Employee-Driven Innovation

A New Approach

Edited by Steen Høyrup, Maria Bonnafous-Boucher, Cathrine Hasse, Maja Lotz and Kirsten Møller



Employee-Driven Innovation

A New Approach

Edited by

Steen Høyrup

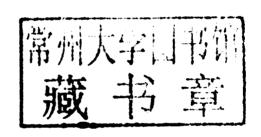
Aarhus University, Denmark

Maria Bonnafous-Boucher Novancia, Paris, France

Cathrine Hasse Aarhus University, Denmark

Maja Lotz Copenhagen Business School, Denmark

Kirsten Møller Aarhus University, Denmark







Selection and editorial content © Steen Høyrup, Maria Bonnafous-Boucher, Cathrine Hasse, Maja Lotz, Kirsten Møller 2012 Individual chapters © the contributors 2012 Foreword © Tara Fenwick 2012

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No portion of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, Saffron House, 6-10 Kirby Street, London EC1N 8TS.

Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The authors have asserted their rights to be identified as the authors of this work in accordance with the Copyright, Designs and Patents Act 1988.

First published 2012 by PALGRAVE MACMILLAN

Palgrave Macmillan in the UK is an imprint of Macmillan Publishers Limited, registered in England, company number 785998, of Houndmills, Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

Palgrave Macmillan is the global academic imprint of the above companies and has companies and representatives throughout the world.

Palgrave® and Macmillan® are registered trademarks in the United States, the United Kingdom, Europe and other countries

ISBN: 978-0-230-27862-2

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources, Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Employee-driven innovation: a new approach / edited by Steen Høyrup

...[et al.].

p. cm.

Includes bibliographical references.

ISBN 978-0-230-27862-2

1. Technological innovations – Employee participation.

I. Høyrup, Steen.

HD45.E367 2012 658.3'14-dc23

2012011154

10 9 8 7 6 5 4 3 2 1 21 20 19 18 17 16 15 14 13 12

Printed and bound in Great Britain by CPI Antony Rowe, Chippenham and Eastbourne

Foreword

Innovation is a powerful and pervasive discourse in workplaces these days. In both private and public sector organizations, innovation is promoted as the critical engine of growth, or perhaps just survival, in hyper-competitive global capitalism. Policy documents stress innovation as a critical skill in the so-called knowledge economy. The most desirable employees are those who are innovative. The most important organizational activities are those dedicated to generating, capturing, institutionalizing and marketing innovation. With so much at stake, hierarchies have flourished in the divisions that are taken to exist between those elite designers valued as the *innovators* and those others who so often are assumed to be the *implementers* – that is, those who engineer, maintain and imaginatively negotiate a mass of everyday problem-solving to make innovations actually work.

But just what is 'innovation', and whom does it serve? In critical circles, important questions have been raised about this discourse for some time. What counts as innovative knowledge tends to be that which is considered novel, solves practical problems, and commands market value. But, of course, all this is determined by very particular interests that recognize and value most those ideas that yield maximum exchange value in networks of production. What tends to be overlooked are other forms of innovation. These include those everyday improvisations that workers generate all the time: small modifications to work processes, inventive solutions that emerge in practice, everyday openings for creative expression that workers somehow find and exploit, and even innovative approaches to well-being. What also tend to become obscured in organizational discussions of innovation are both creative *challenges* to the hegemonic discourses of profit, expansion and productivity driving the current global economy, and creative *alternatives* to received categories and processes.

The authors in this collection have adopted a unique vantage point from which to consider issues of innovation: the employee who 'drives' innovation. What constitutes innovation, from the employees' perspectives? What do they value as innovation? The cases reported here show us glimpses of workers' everyday activity, where innovation processes unfold in the very activities of practice. That is, the divisions between innovation and implementation, or between designing and using, are much more enmeshed than conventional portrayals of innovation have assumed. Further, these cases provide insights into workers' motivations for innovating. While some employee-driven innovations may be subversive, most tend to be genuinely oriented towards seeding more productive, effective and sustainable

work processes. Indeed, many employees generate innovative work-arounds simply to make things work that wouldn't otherwise, or to stretch resources when they don't have the tools they need. In this sense, employee-driven innovation can draw necessary attention to problematic work conditions.

Broader questions raised in the discussions here about employee-driven innovation pertain to ownership. In a knowledge economy, innovative ideas are important capital. To what extent, and in what circumstances, do the employee and the organization respectively deserve recognition and material benefit from employees' innovative activity? Laws governing patents and copyrights are struggling to keep up with the issues posed by the co-production of ideas, products and processes involving employees as well as users and designers. The viral flourishing of virtual innovations, and the growing internet ethos of sharing creative material and ideas in a logic of open access, also raise interesting questions about the terms of exchange and dissemination of innovative property generated by employees.

At the broadest level, these chapters refocus the discussion about the purposes and nature of innovation in work organizations. What counts as good innovation, and when is innovation problematic? Whose assessment determines which innovations become amplified and extended, which are rewarded, and which are stifled? How do different organizational stakeholders – clients, trade unions, government, global markets, financiers, regulatory agencies, and so on – affect the processes of employee-driven innovation? Some authors draw attention to different forms of innovation, and suggest the need for new vocabularies with which to analyse and represent innovative activity. Some raise central questions about the 'goods' that are taken to be inherent in innovative activity, innovative products, and the current prevalence of the innovation discourse in work, policy and learning.

Finally, and perhaps most importantly, this collection causes the reader to question whose interests are served through this pervasive press for innovation in work, and the extent to which opportunities for employee-driven innovation benefit the workers doing the driving.

Tara Fenwick University of Stirling, UK October 2011

Acknowledgements

Thank you to J. Tidd, J. Bessant and K. Pavitt for permission to use the Figure: Key areas for successful innovation management (Figure 10.1, page 192).

Contributors

Tone Merethe Aasen is a research manager at NTNU Social Research AS, Norway. She holds an MSc in Biophysics and Medical Engineering from Norwegian University of Science and Technology (NTNU), an MMa from BI Norwegian School of Management and a PhD in Organizational Innovation Processes from NTNU. Her main research interests include innovation processes and innovation management, organizational complexity and business performance.

Oscar Amundsen is a researcher in the Department of Adult Learning and Counselling, Norwegian University of Science and Technology in Trondheim, Norway. His Master's is in Language and Literature Studies and includes disciplines from social sciences, humanities and technology studies. His PhD is in Organizational Studies, and his main research interests are change, innovation, development and culture in organizations.

Stephen Billett is Professor of Adult and Vocational Education in the School of Education and Professional Studies at Griffith University, Brisbane, Australia. Stephen has worked as a vocational educator, educational administrator, teacher educator, professional development practitioner and policy developer within the Australian vocational education system and as a teacher and researcher at Griffith University. Since 1992, he has researched learning through and for work and has published widely in the fields of vocational learning, workplace learning and conceptual accounts of learning for vocational purposes.

Maria Bonnafous-Boucher is a researcher and Dean of Research at Novancia Business School, Paris. She is a Co-Scientific Director of the Chair of Research in Entrepreneurship and Innovation, Paris Chamber of Commerce and Industry, France. She holds a PhD in Strategy and Organizational Studies and a Master's in Philosophy, majoring in Politics and Morals. Her main research interests include institutional entrepreneurship (clusters policy and governance), stakeholder theory (governance), business ethics and organizational studies.

David Boud is Professor of Adult Education at the University of Technology, Sydney. His research interests are in the areas of learning in workplaces, continuing professional education and assessment for learning in higher and professional education.

Ulrik Brandi is Associate Professor in the Department of Education, Aarhus University. Ulrik holds a Master's in Educational Studies and Philosophy

support, computer-mediated communication, innovation and creativity management and organizational learning and safety.

Kåre Hansen is Research Director at International Research Institute of Stavanger (IRIS) in Bergen, Norway. He has conducted several projects focusing on various aspects of working life in Norway, especially concerning employee participation, working environment and cooperation between unions and management. He is currently managing a project studying conflict management in Norwegian knowledge companies.

Cathrine Hasse is Professor in the Department of Education, Aarhus University, Denmark. She holds a PhD in Anthropology from the University of Copenhagen and has studied organizational cultures in academia for more than 15 years. She has worked on how culture influences learning at physics institutes in five European countries, and in the project 'The Cultural Dimensions of Science' she compared physicists learning, teaching and researching in Denmark and Italy. She takes a special interest in how technologies become entangled with cultural learning processes and how cultural models both include and exclude people and artefacts from organizations.

Steen Høyrup is Associate Professor and Director of the research program Organization and Learning in the Department of Education, Aarhus University, Denmark. His research interests include employee-driven innovation, organizational learning and change, competence development and reflection and learning.

Natasha Kersh is Research Officer and MA tutor at the Faculty of Policy and Society, Institute of Education, University of London. Her research has focused on workplace learning, employability and post-compulsory education. She undertook her PhD research in Comparative and International Education at Oxford University, and is now a member of the Economic and Social Research Council Centre for Learning and Life Chances in Knowledge Economies and Societies (LLAKES). She is researching aspects of adult literacy and workplace learning.

Peer Hull Kristensen is Professor of the Sociology of Firms and Work Organization in the Department of Business and Politics, Copenhagen Business School. His research interest is the comparative study of national business systems, labour markets, the organization of multinational companies and the ongoing mutations of capitalisms. His current focus is on how changing forms of work organization enable new strategies for firms globally, and how this in turn is made possible by making novel use of institutions and creating novel institutional complementarities.

Tea Lempiälä is a researcher at Aalto University, Helsinki, Finland. She holds a DrSc (Economics) from Aalto University, School of Economics. Her main research interests include practices and processes of innovation, collaborative idea development, interdisciplinary research and sustainability.

Maja Lotz is Assistant Professor in the Department of Business and Politics, Copenhagen Business School. She is a post-doctoral fellow at Stanford University. Rooted within the field of Organizational Sociology, she researches into new forms of work organization, co-creation, learning and experimental governance within and across various organizational settings (such as teams, units and firms). In particular, she has studied the dynamics of everyday work roles, communities and work-organizing practices enabling mutual learning and innovative co-creation in current economic organizations.

Kirsten Møller holds a Master's in Psychology from Copenhagen University, Denmark. She is Coordinator of the European Research Network, EDI-Europe. This network has its secretariat at Aarhus University, Denmark. She has worked as an advisor on labour market and educational issues in the Ministry of Employment in Denmark and in the Danish Trade Union Movement, Earlier she worked in Nordic and international teams of researchers at the Nordic Council of Ministers and at the former Danish University: The Royal Danish School of Educational Studies. Her research interests have included sociopsychological stress, gender-related workplace behaviour, employee-driven innovation, social innovation and organizational learning and change.

Oriana Price has worked in the private, public and higher education sectors for the past 20 years. In these sectors she has held numerous management and specialist positions and led a number of organizational change initiatives. Having completed her BA in Psychology and her MBA, Oriana is now completing her doctoral studies in the area of organizational change and practice at the University of Technology, Sydney.

Renaud Redien-Collot is Director of International Affairs at Novancia, Paris. His research interests include minority entrepreneurship, theories of innovation, leadership and intrapreneurship, entrepreneurship education, epistemology of the praxis in the realm of entrepreneurship and the development of public and private discourse about entrepreneurs and entrepreneurship.

Hermine Scheeres is Adjunct Professor in the Faculty of Arts and Social Sciences, University of Technology, Sydney. Her research focuses on communication and culture, organizational learning and organizational change. Her publications span the fields of adult education language and discourse. and work and organizational studies. Recent research projects include the investigation of learning and change in public and private organizations, and communication in hospital emergency departments.

Amir H. Taherizadeh is currently a research fellow at Georg Simon Ohm University of Applied Sciences, Nuremberg (Germany). Amir holds an MBA in International Business and Innovation Management from the University of Malaya (UM) and a Master's in Language Education (TEFL) from the University of Isfahan. Amir's main research interests include innovation management, internationalization of SMEs, strategy and organization.

Ann-Charlotte Teglborg is Professor and Researcher at Novancia, a business school of Paris dedicated to entrepreneurship and business development. Ann holds a PhD in Management from Paris I Sorbonne-IAE de Paris and HEC Paris. Her main research interests include employee-driven innovation and open innovation.

Guy Van Gyes obtained degrees in Political Sciences (1992) and History (1991) at the Catholic University of Leuven (K.U. Leuven). He started his research career in the Department of Sociology at K.U. Leuven. In 1993, he became a research associate at HIVA. Since 1999, he has been a research manager at HIVA in the work and organization sector. His research field includes industrial relations, employee participation and organizational development.

Céline Viala is a researcher at Arcos, France. Céline holds a PhD from Paris-Dauphine University. Her main research interests include corporate entrepreneurship and innovation management. She has specialized in qualitative methods.

Edmund Waite is a researcher at LLAKES (Centre for Learning and Life Chances in Knowledge Economies and Societies), Institute of Education, London University. He holds a PhD in Social Anthropology from Cambridge University. His research interests and publications relate to the study of adult literacy in the UK and workplace learning, as well as the anthropological study of education in Muslim societies.

Sari Yli-Kauhaluoma is a research fellow in Organization and Management at the Aalto University, School of Economics in Helsinki, Finland. Her main research interests include collaboration dynamics and technologyrelated practices in professional communities. Her work has appeared in Organization, International Small Business Journal and Time & Society.

Abbreviations

ABSWL Adult Basic Skills and Workplace Learning

ANT Actor Network Theory

Ba a group context where knowledge is shared, generated and put

into practice through collaboration

CEO chief executive officer, managing director, the highest-ranking

corporate officer

CERI/STI Centre for Educational Research and Innovation/Science,

Technology and Industry

CESifo Centre for Economic Studies

DFEE Department for Education and Employment

DUI-mode Doing Using Interacting mode EDI employee-driven innovation

EDUADM administration of educational affairs

EO entrepreneurial orientation

ESOL English for speakers of other languages

E-tools electronic tools EU European Union

EWC European Works Council

EWCS European Working Conditions Survey
GCSE General Certificate of Secondary Education
HET Suzhou Dushu Lake Higher Education Town

HR human resources

IALS International Adult Literacy Survey

ICMI Innovation Capability Measurement Instrument

ICT information communication technology

IDP integrated development practices

IfM Institut für Mittelstandsforschung (Bonn)

IR industrial relations

IWB innovative work behaviour

LAICS leadership and innovation in complex systems

LLAKES Centre for Learning and Life Chances in Knowledge Economies

and Societies, University of London

LO Landsorganisationen i Danmark (The Danish Confederation of

Trade Unions)

LSM learning support managers

MBA Master of Business Administration

MNC multinational corporations

NACE classification of economic activities in the European

community

xviii List of Abbreviations

NS not significant

OECD Organisation for Economic Co-operation and Development

PC personal computer PVC poly vinyl chloride

PVDF a special kind of monomer renowned for its technical

characteristics

QIA Quality Improvement Agency
QPS quality production systems
R&D research and development
RBV resource-based view

S&T science and technology
SFL skills for life

SIP Suzhou Industrial Park

SME small and medium-sized enterprises SOADM administration of social affairs STS Southern Transport Systems

UK United Kingdom

ULR union learning representatives

UNU-MERIT United Nations University is a research and training centre

of United Nations University and works in close collabor-

ation with the University of Maastricht

VIS visitation office

Contents

Li	st of Tables	vii
Li	st of Figures	viii
Fo	reword by Tara Fenwick	ix
Αc	knowledgements	хi
No	otes on Contributors	xii
Li	st of Abbreviations	xvii
	Part I The Nature of Employee-Driven Innovation	
1	Employee-Driven Innovation: A New Phenomenon, Concept and Mode of Innovation Steen Høyrup	3
2	Employee-Driven Innovation: Operating in a Chiaroscuro Ann-Charlotte Teglborg, Renaud Redien-Collot, Maria Bonnafous-Boucher and Céline Viala	34
3	In Search of Best Practices for Employee-Driven Innovation: Experiences from Norwegian Work Life Tone Merethe Aasen, Oscar Amundsen, Leif Jarle Gressgård and Kåre Hansen	57
	Part II Employee-Driven Innovation in the Workplace Mediated through Employees' Learning	
4	Creating Work: Employee-Driven Innovation through Work Practice Reconstruction Oriana Milani Price, David Boud and Hermine Scheeres	77
5	Explaining Innovation at Work: A Socio-Personal Account Stephen Billett	92
6	Innovation Competency – An Essential Organizational Asset Lotte Darsø	108
7	Employee-Driven Innovation and Practice-Based Learning in Organizational Cultures Ulrik Brandi and Cathrine Hasse	127

8	Employee-Driven Innovation Amongst 'Routine' Employees in the UK: The Role of Organizational 'Strategies' and Individual 'Tactics' Edmund Waite, Karen Evans and Natasha Kersh	149
	Part III Employee-Driven Innovation Unfolded in Global Networks and Complex Systems	
9	Moving Organizations toward Employee-Driven Innovation (EDI) in Work Practices and on a Global Scale: Possibilities and Challenges Maja Lotz and Peer Hull Kristensen	167
10	Exploring the Employee-Driven Innovation Concept by Comparing 'Innovation Capability Management' Among German and Chinese Firms Werner Fees and Amir H. Taherizadeh	185
11	Privileged Yet Restricted? Employee-Driven Innovation and Learning in Three R&D Communities Tea Lempiälä and Sari Yli-Kauhaluoma	211
12	Employee-Driven Innovation and Industrial Relations Stan De Spiegelaere and Guy Van Gyes	230
Inde	ex	247

Tables

2.1	ravi and Solvay-lavaux satisfy the three variables of	
	entrepreneurial orientation	43
3.1	Case enterprises	61
10.1	Summary of the data collection	194
10.2	Descriptive data	195
10.3	Average performance on each innovation dimension within	
	German and Chinese firms	196
10.4	Average total innovation capability in German and	
	Chinese firms	197
10.5	Detailed comparative analysis of five key dimensions of	
	successful innovation management	199
11.1	Three R&D communities	216
11.2	Results of cross-case comparison	218
12.1	Works councils and innovation	234
12.2	Unions and innovation	237
12.3	Possible effects of employee participation on	
	innovation processes	238

Figures

1.1	EDI in an organizational and global context	12
3.1	Interrelated elements of EDI	68
6.1	The Diamond of Innovation	111
6.2	Preject-project	115
6.3	Leadership roles	115
6.4	The Diamond of Innovation linked to four types of knowing	116
6.5	Framework for innovation competency	118
10.1	Key areas for successful innovation management	192
10.2	Average performance on each innovation dimension within	
	German and Chinese firms	197

Part I

The Nature of Employee-Driven Innovation