



Workplace innovation Industry 5.0 style

EUWIN / Bridges5.0 Webinar Programme (Online)

24 November 2023

Dr Peter Oeij / TNO, Netherlands





Bridges5.0 is a EU research project on digitalisation, Industry5.0 and workforce skills



FRESH THINKING LABS

Activity Feed

Labs

Courses

Forums

Members

Knowledge Bank

Blog

Events V

Our Videos

Sign in

European Workplace Innovation Network (EUWIN)

November Friday 24th 10 - 11am UK



Workplace Innovation Industry 5.0 Style.

Peter Oeij (TNO, NL) [BOOK]



Peter Oeij will present his vision on 'workplace innovation' and present the recently published book 'Workplace innovation: the challenge of disruptive transitions'. Subscribed participants to this webinar will get a 50% discount voucher of the book, published by Edward Elgar publishers in the Elgar Research Agenda series.

Peter Oeij is associated with TNO Innovation for Life - the Netherlands, and motivated to improve the quality of work for all of us. He can be reached at peter.oeij@tno.nl



Content

- What is workplace innovation (WPI)? How do I see it?
- Origins of WPI
- Two examples of WPI-implementation and why it works
- Industry 5.0: a new context for WPI
- The latest book: 'A research agenda for workplace innovation: The challenge of disruptive transitions' (Edward Elgar Publishers, 2023)
- Your discount voucher (50%)







- ...for those who speak Dutch....

-what is workplace innovation (in Dutch: sociale innovatie)?

Sociale innovatie toegelicht in een Nederlandstalig filmpje:

https://www.youtube.com/watch?v=75I5-BUv0hQ

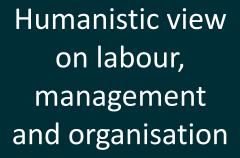




Workplace innovation = WPI



WPI = vision based on a conviction



NVORKPLACE INNOVATION

Employee engagement and employee involvement

Social dialogue

bridges

Minimal division of labour; 'rich jobs'

Not top down but bottom up

> Decentralisation not centralisation

Managers understand they need a integral / holistic view on their organisation



Structure follows strategy,

And

Culture follows structure

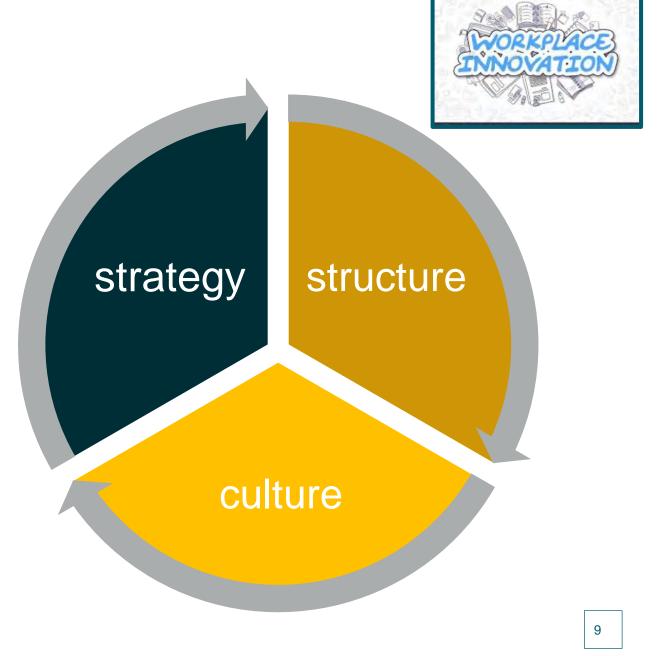
[after Alfred Chandler, 1962]



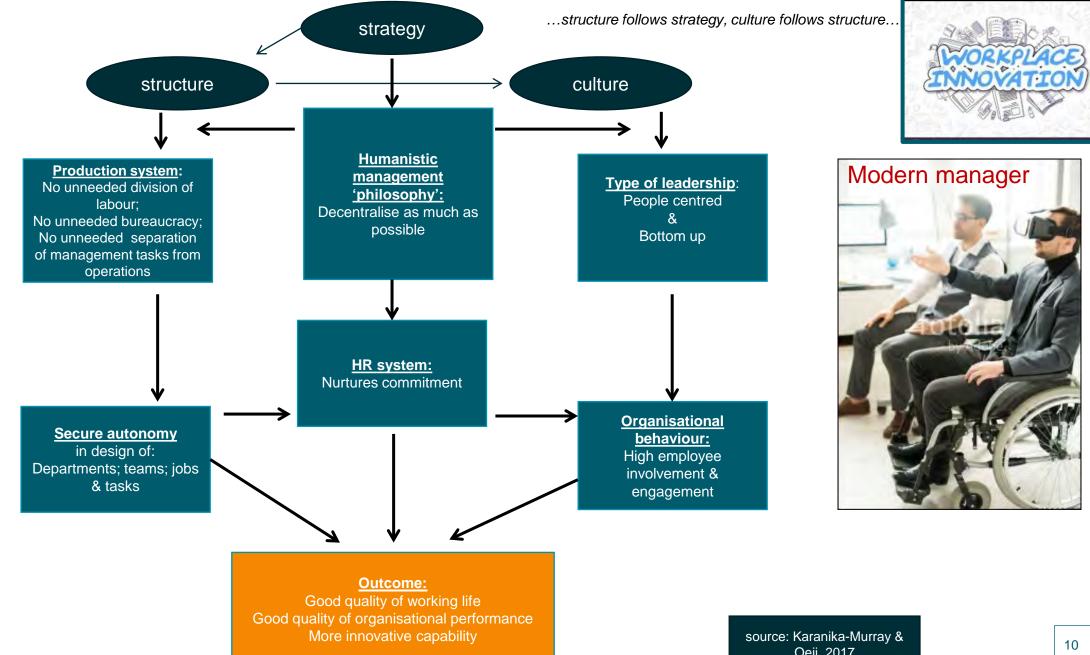


Managers understand they need a integral / holistic view on their organisation







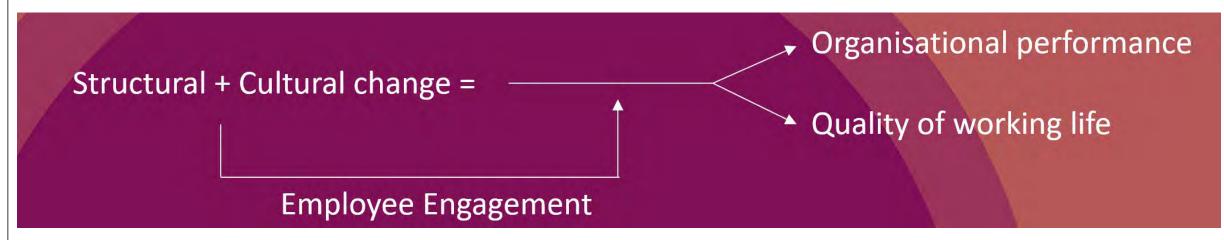




Oeij, 2017

ELEMENTS OF WORKPLACE INNOVATION (WPI)

- it is a renewal of the (work)organisation or of the design of jobs (structural change)
 -) example: introduction of self-organising teamwork design, decentralising management tasks
-) it affects how managers and employees behave in the organisation (cultural change, organisational behaviour)
 -) example: employee engagement, supportive leadership behaviour
-) it is not technological innovation, but it supports the adoption of (technological) innovation (improve innovative capability)
 - > example: employees co-develop technological choices, employee-driven innovation
-) OUTCOMES: better organisational & business performance + better quality of working life



(Source: Oeij & Dhondt, 2017, p.66 in Oeij, Rus & Pot, eds.)



Definition workplace innovation

(Oeij & Dhondt, 2017, p.66 in Oeij, Rus & Pot, eds.)



WPI is an integral set of participative mechanisms for interventions relating structural (e.g., organisational design) and cultural aspects (e.g., leadership, coordination and organisational behaviour) of the organisation and its people with the objective to simultaneously improve the conditions for the performance (i.e., productivity, innovation, quality) and quality of working life (i.e., wellbeing at work, competence development, employee engagement). In this definition, 'participative mechanisms for interventions' are synonymous to employee engagement in decision-making processes and represent a precondition for WPI [Oeij and Dhondt, (2017), p.66].



research into WPI shows that...

- > WPI contributes to
 - -better business performance
 - -better adoption of renewal, innovation and new technology
 - -improved relations between management, unions and employees
 - -cooperative working cultures and appreciated leadership styles
 - -more innovative work behaviour

Sources: Putnik et al., 2016; Oeij, Rus & Pot, 2017







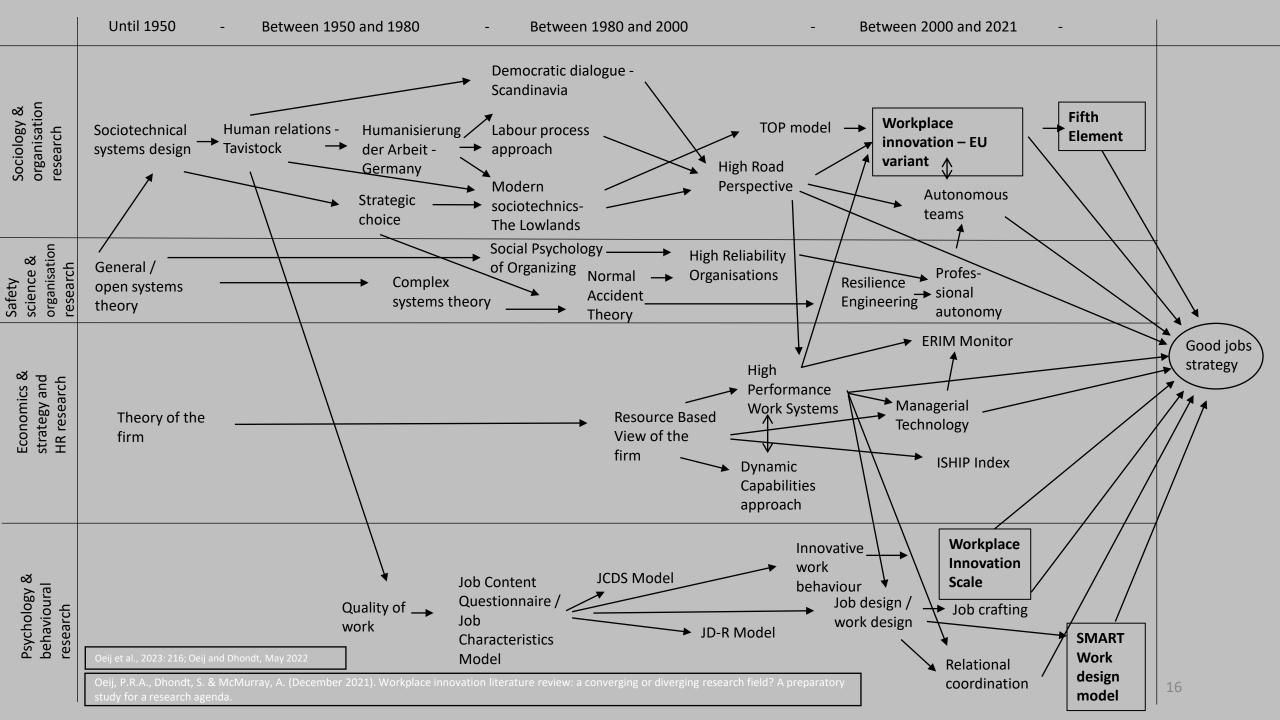


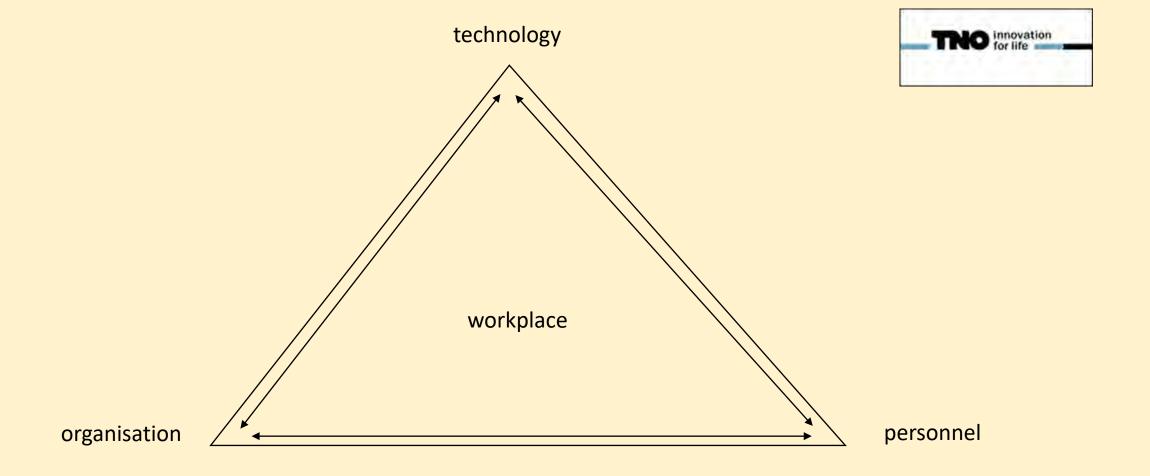
Different approaches to WPI (definitions):

- Individualist versus Organisational
- Subjective versus Objective
- Input / Output versus Throughput

<mark>Our approach:</mark>

- Organisational (sociotechnical systems design)
- Objective (conditional approach)
- Throughput (WPI is a means to a goal, not a goal in itself)





Workplace innovation practices (examples):

- -technology: taking into account that human work is not hollowed out, but augmented and supported
- -organisation: ensuring a division of labour that enables meaningful work
- -personnel: the qualitative and quantitative formation takes into account fair working conditions and learning opportunities

The basis for strategic choice and management behaviour is to put human interests not subordinate to economic interests



EXAMPLES OF WORKPLACE INNOVATION: WHY AND HOW IT WORKS



Two examples

- Logistics research in the Netherlands (2018)
- Eurofound study (2015)





A case study about 51 companies in EU



A survey of managers in logistics

Oeij et al, 2016, Implementing Workplace Innovation across Europe: why, how and what? *Economic and Social Changes:* Facts, Trends, Forecast, 5(47), 195-218.





Int. J. Technology Transfer and Commercialisation, Vol. 16, No. 3, 2019

Contents

SPECIAL ISSUE: WORKPLACE INNOVATION IN THE ERA OF DISRUPTIVE TECHNOLOGIES

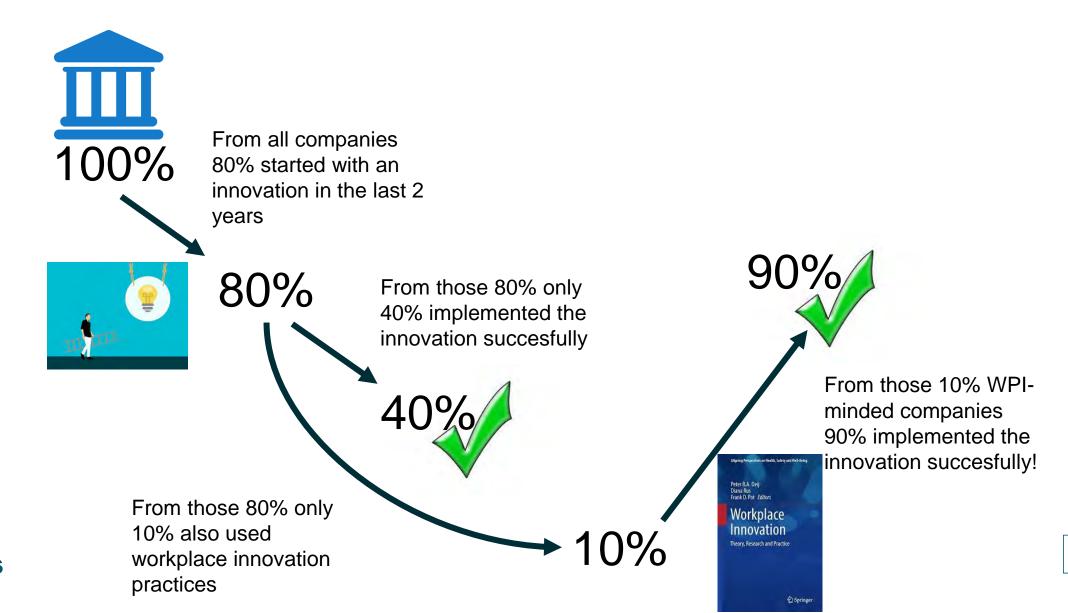
Guest Editors: Dr. Peter R.A. Oeij, Dr. Diana Rus, Professor Steven Dhondt and Professor Geert Van Hootegem

- 199 The digital transformation requires workplace innovation: an introduction Peter R.A. Oeij, Steven Dhondt, Diana Rus and Geert Van Hootegem
- Workplace innovation: a review and potential future avenues
 Diana Rus, Peter R.A. Oeij, Frank D. Pot and Peter Totterdill
- 228 Unleashing workplace innovation in Scotland Rosemary Exton and Peter Totterdill
- 251 Innovation adoption of employees in logistics: individual and organisational factors related to the actual use of innovation

 Katarina Putnik, Peter R.A. Oeij, Steven Dhondt, Wouter Van Der Torre and Ernest M.M. De Vroome
 - The human factor in innovation: implications for policies and practices

 Valenting Patrini and Stayroula Demetriades
- Sociotechnical perspectives on digitalisation and Industry 4.0 Ralf Kopp, Steven Dhondt, Hartmut Hirsch-Kreinsen, Michael Kohlgrüber and Paul Preenen

What do we observe in the logistics sector?





What do we observe the logistics sector? So workplace innovation is 90%/ terrific! From those 80% only 10% also used workplace innovation



practices

What is the secret to successful WPI implementation of the cases in the Eurofound research? [Oeij et al., 2015]

Mature employment relationships:

- 1.management, employees and works councils agree about why WPI should be implemented
 - [efficiency, competitive advantage, innovative capability]
- 2.management, employees and works councils agree about leverage factors
- [employee involvement, top management commitment, powerful leadership]
- 3.management, employees and works councils agree about desired impacts factors
- [employee engagement, longer term sustainability, high performance]







Conclusion about Workplace Innovation:

- Workplace innovation can be useful for performance and better jobs, and adopting innovation
- Link organisational (structural) and behavioural (cultural) elements when designing an intervention
- Structural interventions are 'conditional'; cultural interventions are combatting symptoms, not causes; Human resource policies are often 'symptomatic'.



Workplace innovation as an intervention

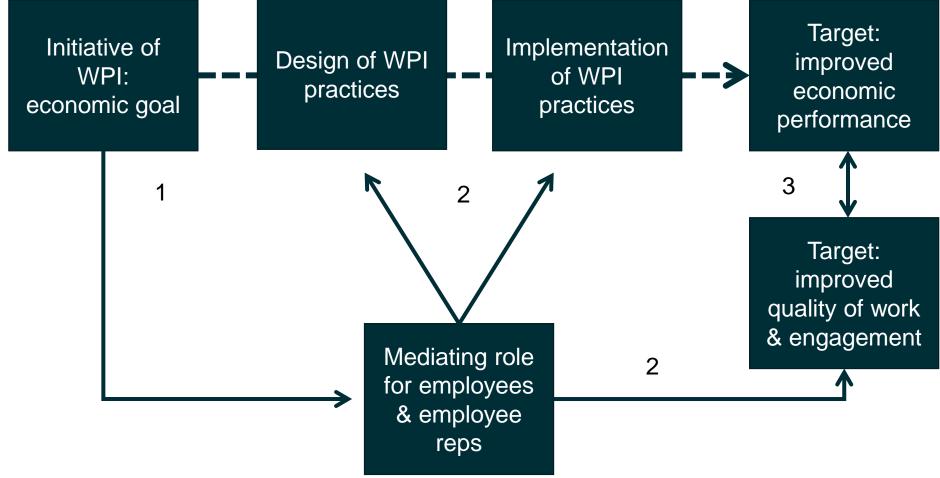


- It starts with a 'problem' that needs to be solved by an 'intervention' [requires solid analysis]
- WPI says: it should positively affect both organisational performance (right to exist) and quality of work (sustainable employability)
- It is about 'content'
 - An intervention in 'structure', 'culture' or mix of both
 - WPI is not the same as technological intervention or 'social' intervention
 - WPI is a means, not a goal in itself
- It is about 'process'
 - It engages and / or involves people
 - It is much like a change process
 - It uses talents of people and further develops those talents
 - There is a complex interaction of 'technology, organisation and people' which makes the process hard to predict and not fully controllable [the risk to fail is significant]



PATTERN OF IMPLEMENTING WPI-PRACTICES (PROCESS MODEL)





To summarize

- -Economic goals are initiated by management
- -Employees are involved in designing and implementing the intervention
- -Quality of work goals become part of the design
- -Key factor: dialogue about common interests for the longer term (mature employment relationships)









Conclusion

- Workplace innovation interventions can be very different regards content, however link organisational (structural) and behavioural (cultural) elements when designing an intervention remains essential
- Link 'necessary' economic goals to 'sufficient' employee interest goals
- Not only the successfull process of development and implementation of WPI benefits highly from the engagement of employees, also the desired longer term goals, and the further / continuous quality of constructive employment relations
- Companies 'resisting to WPI-interventions' can be helped if they can apply the knowledge that is already available; it is likely that it works best if one first looks at economic performance objectives and subsequently connects this to employee interest goals.



Example of what is NOT QUITE workplace innovation

LG Smart Park: WEF Lighthouse Factory | LG

Producer washing machines, refrigirators (and many other consumer electronics)





astounding results!



LG Smart Park: WEF Lighthouse Factory

70% reduction in





Much automation that reduced hard labour and unsafe situations...but the remaining work on the production line is:

- -strong division of labour
- -short cycle times
- repetitive and monotonous
- -unskilled
- -musculo-skeletal risks for the longer term

...only foreign labour migrants are willing to do this work





Source: Peter Totterdill - South Korea: The Future of Workplace Innovation (2023) https://workplaceinnovation.eu/south-korea-the-future-of-workplace-innovation/



INDUSTRY 5.0: A NEW CONTEXT FOR WORKPLACE INNOVATION?



INDUSTRY4.0



Commonalities:

- -apply newest (digital) technologies and continuous innovation;
- -digitalisation pervades into all production processes;
- -I5.0 does not replace but complements I4.0 with human and social values.

INDUSTRY 4.0

INDUSTRY5.0

Techno -driven

- increase efficiency and flexibility
- smart factory / connectivity

Shareholder driven

- limited interest for society
-) limited interest in environmental issues
-) dominance neo-liberal model

Economic value driven

-) job destruction is no issue
-) obsoletion of skills not responsibility of industries

Sustainability

- circularity
- reduce energy / emissions
- not jeopardise future generations

Human-centric

- technology should support humans
- technology should adapt to humans
- technology not impinge worker's rights

) Resilient

- more robust / critical infrastructure
- strategic value chains / security

Source: Breque et al. (2021). Industry 5.0: Towards a sustainable, human-centric and resilient European industry (European Commission, DG R&I).



Conclusion:

The EU Commission puts human-centricity central which is an opportunity for workplace innovation



BRIDGES 5.0 project

interventions and new technology implemented in case companies

What makes these cases Industry 5.0?

- -Human centric
- -Resilient
- -Sustainable

-Human centric: >is new technology applied to augment and support employees? -Human centric:
> do employees
feel and
experience they
are empowered
and sutainably
employable?

outcomes?

-Human centric: >are employees involved in the change and implementation

process?

-Human centric: >Are jobs (re-) designed to ascertain good quality of work?

- -good for business-good for employees
- -good for the planet
- -good for society

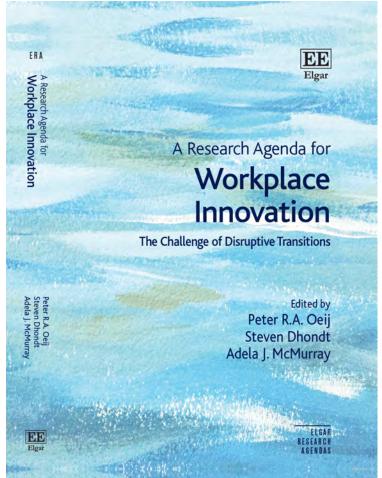




WORKPLACE INNOVATION: THE RECENT BOOK PUBLICATION

4. THE NEW WPI BOOK

A RESEARCH AGENDA FOR WORKPLACE INNOVATION: THE CHALLENGE OF DISRUPTIVE TRANSITIONS



A RESEARCH AGENDA FOR WORKPLACE INNOVATION The Challenge of Disruptive Transitions Edited by Peter R.A. Oeij, TNO, Steven Dhondt, TNO, the Netherlands and KU Leuven, Belgium and Adela J. McMurray, Flinders University, Australia economies and societies. Bringing together an technology with economic, social, and environmental array of highly qualified contributors, this timely book contains important theory research and workplace through technology adoption. This is a analysis on this challenging phenomenon. It includes powerful and timely edition with logically organised valuable resource for managers and scholars alike transformation through the mutually beneficial process of workplace innovation - Peter Boxall, University of Auckland, New Zealand The organization of work and the workplace is under technologies are transforming work across the globe. It is an invaluable contribution to how inclusively to stress. COVID-19 is one example but the longstanding labor supplu shocks flowing from demographics. bu analuzina various country experiences of workplace How are organizations adapting? What constitutes best practice? What are the consequences of COMP-19" different strategies for the organization and for he workforce? These are urgent questions and via Institute, current standing member of Korean thoughtful comparative chapters A Research Agenda Economic, Social and Labour Council timely and much needed contribution." 'As with every previous wave of change, the - Paul Osterman, MIT Sloan School, US n formation revolution and the green transition are bound to transform both consumption and work An insightful and fascinating book that will reshape patterns. This book takes a deep look at the workplace the way you approach innovation in this challenging transformation and how to go about doing it well and disruptive era of unprecedented digital and studying it. Important, useful, and timely for transformation. This book will provide you with tools and strategies to successfully navigate workplace - Carlota Perez, Author of Technological Revolution innovation transition and manage the impacts of and financial Capital: The Dynamics of Bubbles and technology to support and empower your future workforce_read this book and learn from the best! Golden Ages; University College London, University of Sussex, UK and TalTech, Estonia Elgar Research Apendas putline the future of research in a given area. Leading scholars are given the space to explore their subject in provocative ways, and map out the potential directions of travel. They are relevant but also This cutting-edge Research Agendo takes a hard look at workplace innovation practices that are vital for dealing with the global disruptive changes we currently face. It unpacks the ways in which organisations can become more sustainable, not only for value creation and profitability but also for sustainable employability and employee skill Exploring the ways in which workplace innovation provided necessary safeguards to deal with technological and environmental change, chapters provide a state-of-the art discussion of the topic in light of digital disruption

and the Green Revolution. These areas of concern do not beg for one overall solution but for more resilient

organisations in general. Bringing together the most renowned scholars in the field of workplace innovation

With invaluable insight into workplace innovation spanning companies and individuals, nations and regions this Research Agenda explores the results of workplace innovation practices in very different global contexts. It will be

of great value to researchers, policy-makers, practitioners, consultants and students of workplaces, organisations

Contributors include: Tuomo Alasoini, Michiel Bal, Alexandra A. Boeing, Arlanna Costantini, Ezra Dessers, Steven Dhondt Gerbon Hulsegge, Adebis J. McMurray, Mahmoud Moussa, Michiel I. Muchini, Mathew Nifroma, Se Ri No, Peter R. A. Ce Kykatak Oh, Sharon Kaye Parker, Hap Cong Phan, Frank D. Der, Monique Barmiod, Seena Rubbin, Donald (Don) Scott

2023 326 pp Hardback 978 1 80088 193 8 £115.00 / \$165.00 eBook Elgar Research Agenda not valid on books for resale, eBook format or in conjunction with any other after. Valid until 11.08.23

BB Edward Elgar

human behaviour and digital transitions.

ordill Wouter van der Torre Geert Van 2023 326 pp Hardback 978 1 80088 193 8 £115.00 / \$165.00

Edited by Peter R.A. Oeij, TNO, the Netherlands, Steven Dhondt, TNO, the Netherlands and KU Leuven, Belgium and Adela J. McMurray, Flinders University.

Publication Date: 2023 | ISBN: 978 1 80088 193 8 | Extent: 326 pp

A Research Agenda for Workplace Innovation (e-elgar.com)

CONTENT

3 PARTS

Forewo	ord by Professor Dr Eileen Appelbaum	xix
1	An Introduction to the Research Agenda for Workplace Innovation Steven Dhondt, Adela J. McMurray and Peter R.A. Oeij	1
PARTI	TECHNOLOGY AND ORGANISATION: NEW TECHNOLOGY AS A DRIVER FOR CHANGE IN THE ORGANISATION, FOR ITS WORK PROCESSES AND THE WORK OF EMPLOYEES	
2	Workplace innovation at the digital frontier Steven Dhondt, Peter R.A. Oeij and Gerben Hulsegge	15
3	Analysing production disturbances for aligning work organisation, human resource management, and digital transformation Ezra Dessers, Monique Ramioul, Yennef Vereycken, Michiel Bal, Ine Smits and Geert Van Hootege	35 m
4	Augmented telework with avatar technology: impact on workplace and required actions Kentaro Watanabe	51
5	The impact of technology on work: enabling workplace innovation by technological and organisational choice Peter R.A. Oeij, Gerben Hulsegge and Wouter van der To Workplace innovation in the digital era: a role for	67 rre
	SMART work design Sharon Kaye Parker and Alexandra A. Boeing	91
7	How can the Korean workplace become conducive to workplace innovation? Learning from a case study of a manufacturing firm Se Ri No and Kyetaik Oh	113
8	Examining workplace innovation as a driver for innovation in the public sector: evidence from Australia Mahmoud Moussa and Adela McMurray	129

PART	II INDIVIDUAL BEHAVIOUR CONTRIBUTING TO PERFORMANCE GOALS: WORKPLACE ENGAGEMENT TO IMPROVE THE BUSINESS AND THE QUALITY OF WORK		PART II	I CONVERGENCE, POLICY ABOUT WORKPLACE INNOVATION, AND THE AGENDA FOR THE FUTURE	
9	A psychological workplace innovation construct Adela J. McMurray and Don Scott	147		Workplace innovation: a converging or diverging research field? Peter R.A. Oeij, Steven Dhondt and Adela J. McMurray	201
10	Job crafting and work engagement among remote workers in Italy: Lessons for workplace innovation Arianna Costantini and Serena Rubini	167		Towards research-based policy and practice of workplace innovation in Europe Frank D. Pot, Tuomo Alasoini, Peter Totterdill and	
11	Ethical leadership as workplace innovation and enabler for employee commitment and innovative work behaviours in Vietnam Michael K. Muchiri, Hiep Cong Pham, Mathews Nkhoma and Adela J. McMurray	183		Developing a scientific and policy research agenda for workplace innovation: an invitation for conversation and collaboration Peter R.A. Oeij, Steven Dhondt and Adela J. McMurray	271

Countries participating:

Europe: Netherlands, Belgium, United Kindom, Ireland, Germany, Finland, Italy Asia: Vietnam, S-Korea, Japan Australia
USA, Latin America, New Zealand: foreword and endorsers

TNO innovation for life

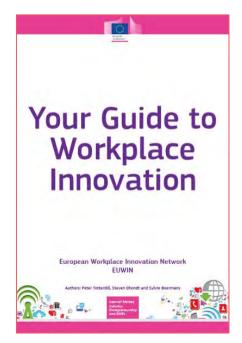


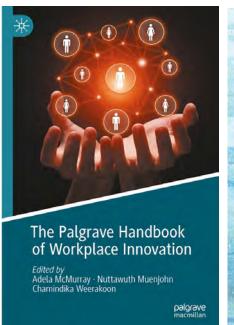


WORKPLACE INNOVATION: RELEVANT SOURCES















REFERENCES

-) Breque, M., De Nul, L.& Petridis, A. (2021). *Industry 5.0. Towards a sustainable, human-centric and resilient European industry*. R&I PAPER SERIES, POLICY BRIEF. DIRECTORATE-GENERAL FOR RESEARCH AND INNOVATION.
- Naranika-Murray, M. & Oeij, P.R.A. (2017). The role of work and organizational psychology for workplace innovation practice: From short-sightedness to eagle view. *European Work and Organizational Psychology in Practice*, 1, 19-30 (also In: Oeij, P. R.A., Rus, D. and Pot F.D. (eds) (2017). *Workplace Innovation: Theory, Research and Practice* (pp. 339-353). Springer: Cham).
-) Oeij, P. R. A., and Dhondt, S. (2017) Theoretical approaches supporting workplace innovation. In P.R.A. Oeij, D. Rus, and F.D. Pot (Eds.). *Workplace innovation: Theory, research and practice* (pp. 63-78), Series 'Aligning Perspectives on Health, Safety and Well-Being'. Cham (Switzerland): Springer
-) Oeij, P.R.A., Dhondt, S., & McMurray, A. (2021, December). Workplace innovation literature review: a converging or diverging research field? A preparatory study for a research agenda. TNO Report R12732. Leiden: TNO Healthy Living.
-) Oeij P. R.A., Dhondt S., Žiauberytė-Jakštienė R., Corral A., Totterdill P. (2016). Implementing workplace innovation across Europe: Why, How and What? *Economic and Social Changes: Facts, Trends, Forecast,* no. 5, pp. 195-218. DOI: 10.15838/esc/2016.5.47.11
- Oeij, P. R.A., Rus, D. and Pot F.D. (eds) (2017). Workplace Innovation: Theory, Research and Practice, Series 'Aligning Perspectives on Health, Safety and Well-Being'. Springer: Cham (Switzerland); DOI 10.1007/978-3-319-56333-6; ISBN 978-3-319-56332-9.
- Putnik, K., Oeij, P.R.A., et al. (2019) Innovation adoption of employees in Logistics: individual and organizational factors related to the actual use of innovation. *International Journal of Technology Transfer and Commercialisation*, 16(3) 251 265

KEY REFERENCES WORKPLACE INNOVATION

- Dhondt, S., Oeij, P.R.A., & Pot, F.D. (2021). Digital transformation of work: spillover effects of workplace innovation on social innovation. In J. Howaldt, C. Kaletka, & A. Schröder (Eds.). A Research Agenda for Social Innovation (pp. 99-116). Cheltenham, UK: Edward Elgar Publishing.
-) Dworschak, B., Senderek, R., & Kopp, R. (Eds) (2021), Workplace Innovation and Leadership. EHP-Verlag Andreas Kohlhage; Gevelsberg (Germany)
- Howaldt, J. and Oeij, P.R.A. (Eds.) (2016). Workplace innovation Social innovation: Shaping work organisation and working life. Special issue of World Review of Entrepreneurship, Management and Sustainable, Issue, 12, Vol. 1, pp. 1-129.
- Naranika-Murray, M. & Oeij, P.R.A. (2017). The role of work and organizational psychology for workplace innovation practice: From short-sightedness to eagle view. European Work and Organizational Psychology in Practice, 1, 19-30 (also In: Oeij, P. R.A., Rus, D. and Pot F.D. (eds) (2017). Workplace Innovation: Theory, Research and Practice (pp. 339-353). Springer: Cham).
- McMurray, A., Muenjohn, N. & Weerakoon, C. (Eds.) (2021), The Palgrave Handbook of Workplace Innovation across Developed and Developing Countries. London: Palgrave Macmillan.
- Deij, Peter (16 May 2023). 'Workplace innovation: Industry5.0 style'. Presentation for "The future of workplace innovation", International Conference on Workplace Innovation, Organised by Korea Labor Institute and hosted by Korean Federation of Banks, Seoul, Republic of South Korea. (https://www.slideshare.net/PeterOeij/peter-oeijworkplace-innovation-industry-50-style)
- Deij, P. & Dhondt, S. (May 2022). Workplace innovation Mapping the development in different scientific disciplines. Blog for BEYOND4.0. Retrieved from www.beyond4-0.eu: https://www.beyond4-0.eu <a href="https://ww
-) Oeij, P.R.A., Dhondt, S., & McMurray, A. (2021, December). Workplace innovation literature review: a converging or diverging research field? A preparatory study for a research agenda. TNO Report R12732. Leiden: TNO Healthy Living.
- Oeij, P.R.A., Dhondt, S., & McMurray, A. (eds.)(2023), A Research Agenda for Workplace Innovation: The Challenge of Disruptive Transitions. Cheltenham, UK: Edward Elgar Publishing.
- Oeij P. R.A., Dhondt S., Žiauberytė-Jakštienė R., Corral A., Totterdill P. Implementing workplace innovation across Europe: Why, How and What? *Economic and Social Changes: Facts, Trends, Forecast*, 2016, no. 5, pp. 195-218. DOI: 10.15838/esc/2016.5.47.11
- Deij, P.R.A., Rus, D., Dhondt, S. & Van Hootegem, G. (Eds) (2019). Workplace innovation in the era of disruptive technologies. Special Issue of International Journal of Technology Transfer and Commercialisation.16(3), 199-309. DOI: 10.1504/IJTTC.2019.10021355
- Deij, P. R.A., Rus, D. and Pot F.D. (eds) (2017). Workplace Innovation: Theory, Research and Practice, Series 'Aligning Perspectives on Health, Safety and Well-Being'. Springer: Cham (Switzerland); DOI 10.1007/978-3-319-56333-6; ISBN 978-3-319-56332-9.
-) Oeij, P., Vaas, F. & Dhondt, S. (2022), Two cases of workplace innovation in the Netherlands (Report for Korea Labor Institute). Leiden: TNO.)
- Pot. F. (2011). Workplace innovation for better jobs and performance. International Journal of Productivity and Performance Management, 60(4), 404-415.
- Rus, D., Carter, A., & Roth, C. (eds) (2017) Workplace innovation Special edition Vol. 1, EAWOP in Practice, 11, 1–87. Retrieved from http://www.eawop.org/ckeditor_assets/attachments/1046/specialissue_part1_2017_full.pdf?1535712991
- Nus, D., Carter, A., & Roth, C. (eds) (2019) Workplace innovation Special edition Vol. 2, EAWOP in Practice, 11, 1–129. Retrieved from http://www.eawop.org/ckeditor_assets/attachments/1144/inpractice_2019_special_issue_11_full.pdf?1557399438
- Totterdill, P. and Exton, R. (2014), 'Defining workplace innovation: The fifth element', Strategic Direction, Vol. 30, No. 9, pp. 12-16.
- Totterdill, P., Exton, O., Exton, R., Sherrin, J., (2009). Workplace Innovation in European Countries. Report to KOWIN (Korean Ministry of Labor). Nottingham: UKWON.
- Totterdill, P., Pot, F., Dhondt, S. & Warhurst, C. (2022). Workplace innovation: Europe's competitive edge: A manifesto for enhanced performance and working lives. European Journal of Workplace Innovation, 7(1), 132–141. doi: https://doi.org/10.46364/ejwi.v7i1.935
- Pot, Frank, Dhondt, Steven, Oeij, Peter, Rus, Diana, & Totterdill, Peter (2019). Complementing digitalisation with workplace innovation. In: Howaldt, J., Kaletka, C., Schröder, A., Zirngiebl, M. (eds.), Atlas of Social Innovation. 2nd Volume A world of new practices (pp. 42-46). Oekoem Verlag, München (ISBN: 978-3-96238-157-8). Download free: www.socialinnovationatlas.net

TNO innovation for life



Thank you for your attention!

Peter Oeij [peter.oeij@tno.nl]





