gittell, 2003). In practice, effective organizations seem to employ a variety of interventions to safeguard the coordination of their internal relationships. However, there are some common characteristics across these interventions. First, these organizations are characterised by a diversity of roles as well as wide-ranging, overlapping roles within order streams. Moreover, they tend to have developed wide-ranging organization-wide mobility policies where employees can be regularly transferred to another stream or branch. This will facilitate cross-pollination of knowledge regarding customers and operations and will help increase employee job control. Importantly, the time span for organising these coordinated relationships can differ significantly. For example, employees may rotate in their tasks several times within one working day. Security officers in Scandinavian airports (Gittell, 2003) are rotating almost constantly, enabling employees to keep an eye on travellers from several different observation points.

The New World of Work

The New World of Work is a combination of practices that focuses on the flexible design of workplace facilities based on time and place independent work (Bijl & Gray, 2011). The New World of Work approach complements the STS-D approach to achieve TWIN, by providing tools for designing the infrastructure of the workplace as well as tools for virtual collaboration. Indeed, re-designing an organization has far-reaching implications for its infrastructural requirements. A flexible organization, with for instance, project teams working in different time-zones with a dynamic need for deliberations, would need flexible working facilities as well as supporting ICT systems that allow for virtual collaboration.

Human Resources Management (HRM)

STS-D theory informs us on how to design tasks and roles that mobilise human talent (de Sitter, 1994), however, it does not provide any answers regarding employee selection, training and development or reward systems. To this end, Human Resources Management (HRM) approaches can be used to complement STS-D in designing a TWIN model. In this respect, we focus on two schools of thought in HRM named after the American Business Schools where they were developed, namely the Michigan (Fombrun, Tichy & Devanna, 1984) and the Harvard models (Beer, Spector, Lawrence, Mills, & Walton, 1984). The Michigan approach, generally seen as the “hard” version of HRM, focuses on high performance aligning personnel management with the organization’s strategy. Therefore, the HRM instruments are tailored to ensure that employees add value to the organization and the focus is on ensuring high employee performance. In contrast, the Harvard model, or the “soft” approach to HRM, focuses on the internal coordination of the expectations and interests of both the business and the employees. Employee involvement is central and the assumption is that it can only be achieved if people are confronted with challenging work. Moreover, it assumes that employee involvement will result in higher productivity, quality and efficiency. Both HRM models assume a balance between management (Michigan) and employee value (Harvard) and they both see HRM as an integral part of the enterprise strategy. STS-D theory claims to balance business demands and employee interests, therefore, for TWIN the combination of both models seems logical.

Archipelago ICT thinking

Although information technology (ICT) systems play an important role in organizations, ICT has never played a major role in designing organizations from a STS-D perspective. However, ICT systems profoundly determine organizational design choices, as they create the technical context within which many organizations are operating and, hence, they also affect the social work system (Bednar & Welch, 2016). In fact, in many cases, ICT is the context within which work takes place. In STS-D, ICT systems are regarded as support systems, hence, in the design sequence, this implies: ‘first organise, then automate’. The introduction of traditional enterprise ICT systems, for example, such as enterprise resource planning (ERP), has had negative effects on organizational agility, productivity and organizational and employee health (Govers, 2003). This is largely due to the fact that they aim for standardisation and take a ‘one size fits all’ approach, whereby, all business functions are integrated into one core work process. However, in most organizations, a number of simultaneous processes take place that vary in terms of inputs/outputs and process steps. Moreover, due to this attempt at standardisation, ERPs can lead to a neglect of customer demands as well as decreased job control.

Contrary to this practice, the STS-D principles suggest that archipelago enterprise

computerization, when taking into account the necessary variety in work processes, is more suitable for workplaces aiming at TWIN goals (organizational performance and quality of work). Archipelago enterprise computerization is analogous to islands being connected under the water line, while being disconnected above the water line in an archipelago (Govers & Sudmeier, 2016). An archipelago enterprise system can consist of various parallel, independent enterprise systems instead of a single organization-wide one. This would imply that the organization identifies independent parallel market or production flows (streams) and ideally would provide each stream with its own computerization to deal with the variety and dynamics of that stream. The general information for all streams is the underwater connection. A light version of an archipelago system can be, for instance, a menu card structure. Like in a cafeteria, a menu of an enterprise system is built around clear-cut, varied processes. The archipelago design of IT systems can create the opportunity to provide specific production flow information to the employees and increase job control. This means that you do not have to provide more information than needed, which results in limited complexity for employees.

Sociocracy or the circular organization

Democratic values are important to create innovative and humane organizations. To this end Sociocracy (Lekkerkerk, 2016) provides the philosophy and tools to improve strategic decision-making, given that it focuses on participative strategic decision-making. Participative and democratic strategic decision-making enforces strategic job control possibilities, enables employee involvement and serves as an important tool for improving local labour relations.

Sociocracy was developed in The Netherlands in the 1970s (Endenburg, 1998; Lekkerkerk, 2016), and although the philosophy has spread, it has not been implemented on a large scale. Its more recent US adaptation, that has gained some ground recently, is called Holacracy (Roberson, 2015). Sociocracy is a consistent approach to involve employees (including managers) across different hierarchical levels in making non-operational decisions, for instance about strategic choices, including innovation and change (Endenburg, 1998). Sociocracy proposes the creation of circles, each consisting of a group of people at the shop or office floor. Depending on the size of the organization and the operational division of labour, there will be a hierarchy of circles (e.g., operational circle, business unit circle, top circle). The members of a circle elect one of them (the manager excluded) to represent them and their views in a higher-level circle, which is linking related lower-level circles. Thus, a number of layers may be formed until the top-circle is reached at top-management team level. Hence, a 'circle-organization' not only has a normal chain of command hierarchy for operational matters, but also a parallel structure of 'circles' for strategic or policy decision-making, that also serves as a bottom-up feedback channel, increasing the information processing capacity of the organization.

Conclusion

STS-D theory and practices have played an important role in designing the structure of humane and innovative workplaces. However, for workplace innovation, simply restructuring units, departments, tasks and roles is not enough. In traditional, bureaucratic organizations, support systems have hidden conservation mechanism to keep the bureaucracy in place. Moreover, for workplace innovation, support and coordination systems as well as democratic strategic decision-making should be included in designing the workplace.

In this article, we aimed at developing a more comprehensive design theory for stakeholders who are involved in design processes aimed at workplace innovation, by starting from sociotechnical design and by exploring how we can broaden that perspective with other approaches, to also cover issues such as IT-design and HR-design. Specifically, we focused on

the following approaches as potential additional perspectives to STS-D in developing a concept of Total Workplace Innovation:

- The Lean Thinking approach for quick time response (JIT) control systems and for continuous improvement;
- The relational coordination theory for supporting horizontal coordination;
- HRM-theories and practices for supporting HR-policies;
- TPM to support the collaboration between maintenance and operation;
- ICT systems design to create effective information support systems, based on variety instead of one size fits all;
- Sociocracy for participative decision-making and democratic involvement on strategic issues.

It is to be noted, that the TWIN concept we presented in this contribution needs to be further elaborated upon. In addition, we admit that we have left several questions unanswered due to limited space, such as, how can these approaches be integrated, how will they affect one another, and what will be the consequences in terms of design steps. Therefore, we suggest a joint journey of practitioners and academic researchers to develop a more profound model and practices for Total Workplace Innovation.

To conclude, the added value of this approach to workplace innovation practices is the understanding of workplace design as a fundamental precondition for the joint optimisation of quality of working life and productivity. The TWIN model starts from a structural design perspective (STS-D), however, to realise TWIN we need to integrate the design perspective with behavioural aspects and specific types of leadership (see Oeij et al., 2015). Realising TWIN in practise, hence, is a simultaneous design and organizational development process.

References

- Achterbergh, J., & Vriens, D. (2009). *Organizations: social systems conducting experiments*. Dordrecht: Springer.
- Adler, N., & Docherty, P. (1998). Bringing business into sociotechnical theory and practice, *Human Relations*, 5(3), 319-345.
- Amelsvoort, P. van (2000). *The design of work and organization*. Vlijmen: ST-Groep.
- Ashby, W. R. (1969). Self-regulation and Requisite Variety. In F. E. Emery (Ed.), *Systems Thinking* (pp. 105-121). London: Penguin Books.
- Bakker, A., & Demerouti, E. (2007). The job demands – resources model: state of the art, *Journal of Managerial Psychology*, 22(3), 309-328.
- Baxter, G., & Sommerville, I. (2011). Socio-technical systems: From design methods to systems engineering. *Interacting with Computers* 23(1), 4–17.
- Bednar, P. & Welch, C. (2016). Enid Mumford: The ETICS methodology and its legacy. In B. J. Mohr and P. van Amelsvoort (Eds.). *Co-creating humane and innovative organizations: Evolutions in the practice of Socio-Technical System Design* (pp. 274-288). Portland, Maine: Global STS-D Network Press.
- Beer, M. B., Spector, P., Lawrence, D. Q., Mills, R., & Walton, R. E. (1984). *Managing human assets*. New York: Free Press.
- Bijl, D., & Gray, M. (2011). *Journey towards the new way of Working: Creating sustainable performance and joy at work*. Zeewolde: Par CC.
- Cherns, A. (1987). The principles of sociotechnical design revisited. *Human Relations*, 40(3), 153-161.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- Eijnatten, F. van, (1993). *The paradigm that changed the workplace*. Assen/Stockholm: Van Gorcum/Arbetslivscentrum.
- Endenburg, G. (1998). *Sociocracy: The organization of decision-making*. Delft: Eburon Academic Publishers.
- Fombrun, C. J., Tichy, N. M., & Devanna, M. A. (1984) *Strategic human resource management*. New York:

Wiley

- Gittel, J. (2003). *The Southwest Airlines way: Using the power of relationships to achieve high performance*. New York: McGraw-Hill.
- Govers, M. (2003). *Met ERP-systemen op weg naar moderne bureaucratieën?* Nijmegen: Radboud Universiteit.
- Govers, M., & Sudmeier, P. (2016). Applying information technology from a socio-technical perspective: A socio-technical perspective on computerization. In B. J. Mohr, and P. van Amelsvoort (Eds.). *Co-creating humane and innovative organizations: Evolutions in the practice Of Socio-Technical System Design* (pp. 289-302). Portland, Maine: Global STS-D Network Press.
- Karasek, R. A. (1979). Job demand, job decisions latitude and mental strain; implications for job design. *Administrative Science Quarterly*, 24(2), 285-307.
- Karasek, R. A., & Theorell, T. (1990). *Healthy work; stress, productivity and the reconstruction of working life*. New York: Basic Books.
- Kuipers, H., & Amelsvoort, P. van, (1990). *Slagvaardig organiseren, inleiding in de sociotechniek als integrale ontwerpleer*. Deventer: Kluwer.
- Kuipers, H., Amelsvoort, P. van, & Kramer, E. H. (2010). *Het nieuwe organiseren: alternatieven voor de bureaucratie*. Leuven: Acco.
- Lekkerkerk, L. J. (2016). Organizing innovation and (strategic) decision making. In B. J. Mohr and P. van Amelsvoort (Eds.). *Co-creating humane and innovative organizations: Evolutions in the practice Of Socio-Technical System Design* (pp. 99-122). Portland, Maine: Global STS-D Network Press.
- Mumford, E. (2006). The story of socio-technical design: Reflections on its successes, failures and potential., *Info systems* 16(4), 317-342.
- Mohr, B. J. & Amelsvoort, P. van (2016) (Eds.). *Co-creating humane and innovative organizations: Evolutions in the practice Of Socio-Technical System Design* Portland, Maine: Global STS-D Network Press.
- Nakijama, S. (1988). *TPM, Introduction to TPM*. Portland, Oregon: Productivity Press.
- Oeij, P. R. A., Žiauberytė-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. (2015). *Third European Company survey – Workplace innovation in European companies*. Luxembourg: Publications Office of the European Union.
- Pot, F., & Dhondt, S. (2016). Workplace innovation. In B. J. Mohr and P. van Amelsvoort (2016). *Co-creating humane and innovative organizations: Evolutions in the practice Of Socio-Technical System Design* (pp. 201-222). Portland, Maine: Global STS-D Network Press.
- Roberson, B. J. (2015). *Holacracy, the new management system for a rapid changing world*. New York: Henry Holt & Co.
- Sitter, L. U. de, Vermeulen, N., Amelsvoort, P van, Geffen, L. van, & Vertroost, P. (1986). *Het flexibele bedrijf*. Deventer: Kluwer.
- Sitter, L. U., de. (1994). *Synergetisch produceren, Human resources mobilisation in de productie: een inleiding in de structuurbouw*. Assen: Van Gorcum.
- Sitter, L. U. de, Hertog, J. F. den & Dankbaar, B. (1997). From complex organizations with simple jobs to simple organizations with complex jobs. *Human Relations*, 50(5), 497-534.
- Suri, R (1998). *Quick Response Manufacturing: A companywide approach to reducing lead times*. New York: Productivity Press.
- Suri, R. (2010.) *It's about time*. New York: Productivity Press.
- Weisbord, M. R. (2004). *Productive workplaces revisited: Dignity, meaning and communication in the 21st century*. London: Jossey-Bass/Wiley.
- Womack, J. P., Jones, D., & Roos, D., (1990). *The Machine That Changed the World: The Story of Lean Production*. New York: Rawson/Harper Perennial.

IMPLEMENTING WORKPLACE INNOVATION ACROSS EUROPE: WHY, HOW AND WHAT?

Peter R. A. Oeij
TNO, The Netherlands
Organization for Applied
Scientific Research
peter.oeij@tno.nl

Steven Dhondt
TNO, The Netherlands
Organization for Applied
Scientific Research

Rita Žiauberytė-Jakštienė
TNO, The Netherlands
Organization for Applied
Scientific Research

Antonio Corral
IKEI Research & Consultancy, Spain

Paul Preenen
Dutch Tax and Custom Administration, The
Netherlands

About the authors

Peter R.A. Oeij is a senior researcher/consultant at TNO, The Netherlands Organization for Applied Scientific Research (Leiden, The Netherlands). The main topics of his work are innovation management, workplace innovation, social innovation, productivity, flexibility, working smarter and team work.

Steven Dhondt is a visiting professor at the KU Leuven (Belgium; Chair Social Innovation) and senior research scientist at TNO, The Netherlands Organization for Applied Scientific Research (Leiden, The Netherlands). He is the network coordinator for the European learning network on Workplace Innovation (2013-2017) for the DG Enterprise & Industry.

Rita Žiauberytė-Jakštienė is a junior researcher at TNO, The Netherlands Organization for Applied Scientific Research. Formerly she has been a recruitment consultant in personnel selection agencies in Lithuania. Her research interests include social innovation, workplace innovation, and goal-setting topics.

Antonio Corral is Unit Director at IKEI Research & Consultancy (Spain). He is an economist and MBA with more than 25 years of experience in social and economic research and public policy projects. He is national correspondent in Spain for the European Observatory of Working Life (EurWORK) of Eurofound.

Paul Preenen is a researcher at the Dutch Tax Agency, Centre for Knowledge and Communication. He holds a Ph.D. in Work and Organizational Psychology from the University of Amsterdam. Previously, he has worked for The Netherlands Organization for Applied Scientific Research (TNO).

Abstract

This article discusses the implementation of workplace innovation (WPI) in European companies. Based on a 51-case study research in 10 EU Member States this article addresses four questions: 1] Why do companies apply workplace innovation; 2] What are different motives for management, employees and employee representatives to implement WPI; 3] What are important leverage factors for the implementation of WPI; and 4] What is known about the (expected) effects according to management, employees and employee representatives?

Results show that successful WPI is an interplay of management-driven business goals and employee-driven quality of work goals. Companies differ in their implementing strategies but constructive cooperation between management and employees is a key success factor for successful WPI.

Introduction

Workplace innovation (WPI) is generally beneficial for both business performance and the quality of jobs. Redesigning organizations and work processes matters for better performance and jobs in general (e.g., Bloom & van Reenen 2010; Boxall, 2012; Boxall & Macky, 2009). The benefits of WPI have been documented for both employees and organizations across a range of organizational and national contexts. For example, WPI has been linked to both improved individual level outcomes such as indices of quality of working life and improved organizational performance (Eeckelaert et al., 2012; Ramstad, 2009), quality of working life (Kalmi & Kauhanen, 2008), better organizational performance (Dhondt & van Hootegem, 2015; Oeij, Dhondt, & Korver, 2011; Oeij & Vaas, 2016), and applicability in SMEs (Oeij, de Vroome, Bolland, Gründemann, & van Teeffelen, 2014). Hence, companies that care about their performance and employees should adopt and implement WPI.

In fact, WPI might be more relevant than ever in the current times of ongoing change and competition, especially given the increasing awareness that many companies focus almost exclusively on technological and business (model) innovation to face today's demands (Dhondt, Oeij, & Preenen, 2015). However, competitiveness is not realised through merely stimulating new technological developments and cost-cutting efficiency policies but needs to go hand in hand with WPI (Pot, 2011; Pot, Dhondt, & Oeij, 2012; Pot, Totterdill, & Dhondt, 2016). Despite these positive results of WPI, less is known about how different European companies implement WPI in their own practices and why they do so. In this contribution our central question, therefore, is: *Why and how do companies implement WPI?* To address this question, we will use data from a Eurofound study (Oeij et al., 2015a) that investigated the implementation of WPI in 51 companies across Europe. We will first describe the concept of WPI. Subsequently, the Eurofound study's results are presented, including two company case examples of the implementation of WPI. We end with a conclusion and implications for policy and practice.

The concept of WPI

In this article, we use the following definition of WPI: a developed and implemented practice or combination of practices that structurally (division of labour) and/or culturally (empowerment) enable employees to participate in organizational change and renewal to improve quality of working life and organizational performance (Oeij et al., 2015a, p. 8, 14). This conceptualisation of WPI implies that one needs to look at the organization as a whole and consider the reciprocal effects of strategy, structure and culture, if one is to reap the benefits associated with WPI (Howaldt, Oeij, Dhondt, & Fruytier, 2016). For instance, hierarchical organizational structures may lead to more directive leadership styles and Human Resource Management (HRM) practices that focus on a clear division of labour and control, whereas less hierarchical structures may lead to leadership styles and HRM practices that are geared at promoting employee involvement, engagement and commitment (MacDuffie, 1997; Pot, 2011). Therefore, to fully understand WPI, it is essential to not only focus on certain types of HRM practices and their consequences, but to also take into consideration the organizational structure and the management philosophy underlying strategic choices (Dhondt & Oeij, 2014; Howaldt et al., 2016; Karanika-Murray & Oeij, 2017).

The workplace innovation's 'structure orientation' contains practices that structure work organization and job design (Oeij et al, 2015a; de Sitter et al, 1997). As described, these practices concern the division of labour, the division of controlling ('managing') and executing tasks, and they provide employees with structural decision latitude or control capacity (Dhondt, Pot, & Kraan, 2014). This means that employees are structurally given influence over their work, management, production system, and organization through, for example, co-creation in work design, employee budget or planning control, self-organizing and self-steering teams. Such an approach goes beyond HR-dominated streams (such as High Performance Work Practices and High Involvement Work Practices – discussed in Oeij et al., 2015a), as it is rooted in the choices made about how to design the production system and work organization. Structure-oriented practices can stimulate employee-control or autonomy, and provide a ground for employee (and employee representatives') voice. These are crucial for individual level motivation and innovative behaviour (Preenen, Oeij, Dhondt, Kraan, & Janssen, 2016; Preenen, Vergeer, Kraan, & Dhondt, 2015).

The workplace innovation's 'culture orientation' contains practices that provide opportunities for employees to participate in various ways, for example, in organizational decision-making through dialogue (Oeij et al., 2015a) and are focused on enhancing employee engagement and participation. An example of such a practice would be higher management visits to the shop floor in order to engage in dialogue with the employees. These culture-oriented practices do not only concern employees, but they could also include employee representatives, as in the case of social dialogue and collective bargaining. Culture-oriented practices can stimulate commitment and provide employees (and employee representatives) with voice (Totterdill & Exton, 2014).

The Eurofound study

The Eurofound study '*Workplace innovation in European companies*' (Oeij et al., 2015a, Oeij et al., 2015b) is a multiple case study among 51 companies from 10 EU Member States. Its purpose, among others, was to explore why and how companies apply WPI in order to offer policy makers in Europe recommendations for how to pursue and stimulate WPI across Europe.

Sampling

The companies were selected from the European Company Survey 2013 (ECS survey) database comprising about 30.000 companies (Eurofound, 2015). For this purpose, a WPI-index score¹ was constructed to rank all companies in terms of their WPI-features (Dhondt et al., 2014; Oeij et al., 2015b). The top 5% of the companies in the ranking were selected; this means that, according to the ECS-survey data, these companies are mature in terms of WPI-features. WPI-mature companies were selected because they have already undergone the whole WPI implementation process, therefore, enabling the analysis of leverage factors and barriers, as well as results of WPI. In order to achieve some variation across Europe, the companies were divided according to the following regional breakdown (Eurofound, 2015): Continental and Western Europe (Denmark, Germany, Ireland, The Netherlands, United

¹ The WPI-Index score (Dhondt et al., 2014; see also Oeij et al., 2015b) consists of separate items derived from the ECS Management Questionnaire, which are linked to the theory of high performance work systems. Using Principal Component Analysis (PCA), a latent structure in the data was found, which consisted of 7 factors: 1) innovation (product and organizational innovation), 2) voice (employees /employee representatives having a say in decisions and changes), 3) learning and reflection (training and feedback), 4) structure and system (variable pay), 5) work organization autonomy (autonomy), 6) work organization career (long-term career plans), 7) hierarchy. The WPI-Index score was calculated as the sum of the scores of these separate factors, implying that each of these elements was given the same weight in the WPI-index.

Kingdom – 102 companies were approached, 22 companies participated), Southern Europe (Greece, Spain – 105 companies were approached, 12 participated), and Central and Eastern Europe (Bulgaria, Lithuania, Poland – 17 companies participated from the 154 that were approached). The final cases were selected via direct contacts with the companies explaining the purposes of the project. Our final sample varied in sector, and size as follows: *Company size*: SMEs 50-249 employees (27 companies) and large companies with 250 employees or more (24); *Branch*: industry/manufacturing (21); commercial services (14); social services (16).

Methods and fieldwork

In each company, face-to-face or group interviews were intended with a manager, a group of employees, and employee representatives to get an extensive and broad picture. These were always persons who were involved and knowledgeable of the WPI practices to be studied. However, for diverse reasons, usually operational difficulties during the fieldwork, in five companies it was impossible to talk to employees and in 16 companies no employee representatives were available.

The fieldwork was carried out by nine European research institutes using a standardized methodology and formalized questionnaires about the how and why of WPI (see Oeij et al., 2015b²). All in all, about 200 people were interviewed (for exact numbers see Table 3 and 4), following specific questionnaires for each interviewee category (in total, 3 questionnaires per firm). The information gathered was entered into a data file and each case was described in a mini-case study report (2–3 pages)³. In each company, specific WPI practices were identified (up to 168 practices in total).

Subsequently, the questionnaires were analysed using Qualitative Comparative Analysis (QCA). Analyses revealed the ‘conditions’ within companies that explain the presence of substantial WPI practices. Together, these conditions constitute successful routes (‘configurational paths’) that can be regarded as implicit strategies employed to become a WPI company. Case study reports were used to assess whether different types of WPI practices could be distinguished. Qualitative information from interviews was used to get a richer description of contextual factors, drivers and motivations, ways of developing and implementing WPI, and the impacts of WPI. This combined approach, leveraging information from different data sources, enabled an in-depth analysis of the companies and their WPI practices⁴.

Results of WPI implementation in practice

Why do companies want to implement WPI?

To see why companies introduced WPI-practices a distinction was made in the questionnaires between two drivers or targets, namely, to improve the quality of performance of the organization or to improve the quality of working life and employee engagement. The analysis of the questionnaires revealed the existence of a third category that essentially combined both drivers. Although economic reasons drive the decision to introduce WPI, most practices identified in the case studies (69%) are targeted at both goals (i.e., the enhancement of the company’s performance and quality of working life), while the remaining practices are

² Full technical report with the methodology can be found on the Eurofound website at <https://www.eurofound.europa.eu/publications/report/2015/working-conditions/third-european-company-survey-workplace-innovation-in-european-companies> .

³ All cases can be found on the Eurofound website at: <https://www.eurofound.europa.eu/workplace-innovation-in-european-companies-case-studies> .

⁴ An elaborate description of the fieldwork and methodology can be found in Oeij et al., 2015b which can be downloaded from the Eurofound website.

approximately equally divided between those that focus on quality of working life (18%) and quality of performance (14%) (Table 1).

Table 1. Types of practices applied and drivers (percentages)

Drivers	WPI			Total WPI	HR	Other	Total
	WPI-structure	WPI-culture	WPI-mixed				
Quality of Performance	1,8	1,2	3,6	6,5	3,6	3,6	13,7
Quality of Work	3,0	3,6	4,2	10,7	6,5	0,6	17,9
Both: Quality of Work and Performance	8,9	15,5	11,3	35,7	28,6	4,2	68,5
Total	13,7	20,2	19,0	53,0	38,7	8,3	100,0
Number of practices	23	34	32	89	65	14	168

Source : Oeij et al. (2015b, p. 21)

Table 1 presents a total of 168 WPI-practices that were identified in the selected companies. Half of these practices (53%) are either focusing on WPI-structure elements (14%), WPI-culture elements (20%) or are a mixture of structure and culture practices (19%). Quite a high proportion of identified practices were assessed as being exclusively HR-practices (39%), which we see as too limited to qualify as a genuine WPI-practice. The practices in this category are ‘typical’ or ‘traditional’ HR-practices in the fields of, for example, personnel recruitment, training, competence development, performance appraisal, working conditions, remuneration, flexibility and health, risk and safety measures. The category ‘other’ (8%) consists of practices such as cost-effectiveness, efficiency improvement and ICT-practices that also do not qualify as WPI.

Table 2 provides some concrete examples of the 168 practices identified. The complete list of practices (including HR-practices) can be found in the Annex to the report (Oeij et al., 2015b). Given that most WPI-practices in our sample seem to be aimed at both achieving economic goals and better work, it is likely that they not only lead to better company performance but also to increased employee engagement and a better quality of working life. WPI practices, such as the ones mentioned in Table 2, tend to be aligned with employee interests and, as we will show later on, lead to agreement among managers, employees and employee representatives as to what is more or less important.

Regarding the different paths or routes employed by companies on their way to becoming mature WPI-companies, we found that organizations followed their own unique routes. Indeed, most of them applied more than one WPI-practice, often a combination of structure oriented, culture oriented and HR measures. This may indicate that a ‘bundling’ of measures might be beneficial, as is proposed in the High Performance Work Practices (HPWP) literature. However, we cannot draw any definite conclusions regarding the ideal combination of WPI-practices, given the wide variety of WPI-practices combinations we found in our cases (Oeij et al., 2015a).

Table 2. Examples of WPI-practices

Types of practices	Examples (*)
WPI: structure orientation	Educational organization (BG-EDUC-UNI-S): Self-managing teams were introduced as a system for organising day-to-day duties and activities. This approach ensures that the team members have sufficient flexibility to decide how to implement their tasks taking into account their own capacities and time schedule.
	Research organization (ES-SCI-ENVIRONM-L): Minimising organizational levels and enhancing autonomous teams is done by ensuring that there are no more than two hierarchical levels between the lowest and the highest levels. This also facilitates the existence of self-managed working teams that have the freedom to organise themselves.
	News & Journalism organization (NL-INFO-NEWS-L): Job enlargement by expanding sales jobs with account management tasks; cross-functional teams were also installed to realise innovation projects across departments
WPI: culture orientation	Museum (DK-ART-MUSEUM-S): Partnership with unions. New projects and organizational changes are debated in a joint committee with union representatives, OSH representatives and management representatives. This committee is initiating new practices such as training and support for new employees.
	Energy company (BG-ENER-GAS-S): The Knowledge Management System, OGpedia, is a voluntarily developed IT-based information sharing system. All employees can share and gain new knowledge.
	Postal organization (LT-SERV-POST-L): “Loyalty Day” aims to enhance communication and knowledge sharing between managers and first line workers. Managers voluntarily visit workers at their work site and gather information about specific processes and possible issues. This increases sustainability, efficiency and good organizational communication.
WPI: mixed	Research organization (ES-SCI-WORK-L): Flexitime practices allow workers to have a say regarding their working times: they can adjust their starting and exiting hours, also ad-hoc exits (with manager’s permission) are allowed.
	Financial service company (EL-FIN-BANK-L): An initiative for personal development: every year teams of 1-2 people take part in a challenge defined by the top leaders. In this way ideas can be passed from young talents to the top management. Young talents are supported by coaching sessions and assessment tools and gain experience.
	Pet food processor (DE-AGRO-PETFOOD-S): Overall Competences: Ready to do any job in the production line, an overall qualification was given to the production staff, enabling the employees to take over every job in the production. After the mechanisation of production most of the employees had the chance to upskill and take over a skilled worker’s tasks.

(*) Company codes are indicative of country, branch of activity and size (small 50-250 and large 250+) and used to ensure anonymity. *Source:* Oeij et al. (2015a, pp. 25-26).

Before we turn to the ‘how’ question, we will take a closer look at the motives, leverage factors and impacts of WPI. The following sections are based on both quantitative data from the questionnaires as well as interview data from managers, employees and employee representatives. Generally, the level of agreement between these stakeholder groups was high⁵.

What are motives to implement WPI?

Although companies did choose varying paths to WPI and selected different (combinations of) WPI-practices, their reasons for initiating WPI reflect much commonality. Our quantitative and qualitative analyses show that, from an organizational perspective, economic motives for initiating WPI are dominant (Table 3). In this sense, from the viewpoint of the ‘organization as a

⁵ The drivers are derived from the WPI-practices that are implemented by the companies; the motives are part of the interview checklists that were applied (for more details see the Technical report, Oeij et al., 2015b).

whole', the most prominent three general motives identified by the three groups of interviewees for initiating WPI implementation, were efficiency improvement, to gain competitive advantage and to enhance innovative capability. However, many companies understand that achieving economic goals largely depends on the role that employees play, as reflected in motives such as becoming an attractive employer and increasing acceptance by employees (Table 3).

Table 3. General motives for the implementation of WPI

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
...for the 'organization as a whole'			
To improve efficiency	80	80	74
To gain competitive advantage	78	58	65
To enhance innovative capability	75	58	65
To become an attractive employer	57	53	44
To enable the acceptance by employees	37	31	47
To enable the embedment of new technology and ICT	37	33	35
To improve industrial relations with unions	18	9	47
...from managers' and employees' perspective			
Economic and business goals	94	89	88
Learning and development opportunities	78	71	74
Performance	61	62	59
Public goals	31	33	32
Flexibility	31	42	38
Shareholder interests	25	24	29
Labour market position	25	18	35
Balance private-work life situation	25	24	32
N of respondents	51	45	34

Source: Oeij et al. (2015b, p. 27)

Apart from looking at motives for 'the organization as a whole', the investigation of 'motives' was also approached as possible desired impacts for each group of stakeholders separately (management, employees and employee representatives) (Table 3). We found that motives for WPI implementation from both the managers' and employees' perspectives overlap⁶, and, moreover, are aligned with the general reasons to initiate WPI⁷. The three most salient motives are economic and business goals, learning and development opportunities, and performance. Interestingly, all three actor groups saw motives related to the quality of organizational performance as more important than those related to the quality of working life.

What are important leverage factors for the implementation of WPI?

Leverage factors are actions, measures or means that drive the successful implementation of WPI-practices. The most important three leverage factors for WPI implementation are employee involvement, top management commitment, and, at a distance, leadership or the involvement of

⁶ Statistical results (based on McNemar tests) indicated that there are no significant differences in how frequently managers, employee groups and employee representatives selected the top-3 motives (economic and business goals, learning and development opportunities, performance).

⁷ All three groups indicated the improvement of efficiency as the most important motive for the "organization as a whole", while gaining competitive advantage and enhancing innovative capability were the second two most important motives. No differences were found among the three groups in the frequency of selecting the improvement of efficiency. Managers' selected gaining competitive advantage more often than groups of employees and employee representatives (respectively $p=.049$ and $p=.039$); managers also selected enhancing innovative capability more often than employee representatives ($p=.039$). Here and in other comparisons attention should be paid to data missing from employee representatives (>30%).

a powerful person (Table 4)⁸. While reasons and motives to start WPI point to business-related arguments, employee involvement seems a sine qua non, when it comes to adoption and implementation.

Table 4. Leverage factors for WPI implementation

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
Employee involvement	82	84	88
Top management commitment	80	69	68
Leadership, powerful person	67	56	65
Organizational, non-conflictive climate	49	42	50
Resources, enough money and people	33	38	29
Time, no interference from reorganization	18	20	24
N of respondents	51	45	34

Source: Oeij et al. (2015b, p. 27)

What are the impacts or expected impacts of WPI?

Impacts of WPI-practices, like drivers, can be divided into effects on organizational performance and on employees. We considered four types of impacts: impacts on the organization, management, employees, and employee representatives (see Table 5).

Table 5. Impacts of WPI

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
for the organization			
Employee engagement	82	78	85
Longer term sustainability	73	64	62
High performance	67	56	59
Establishing good work	63	47	62
for managers/managers' interests			
Efficiency	73	64	74
More sustainability	71	60	62
Competitiveness	65	53	59
Innovation/innovation capability	61	47	59
Satisfied client, customer	61	53	59
for employees/employees' interests			
Learning opportunities	71	67	59
Voice, participation	59	56	59
Challenging, active jobs	57	64	44
Healthy work	43	49	56
for employee representatives/ union interests			
Employees voice	79	67	85
Sustainable organization	56	33	50
Equality, fairness	35	33	41

Source: Oeij et al. (2015b, pp. 28-29)

For the organization, according to all three groups of interviewees, employee engagement was the most important outcome of WPI, followed by long term sustainability⁹, and, at some distance, high performance, better customer focus/client focus, efficiency, and profitability. For employee representatives, notable outcomes were also the establishment of good work and

⁸ Statistical (McNemar) tests indicated that there are no significant differences in how frequently managers, employee groups and employee representatives selected the top-3 leverage factors.

⁹ McNemar Tests also indicated that there are no significant differences in how frequently managers, employees and employee representatives selected the two top outcomes, hence, there is agreement among groups.

more positive employment relations. Remarkable maybe, but according to employees, establishing good work was ranked lower than efficiency, profitability and high performance (not visible in Table 5, see Oeij et al., 2015b; pp. 28-29).

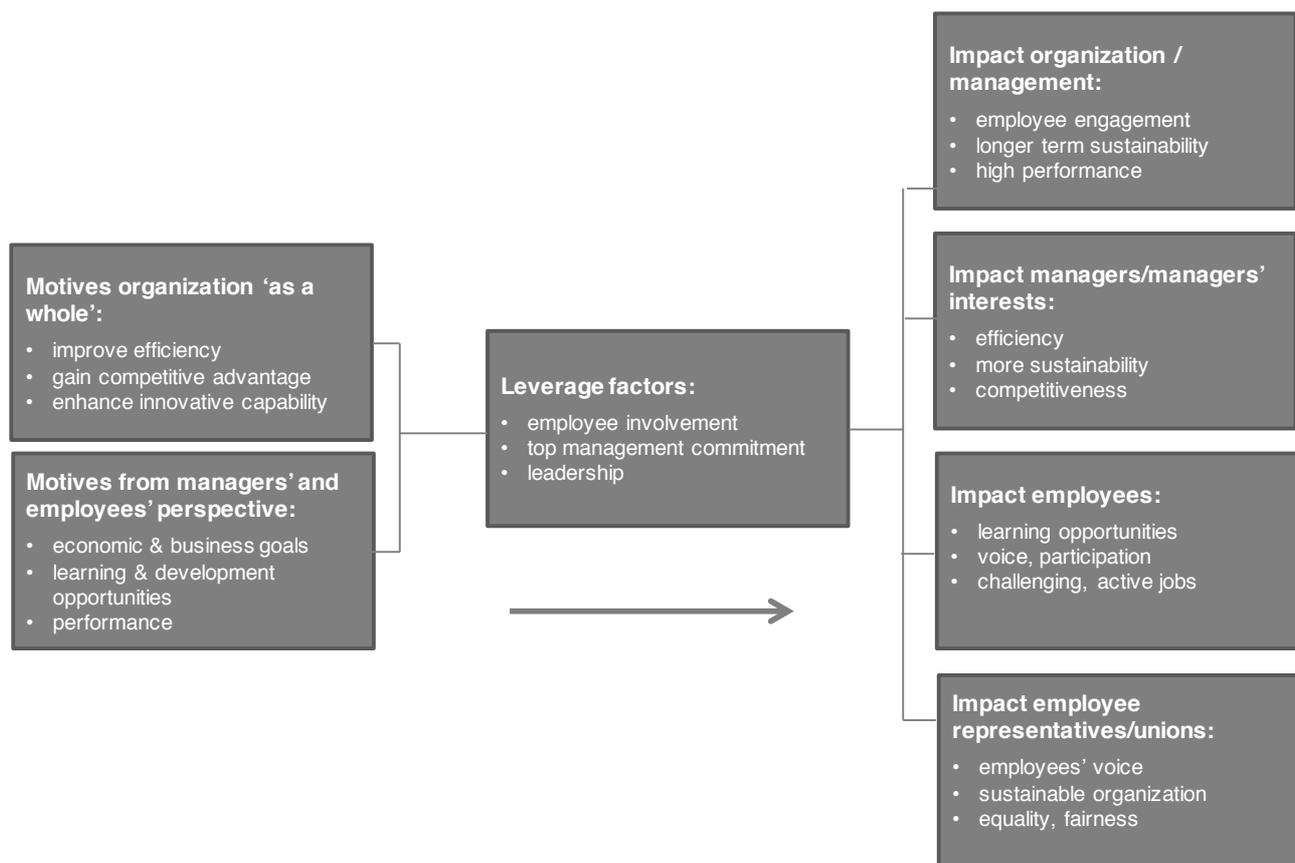
The most important impacts of WPI for managers' interests are efficiency and sustainability; for employees' interests, learning opportunities, voice/participation, and challenging and active jobs; and for employee representatives'/union interests, employee voice.

Summary

In sum, when we consider why companies implement WPI, what they see as the most important leverage factors, and which effects or impacts of WPI they expect for the organization, managers, employees and employee representatives, it becomes clear that the three different respondent groups tend to largely agree with each other. Given that economic goals are triggering the initiation of WPI and that employee involvement is a key factor in the introduction of WPI, it is intriguing to see how much agreement emerges among all stakeholders. All three actors regard:

- employee engagement, longer term sustainability and high performance as the most important impacts for the organization;
- efficiency, increased sustainability and competitiveness as the most important impacts for managers;
- learning opportunities, voice/participation and challenging and active jobs as the most important impacts for employees;
- employee voice as the most important impact for employee representatives.

Figure 1. Agreement about the main motives, leverage factors and impacts of WPI according to three respondent groups (managers, employees, employee representatives)

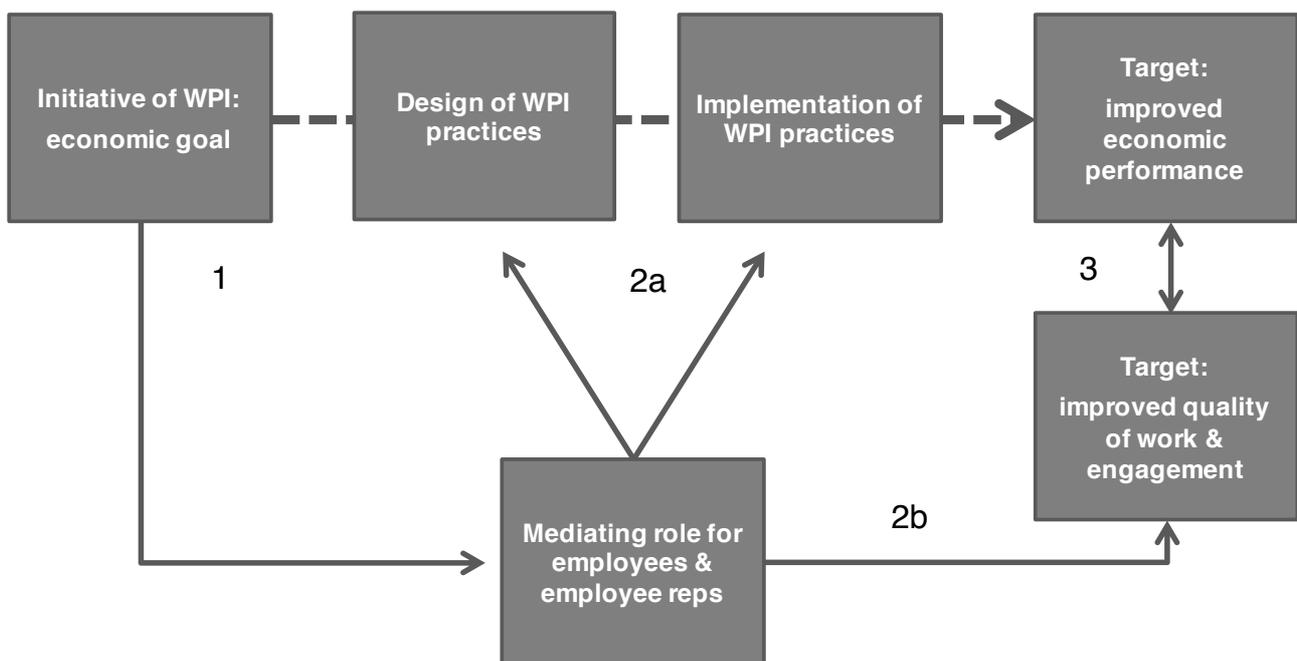


Hence, in many instances, the process of introducing WPI-practices tends to improve not only economic performance, but also employee engagement and quality of working life. Figure 1 captures these findings.

How do companies implement WPI?

Now that we have outlined the motives for introducing WPI and their associated leverage factors, we will discuss ‘how’ WPI is being implemented. The process of initiation, adoption and implementation of WPI-practices reveals a common pattern across companies. As previously described, companies choose paths that differ among companies, yet within companies there is agreement among managers, employees and employee representatives regarding why WPI should be introduced, how to do it, and what impacts are desired. Our research suggests that, often, it is management that initiates WPI, and that the main motive is economic. Once this decision has been taken, employees are involved to help design and implement the intervention. Moreover, consulting employee representatives is common among those companies who advocate communication and employee interests. Be reminded that our sample is from the companies who score the highest on WPI. Many of these companies are WPI-mature and from the case studies we learned that they have come this far after many years. The way that WPI-practices get implemented seems to reveal a generally applied pattern (Figure 2):

Figure 2. Pattern of implementing WPI-practices (Oeij et al., 2015a, p. 59).



1. **The initiative of a WPI** often has an economic purpose and very often this is dominant (see 1 in Figure 2). However, in many cases WPI-practices are not solely targeted at economic goals. Often, they are combined with or embedded in organizational, job and HR-related measures.
2. Once the WPI-initiative has been refined into a measure or set of measures, employees (and often employee representatives) play an important role in **co-designing and developing the WPI-practice** and its **implementation** (see 2a in Figure 2). This happens because management tends to realise that it is impossible to implement WPI without the engagement of employees. Given that employee participation in the design and

implementation phase is inextricably linked to employee engagement and possibly improved quality of working life, this can result in the achievement of employee-favourable targets (see 2b in Figure 2).

3. The target of improved economic performance is often not only a direct effect of the implemented WPI-practice but, is in most cases, also indirectly influenced by employees and employee representatives. When economic targets are achieved, they may well coincide with the targets of improved quality of working life and employee engagement. Vice versa, an improved quality of working life and employee engagement can contribute to improved economic targets (see 3 in Figure 2).

In summary, it appears that (initial) reasons and motives to initiate WPI are mainly economic. In the next phase, concrete WPI-practices are designed and implemented. Here, it becomes apparent that employees get to play a major role, especially in light of the fact that the most important leverage factor for adoption and implementation is employee involvement. Interestingly, managers, employees and employee representatives seem to agree that employee engagement in the whole process is a necessary condition for WPI.

Two company examples of the WPI implementation process

In our research, we found that companies adopt and implement WPI in their own specific way. Below (see Table 6), we will present two examples of WPI implementation from Denmark and Lithuania in order to highlight the uniqueness of the WPI process (Oeij et al., 2015a, pp. 53-54).

Table 6. Examples of the WPI implementation process

Danish example: Partnership with unions

Service organization (DK-SERV-PARK-S): Organizational changes are discussed by the manager and the union representatives. They have a partnership and value each other's opinions. The manager explains: *"It is nice to have representatives who are not afraid to step up against me in a constructive dialogue"*. The implementation approach consisted of 1) management took initiative, 2) external consultants supported the process, 3) experiments were conducted (a work team tested new meeting practices or the like), 4) 'invitation' to the same knowledge for all training, and 5) implementation of the practices, but not necessarily in the same way everywhere. No evaluation was done but adjustments were made along the way. Both management and employees believe that it is important to design the process in a manner that creates 'enthusiasts' amongst the employees. The union representative explains: *"It gives a huge boost to the company that we work together to create a great workplace. ... That's what made us 'the best workplace' (a Danish award) in 2004"*. The employees believe that, even though management determines the direction, they have to have the trust to be able to discuss it: *"It should be perfectly legal to say our outspoken opinion to our manager – and it is. There may well be disagreement, but you have to be able to discuss things"* (employee).

Lithuanian example: Dialogue with personnel

Hotel (LT-ACCOM-HOTELS-S): The WPI practice, Think Guest Feedback, consists of regular middle management meetings where middle managers from all departments (Front Office, Reservations, Conference Hall, Lobby, Restaurant, Sky Restaurant, Room Service, Marketing and others) regularly meet and review Hotel ratings on dedicated social media platforms. They discuss particular guest feedback cases and joint actions that could improve guest stay experience (and feedback as a result), brainstorm on how guest feedback could be stimulated and collectively addressed, take important information back to the teams of their departments for further action, produce minutes of their observations and recommendations to top management on improvement of various hotel operational aspects and share experiences with each other. Think Guest Feedback involves, for example, prompt reaction to guest feedback (especially when negative) before they leave the hotel, and constant organizational learning from any mistakes made. It implies staff empowerment, not only in the sense that they could solve emerging problems straight away, but also that each of them could feel like owners of the business and be proactive in preventing negative guest experiences. Mutual trust, goodwill and respect across departments (not to solve your own issues at other's costs) and between all levels of organizational management were stimulated. According to the General Director, the initiative is still very new, but after a few months, it is already showing benefits.

The Danish example mirrors a stepwise approach of management engaging in partnership with unions. The Lithuanian case exemplifies the taking up of dialogue between management and

employees, which is relatively new to the region. We chose these examples due to their variety, distinctiveness, and richness in terms of implemented WPI practices. Whereas these examples are different in terms of the interplay between management, employees and their representatives, they are all similar in the sense that cooperation between actors is fundamental to improve the business.

Conclusion and lessons for practice

As mentioned in the introduction, WPI practices have been associated with better organizational performance as well as with softer outcomes such as employee engagement. Yet, to date, we know relatively little about why and how companies implement WPI across Europe.

The general conclusions that emerge from our research can be captured in a few lines. The initiative to start WPI practices usually comes from company owners or managers. However, these managers/owners have understood that, for WPI to be successful and to help them reach benefits in terms of company performance and sustainability, employees' and employee representatives' involvement and participation are crucial. Typically, the reasons driving management's decision to implement WPI practices are related to efficiency, competitiveness and innovation enhancement. In a number of cases, management's decision to implement WPI is triggered by other factors such as:

- a situation of crisis or difficulties in the company's performance that requires significant changes to survive and remain competitive in a changing and globalised market, where the traditional products/services and ways of working need to be revised and adapted in order to satisfy the requirements of increasingly exigent and sophisticated customers;
- sometimes, the former is also combined with a take-over from (or merger with) another (multinational) company which brings in new forms of work organization and new work practices, systems, etc. that involve workplace innovation. In these cases, there is a kind of 'WPI know-how transfer' from the headquarters to the subsidiary.
- In several of the Eastern European case studies, the privatisation of public enterprises and the associated reorganization processes have served as a background to the implementation of WPI, seeking greater efficiency and employee involvement that were previously lacking.

Interestingly, factors related to job quality and good working conditions do not emerge as primary reasons or motives for WPI, but rather as either a pre-condition or a result of WPI. This means, that the objective of WPI introduction is not to improve the working conditions or the working environment as such, but that, in order to enhance employee involvement and their contribution to the company's performance and innovation processes, a good set of working conditions is required.

The companies in our sample used different paths to become WPI-mature organizations, meaning they applied different combinations of WPI-practices and stressed different organizational choices (Oeij et al., 2015a). Given that our sample consisted of only WPI-mature companies, it is possible that, for not (yet) WPI-mature organizations other success paths may emerge in future research. We found that organizations can choose different production systems that enable WPI implementation, such as flow structures and teams (Achterbergh & Vriens, 2010; Christis, 2010). This implies that WPI is related to organizational changes at the 'root' of the production process of making products and delivering services (MacDuffie, 1997).

Although companies differ in their implementation strategies, constructive cooperation between management and employees seems to be a key factor for successful WPI, as our two case

descriptions imply. Additionally, the way that WPI-practices get implemented seems to reveal a general pattern across companies (Figure 2). Importantly, it appears that organizations can make strategic choices with their organizational structure. Moreover, it seems beneficial for the emergence of WPI to strengthen the position of employees and employee representatives. This can help boost WPI-practices, which, in turn, may improve both economic performance and quality of working life.

Some pointers for practitioners

In our sample, WPI is supported by all organizational players: managers, employees and employee representatives. This clearly indicates good employment relationships and industrial relations among the company stakeholders, which result in constructive cooperation, communication and collaboration, the containment of labour conflicts and a striving for common interests and goals. To achieve this, management and leadership behaviours are required that not only bring the business forward but simultaneously stimulate trust and employee engagement. In turn, it is necessary that employees engage in entrepreneurial and intrapreneurial behaviours and apply their talents in support of innovation and co-creating change. In addition, it is crucial that employee representatives and unions balance their interests with those of the employees and companies.

Choosing the right WPI-practices to implement is not easy. It requires linking an organization's strategy to its management philosophy, and subsequently, to its structure and culture. Moreover, this has to be done by taking into account the viewpoints of management, employees and external stakeholders – unions, customers, etc. What does this mean? First, the management philosophy determines the strategy (i.e., whether the organization's goals are to be achieved top-down or bottom-up). That same philosophy serves as the basis for the design of the working processes (i.e., the structure). In this respect, one can choose a more top-down or a more bottom-up approach regarding the division of labour and the way in which these working processes are managed. In turn, this will be reflected in the culture of an organization, especially if one looks at leadership styles and the manner in which employees are engaged. In this respect, organizations can show more of a control-orientation versus more of a commitment-orientation, depending on former choices. The established culture will determine whether employees will be more pro-active or risk avoidant. Strategy, structure and culture together constitute a unitary system and need to be treated as a whole. Merely implementing employee-friendly HR-measures, like innovation competitions, job performance interviews or company suggestion boxes while leaving a top-down structure intact, will therefore, result in disappointment rather than satisfaction, in the long run.

When developing WPI-practices one should take a whole system approach and understand that the root causes of behaviour need to be addressed, and that these can often be found in the interplay between strategy, structure and culture. It is nonetheless difficult to assess the potential impacts of WPI-practice at the outset. This is partly because it is difficult to predict the outcomes, partly because of the complex manner in which WPI-practices interact with other organizational factors, and partly because some effects can be quantified, but many others cannot and remain 'qualitative' evaluations. To be able to build a proper 'business case' for such WPI-practices in which a trade-off can be made between quantitative and qualitative aspects, and which reflects the viewpoints of different stakeholders, employers and employees can collaboratively engage in a stepwise approach (Oeij et al., 2012). This approach implies that employers and employees analyse the (future) productivity challenge and strategy of the organization, and link this to possible workplace innovation practices, and their effects on performance and quality of work. By making a trade-off between the advantages and

disadvantages, and by applying a dialogue approach (Oeij et al., 2006), they can build a solid business case for their final choice. The dialogue approach means that viewpoints from different perspectives are taken into account.

Coda

This contribution tried to make clear why leading WPI-companies apply WPI and how they implement it. WPI-mature companies have mature relationships between management, employees, and employee representatives. These stakeholders understand that they need each other and that strategy, structure, and culture can best be seen as a system that should be balanced. Workplace innovation thus requires a holistic or integral view on change. Moreover, companies can take different paths and employ a variety of practices for effective WPI implementation.

References

- Achterbergh, J., & Vriens, D. (2010). *Organizations. Social systems conducting experiments*. (2nd ed.). Berlin: Springer.
- Bloom, N. & van Reenen, J. (2010). Why do management practices differ across firms and countries? *Journal of Economic Perspectives*, 24(1), 203-224.
- Boxall, P. (2012). High-performance work systems: what, why, how and for whom? *Asia Pacific Journal of Human Resources*, 50, 169-186.
- Boxall, P. & Macky, K. (2009). Research and theory on high-performance work systems: progressing the high-involvement stream. *Human Resource Management Journal*, 19, 3-23.
- Christis, J. H. P. (2010). Organization and job design: what is smart organizing? In H.A.M. van Lieshout, L. Polstra, J. H. P. Christis, and B. J. M. Emans (Eds.), *Management of labour. Societal and managerial perspectives* (pp. 39-71). Groningen: Hanzehogeschool Groningen University of Applied Sciences.
- Dhondt, S. & Oeij, P. R. A. (2014). Social innovation related to innovation in management studies. In J. Howaldt, A. Butzin, D. Domanski, & C. Kaletka (Eds.), *Theoretical approaches to social innovation – A critical literature review* (pp.122-150). Dortmund: SI-Drive [EU Seventh Framework Programme].
- Dhondt, S., Oeij, P. R. A., & Preenen, P. T. Y. (2015). Working in the digitalized world: The meaning of the link between advanced manufacturing and Workplace Innovation in the EU growth strategy. In C. M. Schlick (Ed.), *Arbeit in der digitalisierten Welt* (pp. 155-170). Frankfurt/New York: Campus Verlag.
- Dhondt, S., Pot, F. D., & Kraan, K. O. (2014). The importance of organizational level decision latitude for well-being and organizational commitment. *Team Performance Management*, 20(7/8), 307-327.
- Dhondt, S., Preenen, P. T. Y., Oeij, P. R. A., Corral, A., Isusi, I., Totterdill, P., & Karanika-Murray, M. (February 2014). *European Company Survey: Construction of the Workplace Innovation Index and Selection of Companies*. Leiden: TNO.
- Dhondt, S. & van Hootegem, G. (2015). Reshaping workplaces: Workplace innovation as designed by scientists and practitioners. *European Journal of Workplace Innovation*, 1(1), 17-25.
- Eeckelaert, L., Dhondt, S., Oeij, P. R. A., Pot, F., Nicolescu, G. I., Webster, J., & Elsler, D. (2012). *Review of workplace innovation and its relation with occupational safety and health: Literature review*. Bilbao: European Agency for Safety and Health at Work.
- Eurofound (2015), Kankaraš, M., & van Houten, G., *Third European Company Survey 2013 - Overview report: Workplace practices - Patterns, performance and well-being*, Publications Office of the European Union, Luxembourg.
- Howaldt, J., Oeij, P. R. A., Dhondt, S., & Fruytier, B. (2016). Workplace innovation and social innovation: an introduction. *World Review of Entrepreneurship, Management and Sustainable Development*, 12(1), 1-12.
- Kalmi, P. & Kauhanen, A. (2008). Workplace innovations and employee outcomes: evidence from Finland. *Industrial Relations: A Journal of Economy and Society*, 47(3), 430-459.
- Karanika-Murray, M. & Oeij, P.R.A. (2017). The role of work and organizational psychology for workplace innovation practice: From short-sightedness to eagle view. [Special issue]. *EWOP In-Practice*, 20-31.
- MacDuffie, J. P. (1997). The road to "root cause": Shop-floor problem-solving at three auto assembly plants. *Management Science*, 43(4), 479-502.

- Oeij, P. R. A., de Looze, M., ten Have, K., van Rhijn, G., & de Graaf, B. (2012). From Productivity Strategy to Business Case: Choosing a Cost-Effective Intervention for Workplace Innovations. *JCC: The Business and Economics Research Journal*, 5(2), 171-184.
- Oeij, P. R. A., Dhondt, S., & Korver, T. (2011). Social innovation, workplace innovation and social quality. *International Journal of Social Quality*, 1(2), 31-49.
- Oeij, P. R. A., de Vroome, E., Bolland, A., Gründemann, R., & van Teeffelen, L. (2014). Investing in workplace innovation pays off for SMEs: a regional innovation initiative from The Netherlands. *International Journal of Social Quality*, 4(2), 86-106.
- Oeij, P. R. A. & Vaas, F. (2016). Effect of workplace innovation on organizational performance and sickness absence. *World Review of Entrepreneurship, Management and Sustainable Development*, 12(1), 101-129.
- Oeij, P. R. A., Wiezer, N. M., Elo, A.-L., Nielsen, K., Vega, S., Wetzstein, A., & Żołnierczyk, D. (2006). Combating psychosocial risks in work organizations: Some European practices. In S. McIntyre & J. Houdmont (Eds.), *Occupational Health Psychology: European perspectives on research, education and practice* (Vol. 1, pp. 233-263). Maia, Portugal: ISMAI Publishing.
- Oeij, P. R. A., Žiauberytė-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. T. Y. (2015a). *Workplace Innovation in European companies*. Study commissioned by Eurofound. Luxembourg: Office for Official Publications of the European Communities.
- Oeij, P. R. A., Žiauberytė-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. T. Y. (2015b). *Workplace Innovation in European companies. Technical annex*. Dublin: Eurofound.
- Preenen, P. T. Y., Oeij, P. R. A., Dhondt, S., Kraan, K. O., & Jansen, E. (2016). Job autonomy matters for young companies' performance growth. *World Review of Entrepreneurship Management and Sustainable Development*, 12(1), 74-100.
- Preenen, P. T. Y., Vergeer, R. A., Kraan, K. O., & Dhondt, S. (2015). Labour productivity and innovation performance: The importance of internal labour flexibility practices. *Economic and Industrial Democracy*. Advance online publication, March 24 2015.
- Pot, F. D. (2011). Workplace innovation for better jobs and performance. *International Journal of Productivity and Performance Management*, 60(4), 404-415.
- Pot, F. D., Dhondt, S., & Oeij, P. R. A. (2012). Social innovation of work and employment. In H-W. Franz and J. Hochgerner (Eds.), *Challenge Social Innovation* (pp. 261-274). Berlin: Springer.
- Pot, F. D., Totterdill, P., & Dhondt, S. (2016). Workplace innovation: European policy and theoretical foundation. *World Review of Entrepreneurship, Management and Sustainable Development*, 12(1), 13-32.
- Ramstad, E. (2009). Promoting performance and the quality of working life simultaneously. *International Journal of Productivity and Performance Management*, 58(5), 423-436.
- de Sitter, L. U., den Hertog, J. F., & Dankbaar, B. (1997). From Complex Organizations with Simple Jobs to Simple Organizations with Complex Jobs. *Human Relations*, 50(6), 497-534.
- Totterdill, P. & Exton, R. (2014). Defining workplace innovation: The Fifth Element. *Strategic Direction*, 30(9), 12-16.

CASE STUDIES CAN SUPPORT DEFINITIONS OF WORKPLACE INNOVATION IN PRACTICE

Fietje Vaas
TNO, The Netherlands
Organization for Applied
Scientific Research
Fietje.vaas@tno.nl

Rita Žiauberytė-Jakštienė
TNO, The Netherlands
Organization for Applied
Scientific Research

Peter R. A. Oeij
TNO, The Netherlands
Organization for Applied
Scientific Research

About the authors

Fietje Vaas is a psychologist temporarily affiliated with TNO, The Netherlands Organization for Applied Scientific Research. Currently she is working on topics such as innovation of work organization and the management and employment relations of private and public organizations.

Rita Žiauberytė-Jakštienė is a junior researcher at TNO, The Netherlands Organization for Applied Scientific Research. Formerly she has been a recruitment consultant in personnel selection agencies in Lithuania. Her research interests include social innovation, workplace innovation, and goal-setting topics.

Peter R. A. Oeij is a senior researcher/consultant at TNO, The Netherlands Organization for Applied Scientific Research (Leiden, The Netherlands). The main topics of his work are innovation management, workplace innovation, social innovation, productivity, flexibility, working smarter and team work.

Abstract

Many practitioners find it problematic to understand and describe workplace innovation (WPI). Whereas there are well-known definitions of WPI, these remain highly abstract. We argue that, for practitioners, case examples of WPI best practices can be a valuable addition to these definitions. In this respect, based on our practical experience with WPI and the cases that resulted from the Eurofound study (Eurofound, 2015), we propose the following criteria for a case to be a good example for practical purposes. First, the company that serves as a case should have implemented good workplace innovation practices that have resulted in or theoretically promise to result in positive outcomes for the organization and for the quality of work. Second, the case description has to provide actionable information about the WPI practices. Third, the narrative of the case has to be inspiring and provide possibilities for stakeholders to identify with it. We present a number of the Eurofound cases that are informative and inspiring for practitioners while also presenting actionable information.

Definitions of workplace innovation are not very actionable

Practitioners interested in implementing workplace innovation (WPI) practices are in dire need of clear definitions of the concept. A recent study on WPI and its indicators conducted by the European Commission (2014), in the frame of the European Innovation Scoreboard (EIS) 2013-2014 project, identified 8 different definitions of WPI (p.13 and 14). Whereas they differ to a certain extent, all of these definitions conceptualize WPI as being a field or fields of action, a participative process and a win-win outcome for the organization and employees. Moreover, some provide specific examples of WPI practices, such as: participative job design, self-organised teams and continuous improvement.

In the table below, we provide a selection of four of these definitions that showcase the elements mentioned above.

Table 1. Workplace Innovation Definitions

Source	Definition
European Commission (2014)	<i>"Those innovations aim at improving staff motivation and working conditions, thereby enhancing labour productivity, organizational performance, innovation capability, reactivity to market changes and consequently business competitiveness." (p. 13)</i>
Dortmund Brussels position paper on WPI (2012)	<i>"Workplace Innovation is defined as a social process which shapes work organization and working life, combining their human, organizational and technological dimensions. Examples include participative job design, self-organized teams, continuous improvement, high involvement innovation and employee involvement in corporate decision making. Such interventions are highly participatory, integrating the knowledge, experience and creativity of management and employees at all levels of the organization in a process of cocreation and co-design. This simultaneously results in improved organizational performance and enhanced quality of working life....." (p. 2)</i>
Eurofound (2015)	<i>"High performance work practices or innovations in work organization are defined as deliberate changes that can affect how employees undertake their job and/or their broader experience of work and refer to any element of people management" (p. 11)</i>
Pot, Dhondt, and Oeij (2012)	<i>"Workplace innovations are strategically induced and participatory adopted changes in an organization's practice of managing, organizing and deploying human and non-human resources that lead to simultaneously improved organizational performance and improved quality of working life." (p. 262).</i>

Whereas these definitions are clear, most remain relatively abstract. This can be helpful given that implementing WPI successfully is highly dependent on the situation, the context and the history of any given organization. In this sense, the definition should leave room for local interpretation since the concept of WPI itself implies that management should not impose a blueprint of an action plan upon those involved. Employee participation in the design of WPI measures and in the implementation process is a necessary condition for real WPI (Oeij et al., 2015a; Pot, 2011; Ramstad, 2009; Totterdill & Exton, 2014).

However, while it is inevitable from a theoretical point of view for definitions to be abstract, from a practical standpoint, more actionable (Argyris, 1996) information would be helpful. It is possible that this lack of actionable information on WPI could explain why relatively few organizations have implemented WPI practices, although they promise win-win outcomes for all involved. Indeed, we have often encountered the following questions cropping up in companies preparing to implement WPI: *"What are we talking about? What changes in job design, work organization and management are we supposed to implement? Can't you give us examples of good WPI practices, so that we can understand?"*

We conclude that, next to clear theoretical definitions of WPI, practitioners could benefit from examples of cases that embody good WPI practice. Therefore, the study, documentation and dissemination of cases representing best practices are very important for practitioners.¹ Moreover, for researchers, it is important to know how to produce and report case studies that can lead to learning in practical situations.

In this article, we focus on the following question: what information should a case study provide to help practitioners, managers and employees in their search for concrete WPI interventions? In other words: what makes a WPI case a good example for practical purposes?

¹ There are two knowledge banks where many WPI-cases can be found: www.workplaceinnovation.org and EUWIN's knowledge bank: <http://portal.ukwon.eu/euwin-knowledge-bank-menu-new>

First, based on our practical experience, we will reflect on the criteria that would render a case a good example of WPI. Second, we will use the case studies analysed and described in mini cases² in the Eurofound project: *Workplace innovation in European companies* (Oeij et al., 2015a; 2015b) to more thoroughly explain these criteria. Note that we are not developing a case study methodology. We simply want to share our practical experience with WPI and provide a simple framework that can be used by practitioners discussing an intervention with stakeholders and by researchers when reporting a case study.

What makes a case a good example of WPI practice?

First, a case, that is a good example of WPI practice, should exhibit real, substantial WPI practices. Whereas this is a common-sense argument that might even sound trivial, we deem it important, given that, in some cases, lip service has been paid to WPI without any structural changes (see e.g. Ramstad, 2009). In other words, the case should show that workplace innovation practices have been implemented that have led to (or theoretically promise to lead to) improved company performance and improved quality of work. However, determining whether a WPI case does indeed showcase substantial WPI practices is tricky, given that WPI definitions are neither extremely detailed nor actionable in themselves. This issue also arose in the Eurofound study and was solved by asking WPI experts to assess the cases based on their theoretical knowledge and experience with WPI interventions, and to subsequently, categorise them as exhibiting high, medium or less substantial WPI practices (see the paragraph about the Eurofound study below).

Second, for a case to be a good example of WPI practice, a thorough description of the case needs to be available. Without a thorough, detailed description, the value added for practitioners in other organizations is significantly diminished. In this respect, a case description should outline the specific practices/measures/ actions/interventions initially planned to be implemented and discuss the ones that have actually been implemented. Preferably, the case description should be broken down into clear steps that could be replicated in other organizations, although they might have to be adapted to fit these other contexts. In other words, the information presented should be *actionable*. As Argyris (1996) suggested, attention should be paid to informing the reader on how to create – in this case – workplace innovation. That is, it should inform people in other organizational contexts what has been changed in the structure (job design, work organization, hierarchical structure) and the culture (empowerment, management, trust, HR practices) of the organization to achieve WPI.

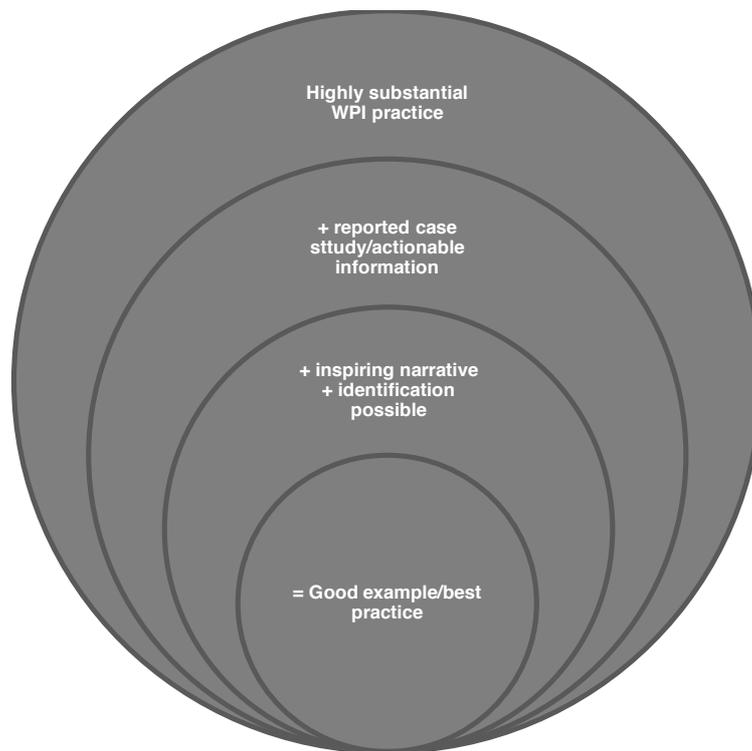
Third, the case has to be inspiring. This means that the description really gets across the story of the change in this organization. Profound storytelling and high-quality narratives have the capacity to reveal important, real-life facts of a case (Gabriel, 2013). Preferably, the description is a narrative that gets the reader to be enthusiastic about the changes in jobs and roles, organizational structure, corporate climate, behaviour, labour relations and trust, etc. It shows the reader that the bundle of WPI practices that is, or was, implemented promise to result or have resulted in the improvement of the company's performance, sustainability and innovative capabilities as well as in providing challenging jobs and good work prospects for all employees.

One strong mechanism to provoke inspiration is identification. Positive collective narratives that people identify with can influence behaviour, cognition and emotions in a favourable way (Rappaport, 1995). Therefore, the narrative should include the possibility for various groups of

² The Eurofound website presents all the 51 mini cases: <http://www.eurofound.europa.eu/surveys/2013/european-company-survey-2013-00>

readers to identify with, in the sense that they can recognize the kind of work, their position (manager, employee, employee representative, trade-unionist, user), the sector, the size of the organization and/or the cultural context. For instance, for employees, it is important that the narrative showcases employees in the case-organization who speak positively about the change process and/or the (predicted) results. Another factor that can lead to identification or, for that matter, to non-identification, is the cultural context of the case as well as national or regional labour relations. For instance, the results of a Danish case could seem so unattainable to Greek managers and employees that the case turns out to be scary instead of inspiring. The same may count for cases from different sectors. Employees of a chemical factory might think (rightly or wrongly) when hearing about practices successfully implemented in a school that: *'this will not work for us'*. Therefore, it is important to embed a case in its cultural or sector-related context, so that a practitioner can decide whether he or she can use it in a specific organization.

Figure 1. The criteria for a case study to be a good example of WPI practice



The figure above summarises the criteria that preferably should be present in a case description of WPI practices. In the next paragraphs, we will elaborate on these criteria and show how they can be applied to existing case studies. To this end, we will use the case studies described and analysed in the Eurofound study³. We will introduce that study first.

The Eurofound study: A source for WPI cases

The Eurofound study was commissioned by the European Foundation for the improvement of Living and Working Conditions (Eurofound) (Oeij et al., 2015a; 2015b). The purpose of the study was to investigate why and how companies in the European Union apply WPI. The authors of this article were involved in this study as part of a larger international research team. During 2014 - 2015, interviews were held in 51 selected companies covering ten EU member

³ Also see the website: <http://www.eurofound.europa.eu/surveys/2013/european-company-survey-2013-00>

states. These companies represent the 5% best scoring companies out of 30.000 companies on a workplace innovation-index in the European Company survey 2013 (Dhondt et al., 2014). Interviews were held with managers, employees and employee representatives and mini-case study reports were written.

As part of the Eurofound study, each case was assessed by three experts⁴. They based their assessment on theoretical notions about the types of interventions that may lead to the desired outcomes of improving the quality of working life and organizational performance. They assessed whether in each case, structural and/or cultural WPI measures, supported by HR measures were indeed implemented. All 51 cases were subsequently assigned a score from 0 to 10 based on a number of criteria representing structural (0- 4 points), cultural (0-4 points), bundled or HR supportive interventions (0-2 points). Based on the final-scores, the cases were classified as being exemplary of highly (16), medium (21) or less (14) substantial WPI practices (Oeij et al., 2015b).

Cases that distinguish between substantial and less substantial WPI practices

For a better understanding of what highly substantial and less substantial WPI practices mean, below, we will provide a description of a case with a high score and one with a low score (see Table 2). We chose to present the Danish manufacturing case because it scored the highest (9,67 out of 10) out of all 51 cases. It received such a high score because it embodies a promising combination of structural and cultural bundles of measures integrated by an explicit vision on WPI. Moreover, the case study exhibits positive outcomes for both the organization and the workers. The Polish school was selected as an example of a case with the lowest score on WPI (2,33 out of 10). Although good practices were implemented, they were not considered to be Workplace Innovations, since they were merely IT-related measures.

In the rest of this article we will exclusively focus on the 16 cases that were qualified by the experts as having implemented highly substantial WPI practices, given that that is a core element of a case to be a good example of WPI practice. To this end, we will select cases that best embody the remaining criteria.

⁴ The three experts discussed their individual ratings and the final score was reached via consensus.

Table 2. The cases with the highest and the lowest WPI scores

The case with the highest WPI score

DK-MANU-FABRIC-S⁵ [Denmark-manufacturing-making fabrics] is an international company that produces fabrics for different customer groups (retail, hotels, furniture manufacturers etc.). The headquarter of the company is in Denmark and it counts one hundred and forty-five employees there who support the manufacturing process in different European countries.

The company operates from a vision that workplace innovation is *“a way to ensure renewal and the ability to offer a service that is so good that customers will chose this company over others”* (Denmark_Minicase_Kvadrat, p 1/3). This company has implemented the following WPI practices: 1. customer segment teams, 2. autonomous and semi-autonomous team work, 3. a flat hierarchy, (*structural improvements according to the experts*) 4. room for proposals to improve processes, products or services, 5. participative formulating of performance goals and targets, 6. innovation meetings for product development (*cultural or mixed improvements, according to the experts*).

The customer segment teams are multi-disciplinary teams that serve segments of clients, such as retail or hospitals. Those employees, who have direct or indirect contact with a group of customers, work together in a team. In supporting departments, such as the Order Expedition, employees work in autonomous or semi-autonomous teams. They distribute their work themselves at a daily morning meeting. There are only three hierarchical layers: the board of managers, middle managers and employees. Every employee can make a proposal directly to the management or colleagues and, if possible, these ideas are directly implemented.

Performance goals and scores are formulated together with the employees, which leads to mutual trust building. The department for product development organises continuous innovation meetings, where creative thinking is promoted. According to the manager and the employees that were interviewed, these interventions resulted in very positive outcomes. The manager stressed that an innovative culture, knowledge sharing and autonomous, interdisciplinary teams give the company competitive advantage. Employees described working in multi-disciplinary teams as highly motivating and said they feel in control over the incremental innovation process that enables them to bring in their ideas.

The case with the lowest WPI score

This school PL-EDUC-INFO-SCHOOL-S [Poland-education-informatics-school organization] was established in 1996 in Poland. The school developed and implemented two IT systems. The first integrates information processing and communication procedures and facilitates communication among the institution, students and employees. The second is an access control system with integrated monitoring. Administrative staff has been trained to work with these systems. Many of the functionalities in these systems were suggested by employees.

The implementation of the two systems has brought benefits for employees, students and for the school: transparency has improved and there is a large reduction of administrative burden. Students can have direct and remote contact with the school and access to administrative processes and educational resources. The image of the school improved.

Cases that distinguish between actionable and less actionable information for WPI

In order to expand on the criterion of providing actionable information for WPI, we will present a case that provides information that is actionable and one that could do better in that respect (see Table 3). As an example of a case that presents highly actionable information, we chose the case of a Danish school. Firstly, the narrative describes the stakeholders involved and the actions that have been taken in terms of co-opting them: joint training sessions, setting common goals, etc. Secondly, the organizational principle for the design of autonomous teams is made explicit, namely, to create autonomous teams, each entirely responsible for educating one group of students. Of course, this is specific for a school, but on a higher level of abstraction, one can state that there was a change from a disciplinary- or functional-oriented to a client-oriented work organization. This principle can be transferred to any other work situation; therefore, it can be called actionable.

As a contrast, we briefly present the case of a Lithuanian manufacturer that has implemented highly substantial WPI practices, but could have done better in providing actionable information about them. From the description, it is not entirely clear how the work organization has been reformed to allow the teams to function as relatively independent self-managing teams. In addition, a more thorough explanation regarding the implemented procedures and the manner

⁵ The indicators S and L stand for Small = 50 – 250 and Large = >250 employees.

in which flex-time helps self-management would have improved the actionability of this information.

Table 3. Two cases showing more or less actionable information about WPI practices

A case study with actionable information

The Danish municipal primary and lower secondary school [DK-EDUC-SCHOOL-S] has 90 employees and 700 students. Following a merger between different schools, the implementation of several educational reforms, a conflict with the unions about the payment of hours for preparation, and given the lowest influx of pupils in the municipality, it was deemed important to create a more exciting and innovative school. Workplace innovation was expected to help. To this end, the following WPI practices were implemented: 1. partnerships with stakeholders were established, 2. autonomous and interdisciplinary teams were introduced, 3. discussion forums were established.

At the start of the change project, partnerships between management, employees and (union) representatives were established to support dialogue, to enhance trust in management, to formulate common goals, and to ensure that all stakeholders were involved as partners in the change process. The creation of autonomous teams responsible for the education of an entire group of students was a structural and radical intervention. Teachers who used to be responsible only for teaching a specific subject were now made responsible for the education of a group of pupils, together with colleagues from other disciplines. Changes were discussed in a number of forums with both direct and indirect (representatives from the union) employee participation.

Many teachers appreciate the changes, although some still struggle with the fact that they cannot just teach 'their own' subject. All stakeholders have learned that, in the beginning, autonomous teams might need a framework that clarifies and delimits their areas of responsibility for action and decisions. Union representatives appreciate that it is easier for employees to get a fair share of the exciting subjects; hence, jobs have become more challenging for all employees. In the period these practices were implemented the school has also increased the student influx. The school expects to become more sustainable given that employee competences and ideas are utilized better in coping with changes.

A case study that could do better in providing actionable information

LT-MANU-RESPIR-L [Lithuania-Manufacturing-making respiratory products] is Europe's leading designer, manufacturer and supplier of a wide range of medical devices for respiratory support. The factory in Lithuania is the main production and scientific research site, part of an international group headquartered in the UK. The company employs over 1700 people in Lithuania.

The company has implemented the following WPI practices: 1. self-managing teams, 2. flexible working times, 3. (electronic) post-boxes to submit ideas, 4. several concrete measures to improve organizational and personal learning and development.

Regarding the self-managing teams the mini case states that '*Now, the teams at the production lines are more responsible for planning (especially production time management), quality and other aspects of the production process.*' (Lithuania_Minicase_Intersurgical, p 1/3). The reader can imagine that there is some impact on the way tasks and responsibilities in the primary process are divided, but it is not clear how the new work organization is designed.

The case also states that working times can be arranged in a flexible way, so that employees have the opportunity to balance their work and private duties. However, the narrative does not clarify what "flexible ways" means, therefore, the information is not actionable.

Regarding the implemented idea-management practices, the case states that there is a review and a feasibility assessment of the submitted ideas. In addition, to develop the promising ideas '*responsible people are assigned to organise the implementation process*' (Ibidem p 2/3). More information regarding the participation of the involved employees would have improved the actionability of this information.

Regarding training and development opportunities, collective training sessions take place each year. Individual training plans – supported by an electronic Learning Management Information System – are drawn up and implemented. Internal career opportunities are offered and supported, and much is done to stimulate learning that helps to adopt new technology. The learning and development practices are very well described and, therefore, can be transferred.

Inspiring WPI cases

For a case to serve as good example the case study should not only provide actionable information, but it should also be inspiring for various groups who want to learn from it.

Table 4. Three WPI cases that inspire

A case that inspires by its narrative

The German company DE-AGRO-PETFOOD-S [Germany-Agriculture-food for pets] is part of a holding and produces pet food. A few years ago, the company had to go through a complete upheaval in order to stay competitive. The whole production process was modernised by introducing machines instead of craft-based production. The new production lines required new employee competencies. Employees were educated and trained to take over every task in the manufacturing process. Moreover, some unskilled workers were trained to do production jobs – every employee had the chance to upskill and take over a skilled worker's task. Thus, former unskilled workers were trained in robotics and are now machine operators. At the request of employee representatives and the works council, every employee was given the opportunity to develop and to implement a training and career plan, which led to more qualified employees taking over more demanding jobs.

In addition, workers at the production site have leeway to organise their work as long as they meet the production deadlines given by the customers. For example, they can decide themselves to take a break, to have a meeting, or to watch a football championship game as long as they fulfil the production targets.

All these measures helped the company stay competitive. Employees like the production flexibility and the chance to improve their skills and competences as well as their new jobs.

A case many different stakeholders can identify with

IE-MANU-PHARMA-S [Ireland-Manufacturing-Pharmaceutic] is a leading manufacturer of pharmacy products mainly for the treatment of angina pectoris and related conditions. The site in Ireland was bought by a Belgian company in 2007, and there are 124 people working here.

Since 2012 the emphasis has been on integrating this plant within the larger group. This was supported by the arrival of the new HR Director who focused on strengthening employee engagement, collaboration amongst employees, creating a partnership with the principal trade union and introducing a culture of continuous improvement.

The WPI practices that were implemented are: 1. systematic follow up of the engagement survey, 2. effective management culture, 3. workplace partnership and 4. embedding quality and compliance.

Of these practices, the workplace partnership is the one that illustrates the important role employees and union representatives have played in the change process and the one that employees and unions can identify with. In this respect, the mini case states: *"During the period of restructuring and its aftermath issues were brought formally to management by union representatives on a regular basis. In time a sense of mutual trust and understanding developed [...] Management is increasingly proactive, finding opportunities to discuss emerging issues with the union official at an early stage."* (Minicase-IE-UCB, p. 2/3).

The HR manager ascribes results such as time efficiency, productivity, improved communication, improved decision making to this partnership and to the proactive discussion with union representatives about emerging issues, thus avoiding conflicts and promoting engagement at all levels.

Internal career opportunities are offered and supported, and much is done to stimulate learning that helps to adopt new technology. The learning and development practices are very well described and, therefore, can be transferred.

A case that can provide identification via region and sector

This British company UK-MANU-BATH-L [United Kingdom-Manufacturing-Sanitary products] is a good example for both the North West European region and the manufacturing sector. The company was founded in 1977 in Birmingham (UK) as a family-owned business. It is now a leading supplier of showers, taps and bathrooms in the UK with exports to Europe and Russia.

Continuous improvement (CI or Kaizen) is at the heart of the company's strategy. The company's strategy is very much directed at operational excellence and innovation to meet customer's needs. This is practised by engaging all employees and stimulating them to participate in the continuous improvement. The Chief Executive points out that *'all employees have two duties: to develop themselves and to change and develop their roles'* (Minicase-UK-Bristan, p. 1/3). Teams are empowered to address issues from customers directly, working within boundaries set to provide room for entrepreneurial behaviour. Moreover, everyone in the warehouse is involved in the integration of technology for 'Just in time' with their team working practices.

The company does the best it can to use the talents and ideas of all employees in cross-functional project teams, in self-managing teams, in an Employee Forum and 4 to 6 Kaizen events per year.

In Table 4 above we present three cases that inspire by their narrative. We chose the narrative about the German pet food company because it gets across the positive feeling, or 'the buzz' (Totterdill & Exton, 2014, p. 16), deriving from a complete renewal of old fashioned production processes and shows that employees and managers are excited about the future and progress.

The Irish pharmaceutical company was selected because it provides us with an example that many stakeholders can identify with, especially employees and union representatives. All the workplace innovation practices are embedded in a workplace partnership between management, employees and trade union representatives.

In the case of the British bathroom equipment producer many elements of Lean production theory are recognizable, especially the notion of continuous improvement (KAIZEN). Practices from this management theory are popular in Western European manufacturing. However, Lean Production is applied in very different ways. Oftentimes it is merely a top-down measure to realize operational excellence and employee involvement only goes as far as needed to reach that goal. In this case, however, elements of Lean Production are used to structurally and culturally empower and enable employees to participate in organizational change and renewal in order to improve the quality of working life and organizational performance, that is, WPI. Therefore, this highly substantial case can be a very inspiring example for many Western European manufacturing companies.

Cases that are good examples of WPI

As we have argued before, cases that are good examples of WPI, have implemented highly substantial WPI practices, provide actionable information and are inspiring. Out of the 16 Eurofound cases that were considered to have implemented highly substantial WPI practices, we have selected three cases that fulfil all of these criteria and that can be used as good examples in a discussion about how to realize WPI in practice (see Table 5). Specifically, we chose to focus on these three because of the following reasons.

The Spanish paper product manufacturer implemented a wide range of structural and cultural measures, supported by HR practices. Most practices in this case are described in an actionable way. The case is inspiring since the story of this company makes the reader believe that it will succeed in surviving a very complicated and threatening market by mobilizing and unifying the competences, ideas and engagement of many stakeholders in the region. Moreover, we deem this a case with which different stakeholders can identify. In short, the case shows that the whole change process is carefully orchestrated by taking into account the interests of a diverse group of stakeholders.

The case of the Danish museum was seen as an interesting bundle of structural, cultural and 'traditional' HR practices. The information about the WPI practices is actionable as it shows how seeking for a common goal and trusting social dialogue can lead to WPI. The reader can learn to trust that teams – supported by training – can find the best way to organise their work to contribute to a shared goal. Given that the museum did this and succeeded can be inspiring for others and it can lead to identification for managers, employees and union representatives.

The case of the Dutch publishing company provides actionable information. It describes how salesmen's and journalists' jobs were enlarged and enriched in a more client- or theme-oriented organizational structure. This case inspires because one feels that local management and employees have fought hard for the survival of an independent regional newspaper within the framework of being owned by a foreign company with different business ideas. Their success can be attributed to giving employees more leeway and more autonomy. People working in companies that need to search for new earning opportunities and a (partly) new business model will certainly be able to identify with this case. And many readers will recognize and identify with the employees of the media group struggling with foreign investment companies executing their own agenda.

Table 5. Three cases that are good examples of WPI practices

ES-MANU-PAPER-S [Spain-manufacturing-paper products]

This company is a paper product producer with a total workforce of about 200 employees. The majority are men working on production-related tasks. This company has implemented a number of WPI practices over the last few years. 1. The frame for these practices is provided by good social dialogue between management, employees and three active regional trade unions. Management provides transparent information and consults employees regarding important decisions early. 2. The common goals that facilitate this dialogue are a shared concern about the sustainability of the company (an important employer in the region) and the quality of work. 3. In terms of HR measures, there is a collective agreement that guarantees high salaries, a 35 working-hour and no overtime working is allowed. 4. The production is done in self-steering teams “that enjoy a certain degree of autonomy in the way their human resources are organized” (ES Minicase, Company X, p2/2). 5. The multi-skilling of the workers is stimulated by a “sliding work organization system” (ibidem, p. 2/2). Employees are encouraged to take up activities that are part of a job higher in rank and in different production lines. 6. Employee representatives have suggested using *biological calendars* to schedule production in a way that allows satisfying the needs for rest and sleep. 7. Employee representatives participate in the process of internal reflection on new business opportunities. 8. In the sphere of human resources management, the company is paying much attention to health and safety risk prevention, by providing information and training courses.

The stakeholders show enthusiasm about the (expected) results. According to management, the WPI practices have led to a good employment climate, skilled, well-motivated and committed staff, and a good use of the innovative ideas of the employees. This in turn, has resulted in improved economic and financial company performance. The employees think this company is a good employer and that the employment conditions are excellent. The unions especially appreciate the actions that contribute to the net creation of employment in the region, such as the financial results and the 35 hour-working week with no overtime.

DK-ART-MUSEUM-S [Denmark-Art & Leisure sector-Museum]

This organization is a museum with 140 employees divided over nine worksites in a larger Danish municipality. During the last years, the pressure to compete with other attractions (cinemas, amusement parks) has increased, and the museum realises the importance of employee involvement to create appealing guest experiences. This case study focussed on WPI practices that concerned two professional groups: hosts and craftsmen in the open-air museum. The implemented WPI practices were: 1. autonomous team work for the craftsmen, 2. a good hosting project, and 3. partnership with unions.

Funen Village is a living workplace, where guests watch craftsmen work on the antique buildings. Previously, the craftsmen’s work centred around maintenance with eighty percent of their working day being spent on following a mandated plan. Now, the teams autonomously organise the task sequence, the planning, work mode, duty roster and budget. They have the opportunity to plan their work in such a way that they can perform jobs that are interesting for the guests to see, during business hours. They also have more time to talk with visitors about their craft.

The museum hosts sell tickets and make sure that the exhibitions function. The hosting project was based on experiences from other types of businesses (e.g., Legoland, the famous Danish theme park) on how to create an exciting guest experience. The museum hosts were trained and, subsequently, formulated new work codes on, for instance, how to greet the guests and how to inspire the guests to explore the exhibitions. They received a book about good hosting experiences providing many tools which changed their jobs. The partnership took shape in a joint committee with union representatives, Occupational Health & Safety representatives and management representatives (based on a regional framework).

Management, representatives and employees agree that the new practices provide greater job satisfaction for employees while simultaneously enabling the company to provide better service. The focus, in general, has shifted from a narrow focus on specific disciplines to a customer focus.

NL-INFO-NEWS-L [Netherlands-Information-Newspaper]

This company is the publisher of a regional newspaper in the Netherlands with about 300 employees. For more than a decade, the company’s existence is being threatened by diminishing earnings from selling subscriptions and advertisements and by the development of new information technologies. In addition, there was a stream of changing international owners and management with different strategies.

By engaging in coalitions supported or initiated by the Works Council and employees, the local management succeeded in implementing WPI practices with the aim of mobilizing employee talents and finding new earning models. These practices were: 1. upskilling and redesigning the jobs of the advertising salespeople into account managers, 2. restructuring the editorial department and redesigning the journalists’ jobs, 3. dialogue between employees and CEO regarding ideas for business improvement, 4. four cross-functional teams that each develop a new idea, 5. cooperation with external partners, such as a university for applied science and a broadcasting company.

The role and the targets of the salespeople have changed completely: instead of selling advertisements by phone, they now have to build a relationship with the clients and to consult them on how to best reach their intended customers. The editorial work used to be organized along regions in the province, producing daily news messages. Given that nowadays this information is more easily distributed by social media, now the value added of a news outlet is to produce more background stories and in-depth studies. Therefore, most of the journalists were placed in the Research department and were organized into specific Theme groups (e.g., Health, Sports, Education). This new way of organizing in multifunctional theme groups provides opportunities for journalists to cooperate with account managers in writing targeted articles.

Management-employee dialogue resulting in cross-functional teams developing promising ideas are familiar practices in other companies as well. However, what is striking here is the thoughtful way in which they organised this. For instance, team members work full-time in these cross-functional teams for a certain period of time and are thoroughly trained and coached to do the job.

The results for the company seem positive. The newspaper is still on the market and is investing in new earning opportunities. The employees have more challenging jobs, have better career prospects and the feeling of being heard and taken seriously.

Table 6 below shows that these three cases meet all the criteria and can be used as good examples.

Table 6. Summarizing the three cases that are good examples of WPI

	ES-MANU-PAPER-S	DK-ART-MUSEUM-S	NL-INFO-NEWS-L
highly substantial case	Yes, score: 7.5*	Yes, score: 7.7	Yes, score: 8
+ reported case study/actionable information	Mini-case Information could be more actionable	Mini-case, including actionable information about redesign of 2 jobs and team working	Mini-case, including actionable information about redesign of jobs and organizational structure, employee groups for business development
+ inspiring + possibilities for identification	Yes, by mobilizing many stakeholders in the region to retain employment	Yes, the image of the museum modernized; Managers and unions can identify because of partnership model	Yes, for companies and stakeholders that need to mobilize all talents to develop new business opportunities. Employee representatives can be inspired by the role of the works council here.

Note: * - scores given by the Eurofound experts.

To conclude

Many practitioners find it problematic to define workplace innovation. The well-known definitions hardly provide any actionable information. In this contribution, we have argued that, for practitioners, examples of cases describing best WPI practices can provide value added to purely theoretical definitions of WPI. Therefore, we tried to answer the question: *What makes a case a good example of WPI practice?*

In this article, we proposed the following criteria. First, the company that serves as a case should have implemented good, highly substantial WPI practices in a participative way. Those practices must have led to or promise to lead to improved company performance and improved quality of work for the employees involved. Second, the case description needs to provide actionable information about the WPI practices implemented. That is, it provides information on what has been changed in the structure, the culture and in supporting HR practices and how that has been done. Third, the case has to be inspiring; that means that the narrative really gets across the story of the change in the organizational structure, culture, climate and behaviour of management and employees, as well as, their enthusiasm about the (expected) results. An inspiring case also provides the opportunity for diverse groups in other organizations to identify with it. That is, others can recognize and identify with the kind of work, the sector and/or the cultural context.

To illustrate these criteria, we used the cases from the recent Eurofound study. First, we focused on cases that were identified by experts in the Eurofound study as having implemented highly substantial WPI practices as well as less substantial WPI practices. Subsequently, we focused our attention on the sample of 16 highly substantial cases in the Eurofound study, given that this is a sine-qua-non for a case to be able to provide any useful information on WPI best practices. Within these 16 mini-cases we found and described some that provided actionable information and some that could do better on that criterion. Moreover, we found cases that are inspiring because the narrative not only presents what has been changed in the company and how it has been done, but also gets across ‘the buzz’ generated. Finally, we

described three cases that embody all three criteria and can be used by practitioners as examples of best practices for WPI.

Some take-away messages for practitioners are the following: A case that is a good example of WPI practice can help clarify what managers and employees might change in the structure and culture of an organization and how to do that. Therefore, practitioners should consider finding cases that have been rated by experts as having implemented effective WPI practices. Moreover, these cases should have an inspiring narrative that describes the practices and the change process in an actionable way. Practitioners might also want to consider in how far people in their organization would be able to identify with that case. Depending on the situation, that might be the sector, the region or a specific approach, such as a dialogue.

Surely, this is not a fool-proof recipe and we advise practitioners to be flexible in their approach. Surprisingly, a case from a service sector might inspire employees from a manufacturing company. Practitioners should also keep in mind that a case description is not a handbook for how to implement workplace innovation. The best-practices-approach has its own general limitations, and, practitioners should be prepared to be flexible and adapt any best practices to their own context. In this sense, a good case example can be a source of information for finding practical solutions for specific problems in an organization as well as provide inspiration for discovering new perspectives.

References

- Argyris, C. (1996). Actionable knowledge: Design causality in the service of consequential theory. *The Journal of Applied Behavioral Science*, 32(4), 390-406.
- Dhondt, S., Preenen, P., Oeij, P., Corral, A., Isusi, I., Totterdill, P., & Karanika-Murray, M. (2014). *European Company Survey: Construction of the Workplace Innovation Index and Selection of Companies*. Leiden: TNO.
- Dortmund/Brussels Position Paper on Workplace Innovation, 26 June 2012. Retrieved from: <http://www.kennisbanksocialeinnovatie.nl/nl/kennis/kennisbank/workplace-innovation-as-social-innovation/1009/download/dortmund-brussels-position-paper-12th-june-2012/1980>
- Gabriel, Y. (2013). Researchers as storytellers: Storytelling in organizational research. In M. Gotti & C. S. Guinda (Eds.). *Narratives in Academic and Professional Genres* (pp. 105-122). Bern: Peter Lang.
- Eurofound (2015). Kankaraš, M., & van Houten, G., *Third European Company Survey 2013 - Overview report: Workplace practices - Patterns, performance and well-being*, Publications Office of the European Union, Luxembourg.
- European Commission (2014). Kesselring, A., Blasy, C., & Scoppetta, A. *Workplace Innovation: Concepts and Indicators*. Brussels: European Commission, DG for Enterprise and Industry.
- Oeij, P., Žiauberytė-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. (2015a). *Third European Company Survey: Workplace innovation in European companies*. Study commissioned by Eurofound. Luxemburg: Publication Office of the European Union.
- Oeij, P., Žiauberytė-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. (2015b). *Workplace Innovation in European companies. Technical annex*. Dublin: Eurofound.
- Pot, F. D. (2011). *Workplace innovation for better jobs and performance*. *International Journal of Productivity and Performance Management*, 64(4) 404-415.
- Pot, F. D., Dhondt, S., & Oeij, P. R. A. (2012), Social innovation of work and employment. In H-W. Franz and J. Hochgerner (Eds.), *Challenge Social Innovation* (pp. 261-274). Berlin: Springer.
- Ramstad, E. (2009). Promoting performance and the quality of working life simultaneously. *International Journal of Productivity and Performance Management*, 58(5), 423-436.
- Rappaport, J. (1995). Empowerment meets narrative: Listening to stories and creating settings. *American Journal of Community Psychology*, 23(5), 795-807.
- Totterdill, P., & Exton, R. (2014). Defining workplace innovation: The Fifth Element. *Strategic Direction*, Vol. 30(9), 12-16.

CREATING THE BOTTOM-UP ORGANIZATION FROM THE TOP: LEADERS AS ENABLERS OF WORKPLACE INNOVATION

Peter Totterdill

Workplace Innovation Limited, UK
peter.totterdill@ukwon.net

Rosemary Exton

Workplace Innovation Limited, UK

About the authors

Peter Totterdill is a Director of Workplace Innovation Limited, an international not-for-profit company committed to stimulating and resourcing better ways of working. He is also a Visiting Professor at two universities.

Rosemary Exton is also a Director of Workplace Innovation Limited. Her principal field of expertise is in employee empowerment and management-union partnership. She brings practical experience as a manager, clinician and trade union representative.

Abstract

Workplace innovation enhances economic performance and quality of working life simultaneously. Yet successive surveys show that its adoption rate is slow. In many European countries, there is little infrastructure to support the adoption of workplace innovation, often despite a long history of poor productivity and skills utilisation. Enterprise leadership therefore plays a critical role in determining whether or not workplace innovation practices are adopted. Three selected case studies illustrate journeys towards workplace innovation from different starting points. They demonstrate how a consistent approach to shared and distributed leadership can stimulate employee empowerment and initiative from the bottom up, as well as the cumulative impact of small incremental changes.

Introduction

The evidence is clear. Workplace innovation enhances both economic performance and quality of working life, presenting a compelling case for change in organizations characterised by traditional cultures and ways of working (Pot, Totterdill, & Dhondt, 2016; Ramstad, 2009; Totterdill, 2015).

There is a growing number of case studies of companies such as Innocent and Red Gate Software created by a new generation of entrepreneurs who attribute their success to empowering and non-hierarchical workplace practices and who are not burdened with conventional management attitudes and organizational practices. Such cases, inspiring though they can be, should not lead us to underestimate the challenge faced by those seeking to drive change in more traditional and longer established organizations, often in the face of resistance or inertia. A systemic and transformational approach is required if established practices are to be uprooted and replaced with active workforce involvement and participation (Totterdill, 2015).

The term “workplace innovation” is now widely used to describe such an approach. Based on their meta-analysis of 120 case studies across ten European countries, Totterdill and colleagues (2002) argue that it takes diverse forms but is always characterised by the adoption of workplace practices that enable employees at every level of the organization to use and

develop their full range of skills, knowledge, experience and creativity in their day-to-day work (Totterdill, Dhondt, & Milsome, 2002). Workplace innovation stresses the importance of individual job autonomy, self-managed teams, permeable organizational walls and ceilings, systems and procedures based on trust and empowerment, systematic opportunities for employee-led improvement and innovation, shared and distributed leadership, and employee voice in strategic decision-making.

There seems to be little evidence to show that evidence about the benefits of workplace innovation motivates or stimulates its actual adoption in companies. While much is known about the practices and behaviours associated with workplace innovation, less is known about the drivers and situational settings which stimulate and sustain it. We need a much better understanding of the factors which shape workplace practices at enterprise level not least because successive surveys demonstrate a substantial gap between the evidence from research of “what works” and what actually happens in European enterprises (Eurofound, 1997, 2012, 2015a; OECD, 2010).

These contextual factors can reflect national characteristics as well as those at the workplace, and a “varieties of capitalism” (Hall & Soskice, 2001) approach might be used to explain differences in the distribution and nature of workplace innovation in Europe (Totterdill, Exton, Exton, & Gold, 2016). Hall and Soskice distinguish two distinct types of capitalist economy based on the ways in which firms operate in the market and interact both with each other and with actors such as government and trade unions. In Liberal Market Economies (LMEs) such as the UK, firms interact principally through market mechanisms; in Co-ordinated Market Economies (CMEs) such as those in Northern Europe, non-market forms of interaction such as social partnership and regulation play a more prominent role in shaping patterns of interaction.

Constraints on the development of workplace innovation are likely to be greater in liberal market economies than in the coordinated market economies. Godard (2004) argues that high performance workplace practices challenge the LME paradigm in which distrust and adversarial relations often underpin the employment relationship. In the CME paradigm, levels of trust are higher and provide a sounder basis for ways of working based on autonomy and self-management. For example, enterprise level “Co-operation Committees” long-established within the national social partnership arrangements in Denmark, can play a significant role in stimulating and resourcing workplace innovation (Mulvad Reksten & Dragsbæk, 2014). Likewise, public policy intervention to promote and support the adoption of workplace innovation is widespread within CME countries, and actively involves both labour market partners, but is rare elsewhere (Totterdill et al., 2016). In LME countries such as the UK, explanations for the adoption of workplace innovation are therefore more likely to be found at enterprise level, with a much greater emphasis on voluntarism and managerial discretion.

Analysis of fifty-one case studies undertaken as part of the Third European Company Survey provides a rare insight into the “paths to workplace innovation” found at enterprise level (Eurofound, 2015b). In particular, the study explores the variations and similarities between organizations in which workplace innovation:

- is instigated by top management or by employees;
- involves employees in the design and implementation of workplace practices, or not;
- is driven by the strategic goal of securing a sustainable future (the “burning platform”) or by specifically targeting performance or quality of working life indicators;
- reflects the existence or absence of organizational freedom from control by a parent company or by other stakeholders.

While these variations are seen to shape the specific characteristics of workplace innovation in each organization, common outcomes are found in terms of innovative behaviour based on enhanced employee autonomy.

Each of the six case studies conducted in the UK describes the instigation of workplace innovation practices from the top down, perhaps reflecting the relative absence of the workplace social partnership arrangements associated with CME countries. In four of the cases, workplace innovation resulted directly from the appointment of a new Chief Executive committed to distributed forms of leadership and with a transformational agenda. Three of these cases are examined below.

It is equally important to understand the nature of the journeys that followed. While some people in shared leadership roles have a clear vision of the systemic change they are trying to establish, others begin the journey from one of several specific issue-related angles such as industrial relations, a changing competitive environment, concordance with a parent company's corporate values or the need to sustain competitiveness. At its best, this begins an incremental though sustained journey of experimentation, trial and error, and learning as workplace innovations are established, consolidated and extended, characterised by 'bottom up' employee empowerment and initiative. As the Eurofound case study report argues, the resulting practices "do not often constitute a coherent programme, and in many cases, they reflect developments over a number of years" (Eurofound, 2015b, p. 41).

Workplace innovation and "the British disease"

The UK has a multi-faceted and well documented problem with productivity, skills development and skills utilisation. According to the UK Commission for Skills and Employment (UKCES, 2010, p. i):

"Our stock of skills and their optimal deployment fare relatively poorly when compared internationally according to skills utilisation measures such as labour productivity and levels of qualifications among different workforce groups. Access to opportunities for skills acquisition is uneven as are their impacts."

UKCES and other commentators describe this as a "low skill equilibrium". The economy is seen to be trapped in a vicious spiral of low value-added and low skills; enterprises are staffed by low skilled staff producing low quality goods and services to which the training market responds rationally by providing training aimed at the demand for low skills.

This "British disease" has a long clinical history, achieving cyclical but transitory public policy prominence over several decades though seemingly without reaching solutions capable of closing the productivity gap with competitor nations (Wright & Sissons, 2012). Survey findings (UKCES, 2010; LLAKES, 2012) point to:

- a widening gap in the labour market between the number of workers with qualifications at various levels and the number of jobs that require those qualifications;
- the tendency for UK employers to require lower educational qualifications for otherwise similar jobs than their counterparts in many other developed countries;
- 35 – 45% of workers with qualifications that are not fully utilised in their current jobs (Wright & Sissons, 2012) but which would be of economic value if they could be put to better use in more demanding roles;
- the slow pace at which UK employers have adopted workplace innovation practices despite long-established evidence that they are associated with enhanced levels of productivity and performance.

The two latter points are of particular relevance to this article as well as providing a partial explanation for the “British disease”. The fundamental premise underlying workplace innovation is that traditional ways of organising and managing work limit the ability of employees at all levels to use and develop their full range of skills, knowledge, experience and creativity, both in performing their functional tasks and in contributing to improvement and innovation, thereby weakening productivity, competitiveness and quality of working life. Workplace innovation seeks to broaden job roles and employee discretion at both individual and team levels, transcend vertical and horizontal demarcations, enable employee-led improvement and innovation, and engage the tacit knowledge of frontline workers as a resource for all levels of decision making. It therefore embraces the concern with skills utilisation and development in the workplace (Totterdill, 2016).

These workplace practices enhance the ability of employers to secure a full return on their investments in training and technology as a result of improvements in performance, innovation and quality of working life. Moreover, as a 2015 study by CEDEFOP (the EU’s Centre for the Development of Vocational Training) shows, increasing the complexity of jobs leads to enhanced opportunities for workplace learning and development.

“Workplace innovation” emerged during the early years of the century as a unifying concept which brought together work organization, human resource management and other antecedents. Frank Pot (2011, p. 404) describes workplace innovation in terms of “new and combined interventions in work organization, human resource management and supportive technologies” which are strategically informed and highly participative in nature.

In defining workplace innovation, it is important to recognise both process and outcomes. The term describes the participatory *process* of innovation which leads to *outcomes* in the form of participatory workplace practices. Such participatory practices grounded in continuing reflection, learning and improvement sustain the process of innovation in management, work organization and the deployment of technologies.

Workplace innovation is fuelled by 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. It seeks to build bridges between the strategic knowledge of the leadership, the professional and tacit knowledge of frontline employees, and the organizational design knowledge of experts. It seeks to engage all stakeholders in dialogue in which the force of the better argument prevails (Gustavsen, 1992; Pot et al., 2016).

Research highlights the importance of internal consistency in such policies and practices (Huselid, Jackson, & Schuler, 1997). As Teague (2005) suggests, organizations with mutually reinforcing employment practices achieve superior performance as their collective impact is greater than the sum of individual measures.

Such insights led to the creation of *The Fifth Element*¹ as a means of providing practical and actionable insights into the vast body of research evidence relating to workplace innovation in order to enhance productivity, performance and employee health and well-being (Totterdill, 2015). Grounded in a cross-cutting analysis of research studies and documented cases, *The Fifth Element* identifies four basic building blocks which, in concert, create a system of mutually reinforcing practices (See Table 1):

¹ <http://uk.ukwon.eu/the-fifth-element-new>

Table 1. The Fifth Element

Element 1	Empowering jobs and self-managed teams.
Element 2	Flexible organizational structures, people-centred management practices and streamlined systems and procedures based on trust.
Element 3	Systematic opportunities for employee-driven improvement and innovation.
Element 4	Co-created and distributed leadership combined with 'employee voice' in strategic decision-making.

Element 5, *The Fifth Element*, represents the enterprising behaviour, the culture of innovation, the high levels of employee engagement, and the organizational and individual resilience which flourish when the other four combine to shape experience and practice across the whole organization.

If workplace innovation produces tangible economic and employee benefits at enterprise level it is also likely to have wider impacts on the labour market and economy. Skills demand is enhanced because employers need individual workers to embrace wider technical functions and, critically, to enhance generic skills including problem solving, communication and team working. Product and service quality are enhanced while the rate of innovation grows, thereby breaking out of the low skills equilibrium trap (CEDEFOP, 2015; OECD, 2010; UKCES, 2010).

The gap

Even though evidence about the effectiveness of workplace innovation has been around for a long time (Totterdill, 2015), successive surveys show that the vast majority of UK companies do not make systematic use of it. One UK survey estimated that less than 10% of employees work in self-managing teams, a basic building block of good work organization, while less than 30% have a say in how their work is organised. The UK compares unfavourably with several other Northern European countries against many such indicators of employee involvement and participation (LLAKES, 2012).

At enterprise level the limited spread of workplace innovation practices can be understood in terms of several interwoven factors (Business Decisions Limited, 2002; Totterdill et al., 2002) including:

- an excessive tendency to see innovation purely in terms of technology;
- low levels of awareness of innovative practice and its benefits amongst managers, social partners and business support organizations;
- poor access to robust methods and resources capable of supporting organizational learning and innovation;
- barriers to the market for knowledge-based business services and the absence of publicly provided forms of support;
- the failure of vocational education and training to provide knowledge and skills relevant to new forms of work organization.

Resistance to high involvement work practices can also be explained in terms of the embedded structures that shape management behaviour. Power can be seen as a zero-sum game: to empower workers, managers may wrongly perceive that they have to lose it, potentially challenging their self-identity and status within the organization (Hardy & Leiba-O'Sullivan, 1998).

Driving workplace innovation in UK organizations

As with other liberal market economies the UK lacks both the social partnership structures and the public policy frameworks that help to stimulate the adoption of workplace innovation in the CME countries. UK governments have relied on a market-driven approach to workplace innovation and instigated no policies or programmes to close the gap in productivity caused by the very long tail of companies who fail to respond to evidence. This stands in stark contrast to France, Germany and some Nordic countries where national and regional workplace development programmes have existed for some decades (Totterdill, Exton, Exton, & Sherrin, 2009).

In this context, it is unsurprising that enlightened leadership should play an important role in driving workplace innovation within public and private enterprises, though the systemic adoption of highly participative working practices remains relatively rare in UK enterprises. Leadership theory is a highly-contested field but leadership development has nonetheless gained increasing prominence through business school curricula, professional institutions and consultant offerings. Early theories were primarily focused on the distinction between “task focus” and “people orientation” (for example Vroom & Yetton, 1988) but the emergence of “New Leadership Theories” led to the celebration of “transformational”, “charismatic”, “visionary” and “inspirational” leadership (Storey & Holti, 2013), often drawing on the burgeoning hagiographies of business leaders such as Jack Welch and Steve Jobs.

The dark side of such leadership approaches soon began to emerge including the potential for abuse of power, narcissism, destabilisation, blind obedience and fear of questioning. It can even be argued that the extraordinary trust in the power of charismatic CEOs displayed in these leadership approaches “resembles less a mature faith than it does a belief in magic” (Khurana, 2002, p. 8).

Alternative approaches focused on leadership as a creative and collective process (Senge, 1990) were less concerned with the central, charismatic individual and more with the creation of opportunities for employees to seize the initiative and contribute to decision making. Such shared and distributed leadership relates to a concern with empowerment (Caldwell, 2005) and change agency, a phenomenon characterised by dispersed responsibility for change and not to be confused with the more heroic or charismatic models of change leadership (Buchanan, Addicott, Fitzgerald, Ferlie, & Baeza, 2007). For Gronn (2002) the principle advantage of distributed leadership is that it builds organizational capability, and is, therefore, a key element of workplace innovation in that it helps to release the full range of employee knowledge, skills, experience and creativity.

Recent developments in the UK add extra weight to the focus on leadership. On the same day in June 2015 two public agencies coincidentally published guidelines on productivity (Acas, 2015) and employee well-being (National Institute for Clinical Excellence, 2015), both referring to the need for positive leadership styles which encourage creativity, new ways of doing things and opportunities to learn, and for leaders to be open, honest and visible.

The case studies

The authors were part of a team of researchers commissioned by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) to interview a sample of companies identified from their responses to the earlier European Company Survey (Eurofound, 2015a) as scoring highly in relation to indicators of workplace innovation.

During 2014-2015, interviews were held in fifty-one selected companies covering ten EU member states. In each company interviews were held wherever possible with a manager (mostly an operational director or HR manager), a group of employees and an employee representative. These provided in-depth, qualitative information about workplace innovation practices, the motivations and actions of different actors and their contributions to their development and implementation, and their outcomes and effects including company performance and quality of work. Interviews were recorded and transcribed, and for each case, a coding matrix was completed in which all the answers were incorporated in a systematic manner (Eurofound, 2015b).

Of the six UK case studies, we selected the three which most clearly illustrate the choices that leaders make in shaping working practices and culture within their organizations. While in all three cases workplace innovation was instigated by a newly appointed Chief Executive and led to greater employee empowerment and innovation, their journeys of transformation were very different, reflecting the varied contexts within which each operated. In the following section both the divergences and commonalities of the three journeys are explored.

Drax Power: Transforming industrial relations and leadership

Drax Power is the owner and operator of Drax Power Station in North Yorkshire, the largest power station in the UK. It is a wholly owned subsidiary of Drax Group plc. Some 850 people are directly employed by Drax Power at the power station site, around 600 of whom operate the plant. The remainder are in corporate and other Drax Group functions. Union density amongst plant workers is around 80%, though much lower in senior roles and corporate services.

Drax Group has been listed on the London Stock Exchange since 2005. AES, the previous US owners of the power station, transferred ownership to its lenders following a period of financial hardship for the business triggered by a period of all-time low power prices. Drax Group recognised that coal-fired electricity generation would have little future beyond 2020 due to national and EU regulatory regimes. Lobbying by the company, led by its Chief Executive Dorothy Thompson, persuaded government of the environmental and strategic benefits of conversion to biomass, reducing greenhouse gas emissions typically by 80% compared with coal-fired generation. A massive programme of investment which is still underway led to consequent changes in working practices and the need to engage the workforce in the process.

Improved industrial relations and greater staff engagement in innovation and improvement were central to the future vision for Drax. Between 2010 and 2012 the company developed a twin-pronged strategy based on both representative and direct participation in order to build the culture of openness and participation which it saw as vital to its future success.

Working together with trade unions

Prior to 2005 industrial relations were adversarial and this legacy persisted even after the formation of the Drax Group. This was a context not conducive to the transformation facing the company, limiting prospects for employee engagement in the change process. Richard Neville's arrival as Head of HR in 2009 created an opportunity to break with the past, not least because of his previous track record in securing effective partnerships with unions in other utility companies.

Overcoming their initial scepticism, Richard worked closely with union representatives to design 'Working Together', Drax Power's partnership agreement. Working Together doesn't just focus on communication and consultation at corporate level but seeks to shape line management behaviour at all levels of the organization. It commits managers to a process of "open, honest,

clear and accurate” communication and two-way dialogue; the agreement has been reinforced by a programme of management training and development in partnership behaviours, from supervisors upwards.

The emphasis is also on early stage trade union involvement rather than consulting on a finalised proposal. In addition to the quarterly Joint Consultative Committee, senior managers and union representatives meet weekly in informal “Point of Contact” sessions, providing an off-the-record sounding board for ideas and allowing specific issues to be addressed flexibly.

Replacing adversarial industrial relations with management-union partnership has played a vital role in Drax Power’s technological and cultural transformation. In particular, it has engaged unions as active and knowledgeable partners in the programme of technological innovation and prevented adversarial industrial relations from becoming an obstacle to change. Of equal importance, it has helped to build trust and engagement in change throughout the wider workforce.

Leading a culture of communication and consultation at Drax

Drax’s flagship communication channel is the twice-yearly Open Forum instigated by Dorothy Thompson and involving the senior executive team in face-to-face, hour-long dialogue sessions with the whole workforce. In view of very strict rules about how many people can leave their posts for reasons of safety, and to keep the plant going, Forums are conducted in sessions ranging from one or two people to groups of forty.

This very significant investment of time by the Chief Executive and her senior team exposes them to the concerns, ideas and tacit knowledge of employees at all levels of the organization. While part of each session is based on a presentation to employees, the emphasis is firmly on two-way communication. Open Forums replaced the previous company-wide meetings and suggestion schemes which had struggled to stimulate open and constructive dialogue and feedback. Outcomes and suggestions from the different Forum sessions are assimilated and disseminated throughout the company using various media channels.

Employees at all levels report that the Forums symbolise Drax’s visible and approachable leadership, helping to drive a more open culture characterised by improved communication through both formal and informal channels.

Who benefits?

Improved understanding

A 2010 workforce survey asked whether employees understood the company’s future direction. Only 11% of respondents strongly agreed that they did. When the same question was asked in 2011, 96% of respondents agreed (and 63% *strongly* agreed), representing a major shift in engagement levels.

Partnership working from a trade union perspective

Union representatives stressed during the interview that partnership working hasn’t yet shaped the behaviour of managers at all levels and there are still blockages. But they acknowledged that the agreement provides a tangible focus: “[*Management*] will discuss more things with you, more things about the business.” It is a safeguard: “*But when all else fails you can always refer back and say, this is what we have signed, why aren’t you following this procedure?*” And informal contact plays an important role: “*Every fortnight we have a Point of Contact meeting so there is more chance of us getting across things that we find are not right and we can sit down and discuss those things.*”

Supporting people through change

One person summarised the general view expressed during the employee peer group interview: *“the workforce is very well supported . . . the first thing the business did before implementing any of those changes was roll out the Vision and Values . . . and basically let everybody know what was going on and . . . that we would be supported through it . . . The way the changes are implemented, it is a very inclusive process.”*

Employee voice

One employee commented: *“It is interesting isn't it, you go to the Open Forums and people will say what they think and absolutely nobody will turn round and go, I can't believe he said that . . . they might not agree with you but nobody will actually knock anyone for having a view because we are encouraged to have a view. That's really empowering I think.”*

Prognosis

Drax Power has succeeded in improving industrial relations, securing union commitment to a common vision and creating a more open and entrepreneurial culture. This has helped in the company's transformation and is releasing staff ideas for innovation and improvement. Dorothy Thompson's open leadership creates trust and employees feel confident about the future. Remaining obstacles such as instances of unsupportive management behaviour need a consistent approach if the new culture is to become fully embedded.

Skanska: Living corporate values

Skanska, a Swedish-owned company established in 1887, is one of the world's leading project development and construction groups. The UK operation was established with the acquisition of Kvaerner Construction in 2000, McNicholas Utilities in 2006 and Atkins Highways Services in 2013. It is now one of the country's largest contractors, employing more than 5,000 people.

The UK construction industry traditionally had a poor image tarnished by corruption, quality issues, insufficient regard to safety, a poor environmental record and the blacklisting of union activists. When Skanska acquired Kvaerner, it inherited many of these practices, at odds with the Swedish parent company's open and transparent culture and values. Mike Putnam's appointment as CEO in 2009 demonstrated a clear commitment to break with the past. Visibility and accessibility is characteristic of his leadership style and in a 2012 article (Oliver, 2012), he explained that:

“One of the big transformations has been to adopt the Swedish approach to openness and transparency.”

“Everybody in the UK talks about it but in the Skanska Group it is at a completely different level. When you have your values you need to be visibly seen to follow them. The behaviour that backs up that leadership is absolutely crucial.”

Although the Swedish parent's values provided a powerful driver, the interviews suggested that Putnam is known in the company to be motivated by “gut feel” rather than spending time preparing an elaborated business case for culture change.

“Respect” is a word that recurred frequently in our interviews with managers, union representatives and frontline staff alike. It is reflected in the company's core values which aspire to:

- zero accidents;
- zero environmental incidents;
- zero tolerance of bribery and corruption;

- zero defects.

Respect forms part of a culture which, according to a senior manager interviewed as part of the study, is intended to “penetrate the company’s DNA”, releasing employee voice at every level of the business. While hierarchical structures remain in the business, he argued, hierarchical management behaviour is increasingly out of place.

Mutually reinforcing practices: the journey to culture change

In Skanska, graduated improvements in culture have resulted from a series of incremental workplace innovation initiatives that took place between Putnam’s appointment in 2009 and the interviews in 2014. Interviewees in each group were clear that the new CEO was personally responsible for stimulating and sustaining each initiative. While each initiative is relatively modest in itself, they consistently reflect Putnam’s commitment to Skanska’s core values and build on each other to create a sustainable momentum of change:

- *Breaking down silos*: Skanska UK started with the acquisition by the Swedish parent of three businesses with separate cultures and practices. The first part of the journey was to demolish the walls between different parts of the organization, centralising and transforming “Enabling Functions” such as HR and Finance. This helped embed Skanska’s core values in each function and allowed consistent, company-wide initiatives to develop, addressing management development, healthy working and environmental sustainability.
- *Changing management behaviour*: Management development programmes focus on culture, not basic procedures. Skanska’s Great Boss initiative defines expected management competencies and behaviours which are reinforced through management training programmes and appraisals. Progress is measured through an annual working climate survey. Union representatives interviewed for the study agreed that it is working and that there has been a steady change in management culture.
- *Reinforcing ethical behaviour*: At least once a quarter – and often monthly – management team meetings will spend half an hour exploring an ethical dilemma relevant to the business, either hypothetical or real. This reinforces the message to all managers that Skanska seeks to be driven by its core values.
- *Trade union partnership*: senior management teams work closely with the trade unions which are seen as vital partners in reinforcing company values and in ensuring health and safety. Early-stage involvement and informal dialogue between union representatives and management at all levels play a critical role in dealing with potential issues quickly and collaboratively.
- *An “Injury Free Environment”*: Safe, healthy working is driven from the top. It is seen as part of a shared learning culture rather than a regulatory stick. A rare death on any Skanska site in the world leads to a Global Safety Stand Down - a one minute silence plus an opportunity to learn from the experience and improve practice. Employee voice and union safety representatives play a critical role in highlighting risks and identifying better ways of working. This extends to the supply chain, ensuring consistent practices on site.
- *A learning culture, not a blame culture*: “If things go wrong and you tell us you get nothing but support.”
- *Engaging employees in improvement and innovation*: Skanska recognises that there is no single way of stimulating employee initiative. An open and enabling management culture is the starting point, supported by specific initiatives including local Consultation Forums for

frontline workers and union representatives, the Skanska Way Week – a focus for dialogue on important issues such as wellbeing and mental health, a You Said/We Did board, and even an Innovation App that enables employees to take a picture to illustrate ideas for improvement.

- *Open access to learning*: Prominently positioned in the main entrance hall of Skanska's headquarters, the Learning Centre hosts diverse personal development opportunities from on-line courses to tailored one-to-one support.

Who benefits?

Skanska has one of the best health and safety records in the UK construction sector. Likewise, levels of employee engagement are consistently high. Annual engagement surveys typically secure a 75-85% favourable response to every question set.

Active engagement with trade union representatives in working towards common goals has secured positive employment relations.

A clear strategy has been adopted for integrating new acquisitions. Skanska acquired Atkins Highway Services in 2013, and these practices are ensuring the integration of its staff into the company's culture.

Prognosis

This case study does not describe a dramatic example of workplace innovation. It is about a series of incremental innovations sustained by consistent leadership and slowly generating a strategic change in culture, working practices and employee engagement.

It is still work in progress, and the company recognises that it will always be so. An open and innovative culture is not something you create just once: rather it needs to be maintained and renewed continuously.

Asked if there was one message he would like to give to Mike Putnam, one trade union representative said that his would be: "fantastic job, keep going!"

Bristan: Positioning for sustained competitiveness

Bristan was founded in 1977 in Birmingham (UK) as a family owned business. It is now a leading supplier of showers, taps and bathrooms in the UK with exports to Europe and Russia. It has been awarded one star status in the Sunday Times *Top 100 Best Companies To Work For*.

Leadership by Behaviour

The company is led by Chief Executive Jeremy Ling. He joined Bristan Group in 2009 when it was a family-owned "can do" company but with "a lack of clear focus and inconsistent objectives". One of Jeremy's first tasks was to guide the sale of the company to Masco, a US-based group of companies. Each company within the group operates autonomously and Bristan has retained its family atmosphere.

Employees interviewed as part of the study tended to see Jeremy's arrival as transformative. A series of measures instigated by him since his appointment in 2009 and our visit in 2014 have placed continuous improvement at the heart of the company's practice and this is reflected in the experiences of several of the employees interviewed. Jeremy himself describes the Bristan Group as "always moving forward".

Jeremy's approach is informed in part by his past frustrations when working for larger and less empowering organizations. He set out to create a culture based on shared leadership, values and behaviours: *"empowerment of my top team and feedback on performance are essential for us to be a learning organization"*. He and his senior team are guided by "boundaries" rather than strict role definitions and are trusted and empowered to be entrepreneurial within those boundaries. Jeremy points out that all employees have two duties: to develop themselves and to change and develop their roles.

One person summarised the view of Jeremy's leadership held by members of the employee peer group interviewed as part of the study: *"This senior management team are the best ever, they know all our names."* He argued that Jeremy is passionate about bringing people with him. The "Big Briefing", a quarterly meeting to keep everyone aware of company progress, results and updates, enables employees to ask questions and give feedback. Everyone attends in prearranged hourly slots and people are encouraged to send Jeremy emails on the topic he presents.

Jeremy argues that line managers drive the organization and they take their own decisions about how to lead their teams. Self-managed team-working is an important part of the culture of non-hierarchical behaviour that Jeremy is creating in Bristan. Teams are empowered to address issues from customers directly, working within boundaries set to give room for entrepreneurial behaviour. Open plan offices and working groups enable cross functional collaboration throughout the company, and job swaps provide opportunities to work in different areas and support career progression.

Training, skills development, apprenticeships and career progression are a priority for Jeremy, and the majority of the senior team have been promoted from within the company. The "Leadership by Behaviour" training programme based on the empowerment-based values that Jeremy introduced to Bristan is cascaded from the senior team to all managers.

Employees value the company's commitment to their learning. Individual development goals, learning needs and SMART objectives are discussed at conversational one to one meetings with line managers each month; together with mid-year reviews these lead to a "no surprise" year-end appraisal.

The senior team makes sure that everyone works within Bristan Group's SHINE values - Straightforward, Helpful, Innovation, No Limits to Customer Service, and Empower and Engage. Each quarter, three finalists from each of the five categories are chosen by the company's Employee Forum, which then decides on an overall winner. These winners are then entered into the Star Performer category, with the overall winner being announced at an award ceremony in January. At the end of the year, the company holds an awards ceremony where the SHINE Star of the Year is named.

Continuous improvement (CI) is part of the everyday vocabulary at every level. CI champions organise improvement projects and teams organise cross-functional working groups involving people from all areas of the company to improve the way they work. At the time of interview, in 2014, there were 146 CI initiatives in progress, each based on an opportunity identified by an employee. Bringing people together from different parts of the company enables problems to be seen "with a fresh pair of eyes." Every employee is also encouraged to sign up for a Kaizen project, taking time out for a week to join a cross-functional team. Between four and six Kaizen events are held every year and outcomes are presented to the senior team as an important means of learning, engagement and networking.

For example, a warehouse-led “fast despatch” group recruited from across the company met for a week and reviewed the despatches, cutting 7.5 miles of walking per week. Everyone in the warehouse is involved in continuously improving the integration of technology for “Just in Time” with their team working practices and USP (Unique Selling Point) of “next day delivery”. The warehouse people rotate their roles and tasks regularly, but individuals can self-organise if they want to stay to complete something.

An Employee Forum offers further opportunities to discuss issues or ideas for improvement. Thirteen Employee Representatives are nominated by their peers and attend four formal meetings a year with a member of the senior management team. The Forum helps run ‘PeopleFest’ which is an annual event encompassing sessions on well-being, career, financial and health advice, cycle to work, benefits, discount vouchers and child care information. The Forum is given a budget to organise the annual family open day which is the climax to PeopleFest.

Trust and open communication are reflected in the employee survey with an 89% return rate. Managers reflect on what to do differently based on survey results. As part of their action plan they write individual ‘I promise to...’ commitments on the Management Pledge Board in the canteen.

Who benefits?

Open leadership, communication and trust have enabled Bristan Group to undertake a potentially difficult ‘journey of efficiencies’ with a reduction in overall staff numbers and the closure of sites, while retaining high levels of staff engagement. Profits have risen as a result of these actions and employees have gained yearly pay rises and even bonuses throughout the recession. Employees are kept fully informed of plans to expand and are upbeat about the future. One employee summed up the feeling of the interview group: “Bristan Group are investing in their people so people will stay - those who leave come back.”

Conclusion

These three organizations undertook major journeys of transformation during the period between 2009 and 2014, stimulated by the appointment of new Chief Executives. In each case, the CEO-driven momentum of change led to an increase in bottom-up initiative including the greater empowerment of frontline workers in their day-to-day jobs and to the amplification of employee voice in decision-making. This reinforces the view of Gronn (2002) and other writers that distributed leadership builds organizational capability and helps to release the full range of employee knowledge, skills, experience and creativity. Since the adoption of workplace innovation practices in LME economies relies more on managerial discretion alone than in CME countries, distributed leadership models have a particularly important role to play.

Positioning the organization for a better future, not responding to crisis

None of the three companies was motivated to change by short term problems or issues. In each case, the Chief Executive was driven by a ‘gut feel’ that responsiveness to future opportunities and resilience against future challenges needed to be strengthened by making better use of the skills, experience and creativity of the company’s entire workforce.

Diverse entry points leading to systemic approach

The journeys of each organization began from very different starting points but each CEO emphasised consistency of values, aligning work organization, organizational structures, systems and procedures, high involvement innovation and improvement, and employee voice in

order to create a sustainable body of mutually reinforcing practices based on participation and empowerment.

Workplace innovation as 'the sum of the parts'

Each of the three companies achieved profound improvements in culture and working practices through the cumulative impact of small, incremental changes rather than by big leaps. None of the CEOs began with a masterplan: rather they created opportunities for inclusive reflection and dialogue that led to the identification of ideas for improvement and innovation. These transformations reflect the *process* of generating and implementing these ideas as much as the ideas themselves.

Consistent values and behaviours

Workplace innovation can be deflected by short-term problems and contingencies, especially when senior management becomes overly involved in crisis management (Business Decisions Limited, 2002). Jeremy Ling, Mike Putnam and Dorothy Thompson share an approach to leadership based on delegation and the rejection of micro-management. This enables them to focus on strategic matters including consistency in the design and implementation of workplace innovation initiatives.

References

- Acas (2015). *Building Productivity in the UK*. London: Acas Strategy Unit.
- Buchanan, D., Addicott, R., Fitzgerald, L., Ferlie, E. & Baeza, J. (2007). Nobody in charge: distributed change agency in healthcare. *Human Relations*, 60, 1065-1090.
- Business Decisions Ltd. (2002). New forms of work organization: the obstacles to wider diffusion. KE-47-02-115-EN-C, DG Employment and Social Affairs, European Commission, Brussels. Retrieved 2016, January 3 from <http://uk.ukwon.eu/document-store/new-forms-of-work-organization-the-obstacles-to-wider-diffusion-final-report>
- Caldwell, R. (2005). *Agency and Change: Rethinking Change Agency in Organizations*. Abingdon: Routledge.
- CEDEFOP (2015). *Matching skills and jobs in Europe: Insights from Cedefop's European skills and jobs survey*. Retrieved 2016, January 3 from <http://www.cedefop.europa.eu/en/publications-and-resources/publications/8088>
- Eurofound (1997). *Employee Participation and Organizational Change*. EPOC survey of 6000 workplaces in Europe. Dublin: European Foundation.
- Eurofound (2012). *5th European Working Conditions Survey*. Overview report. Dublin: Eurofound.
- Eurofound (2015a). Kankaraš, M. & van Houten, G., *Third European Company Survey 2013 - Overview report*, Publications Office of the European Union.
- Eurofound (2015b). Oeij, P., Žiauberytė-Jakštienė, R., Dhondt, S. Corral, A., Totterdill, P., & Preenen, P., *Workplace innovation in European companies*. Luxembourg: Publications Office of the European Union.
- Godard, J. (2004). A critical assessment of the high-performance paradigm, *British Journal of Industrial Relations*, 42, 349-378.
- Gronn, P. (2002). Distributed leadership as a unit of analysis. *Leadership Quarterly*, 13, 423-451.
- Gustavsen, B. (1992). *Dialogue and Development*. Maastricht: Van Gorcum.
- Hall, P. A. & Soskice, D. (Eds.) (2001). *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- Hardy, C. & Leiba-O'Sullivan, S. (1998). The Power Behind Empowerment: Implications for Research and Practice. *Human Relations*, 51, 451-483.
- Huselid, M. A., Jackson, S. E. & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance, *Academy of Management Journal*, 40, 171-188.
- Khurana, R. (2002). The curse of the superstar CEO. *Harvard Business Review*, September, 3-8.
- LLAKES (2012). *Skills and Employment Survey*. Retrieved 2016, January 3 from <http://www.llakes.ac.uk>

- Mulvad Reksten, P. & Dragsbæk, P. (2014). How trade unions can stimulate, resource and sustain workplace innovation. Experiences from Denmark. *EUWIN Bulletin*, June. Retrieved 2016, January 3 from <http://portal.ukwon.eu/tu-in-wi-denmark>
- National Institute for Clinical Excellence (2015). *Workplace policy and management practices to improve the health and wellbeing of employees*. NICE Guideline NG13. London: NICE.
- OECD (2010). *Innovative Workplaces: Making Better Use of Skills within Organizations*. Paris: OECD Publishing.
- Oliver, A. (2012). Mike Putnam: recession riding. *New Civil Engineer*. Retrieved 2016, January 3 from <https://www.newcivilengineer.com/mike-putnam-recession-riding/8627486.fullarticle>
- Pot, F. (2011). Workplace innovation for better jobs and performance. *International Journal of Productivity and Performance Management*, 60 404-415.
- Pot, F., Totterdill, P., & Dhondt, S. (2016). Workplace innovation: European policy and theoretical foundations. *World Review of Entrepreneurship, Management and Sustainable Development*, 12, 13–32.
- Ramstad, E. (2009). Promoting performance and the quality of working life simultaneously. *International Journal of Productivity and Performance Management*, 58 423-436.
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. London: Century Business.
- Storey, J. & Holti, R. (2013). *Towards a New Model of Leadership for the NHS*. London: NHS Leadership Academy.
- Teague, P. (2005). What is Enterprise Partnership? *Organization*, 12, 567-589.
- Totterdill, P. (2015). Closing the Gap: The Fifth Element and Workplace Innovation. *European Journal of Workplace Innovation*, 1, 55-74.
- Totterdill, P., Dhondt, S. & Milsome, S. (2002). *Partners at work? A report to Europe's policy makers and social partners*. Nottingham: The Work Institute.
- Totterdill, P. (2016). *Innovative workplaces: Enhancing skills utilisation through workplace innovation*. Paris: OECD.
- Totterdill, P., Exton, O., Exton, R., & Gold, M., (2016). High-performance Work Practices in Europe: Challenges of Diffusion. *European Journal of Workplace Innovation*, 2, 63-81.
- Totterdill, P., Exton, O., Exton, R., & Sherrin, J., (2009). *Workplace Innovation in European Countries*. Report to KOWIN (Korean Ministry of Labour). Nottingham: UKWON.
- UKCES (2010). *High Performance Working: Developing a Survey Tool*. Evidence Report 5. Wath-on-Deerne: UK Commission for Employment and Skills.
- Vroom, V. H. & Yetton, P. W. (1988). *The New Leadership: Managing Participation in Organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Wright, J. & Sissons, P. (2012). *The Skills Dilemma: Skills Utilisation and Low-Wage Work*. London: The Work Foundation.