



# **Third European Company Survey**

## **Workplace innovation in European companies**

### **Technical annex**

*Note:* This technical annex is related to the report *Third European Company Survey – Workplace innovation in European companies* (Eurofound, 2015), which is available online at <http://www.eurofound.europa.eu/publications/report/2015/working-conditions/third-european-company-survey-workplace-innovation-in-european-companies>

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Disclaimer: This report has not been subject to the full Eurofound editorial and publication process.

# 1 Methodology

## A1.1 Case study design, target population, sample and selection procedure

To get in-depth information on the dynamics of workplace innovation (WPI), a number of company case studies were conducted and analysed. Each company case study involved three face to face interviews – which ranged from 45 to 90 minutes – with a manager, a group of employees and, if available, an employee representative.

The unit of enquiry was threefold: management, employees and employee representatives in 51 companies across a limited number of EU Member States. Eurofound pre-selected a number of possible EU Member States. The final selection covered almost all European regions. The cases were divided into three regions that consisted of:

- Continental and Western: DE, DK, NL, UK, IE (22 cases)
- Mediterranean: ES, EL (12 cases)
- Central and Eastern Europe: BG, PL, LT (17 cases).

To arrive at this group, the following sample and selection procedure was followed (see Dhondt et al, February 2014; TNO, IKEI, WPI, September 2014, in the reference list under ‘Interim reports of the study). Firstly, the ‘WPI-Index score’ was developed as a means to measure workplace innovation in order to select candidate companies from the 30,000 strong database that had been generated by the European Company Survey 2013 (ECS2013). The WPI-Index score is constructed of separate items derived from the ECS Management Questionnaire. The Fifth Element-model (Totterdill and Exton, 2014) served as a guide for a *theory based* construction of this index. The model describes four elements of workplace innovation, which have been deducted from the theory of high performance work systems. From the ECS questionnaire, items were selected that could be connected to the four elements of the Fifth Element-model. The use of Principal Component Analysis (PCA), a factor analysis that applies varimax rotation, resulted in a latent structure in the data consisting of seven factors: 1) innovation (product and organisational 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 organisation autonomy (autonomy), 6) work organisation career (long-term career plans), 7) hierarchy:

- factor 1: innovation (GACTEDE\_2, BINNMAPR\_2, BINNPRSE\_2, BINNOPROC\_2, JCHALLOCC\_2);
- factor 2: voice/workplace partnership (IINIMWPP\_2, IINIMPEA\_2);
- factor 3: learning and reflection (HTRAIN\_PERC\_MS, HAPRAIS\_PERC\_MS, ELELEDOC\_2);
- factor 4: structure and systems (HVPGRPE\_2, HVPPRSH\_2, HVPSHOW\_2);
- factor 5: work organisation autonomy (EPLANN\_2, FTAUTON\_2, HFLEXI\_PERC\_MS);
- factor 6: work organisation career (HRLONG\_2, HRINTERN\_2);
- factor 7: hierarchy( EHIERARCH\_2).

The WPI-Index score was a calculated sum score of these separate factors, implying that each of these elements was given the same weight in the WPI-index.

**WPI-index:**

Y\_WPI\_7\_FINAL= Y\_innovation, Y\_voice, Y\_learn\_reflect, Y\_struct\_syst, Y\_work\_org\_auton,  
Y\_work\_org\_career, EHIERARCH\_2

The solution, to a certain extent, overlaps with the Fifth Element-model and other ‘High Performance Works Systems theories. Work organisation is divided into: work organisation autonomy and work organisation career. Hierarchy has emerged as a separate factor. Innovative culture refers to: learning, customer orientation and resilient ways of dealing with change. Voice points to the importance of employees/employee representatives having a say in decisions and changes. Bottom up organisation underlines the importance of employees’ job autonomy and their sovereignty in choosing flexible working hours. The Index indicates that WPI is represented by several factors which supports the view that ‘workplace innovation’ resembles a ‘high performance work systems’ solution in which a multifaceted ‘bundle of resources’ seem to be related. In practice, ECS-companies appear to ‘bundle’ several measures in regard to workplace innovation.

After computing the WPI-Index score for each company in the ECS dataset, the second step was to rank all of the company scores in each of the pre-selected 14 countries (later reduced to 10 countries). The criterion to select companies was a high WPI-Index score – ranging from 1 to 100 – and an even as possible distribution across countries. The aim was to select companies from the top 5%, which translates to a cut-off score of 70, in WPI-scores. Table A1.1 presents the number of companies per country with a WPI-score of 70. Categories are divided and grouped by the WPI-Index scores, 70-79, 80-89, and 90 plus.

**Table A1.1 Distribution of top WPI-Index scores for companies (50-249, and 250+ employees) for the 14 countries**

WPI-score	50 to 249 employees				250 employees plus		
	90 plus	80 to 89	70 to 79		90 plus	80 to 89	70 to 79
1,00 Belgium	1	5	11	1,00 Belgium	1	4	11
2,00 Bulgaria	0	0	3	2,00 Bulgaria	0	0	1
3,00 Czech Republic	0	0	0	3,00 Czech Republic	0	0	5
4,00 Denmark	6	15	53	4,00 Denmark	5	10	33
5,00 Germany	1	3	9	5,00 Germany	1	5	23
7,00 Ireland	1	1	8	7,00 Ireland	0	2	7
8,00 Greece	1	2	3	8,00 Greece	0	1	1
9,00 Spain	1	4	24	9,00 Spain	4	8	21
15,00 Lithuania	0	0	4	15,00 Lithuania	0	2	2
19,00 Netherlands	1	14	44	19,00 Netherlands	5	12	38
21,00 Poland	0	1	16	21,00 Poland	0	7	13
22,00 Portugal	0	1	16	22,00 Portugal	0	3	2
27,00 Sweden	0	7	36	27,00 Sweden	0	14	21
28,00 United Kingdom	0	10	23	28,00 United Kingdom	2	7	31

Note: The figures 1,00 to 28,00 in column ‘WPI-score’ refer to the assigned number of each country in the ECS database.

The third step was to produce from these 1,284 anonymous cases, a list of companies with names and addresses which included also companies with a lower WPI-Index score (the lowest score was 50). A low response of 5% was held possible. For reasons of confidentiality this was carried out by the organisation that constructed the ECS2013 sample and performed the fieldwork.

Researchers were unable to relate these 51 cases to scores on the ECS items due to reasons of confidentiality restrictions. The candidate-list contained 1,284 companies (685 with <250 employees; 599 with  $\geq 250$  employees). Due to the fact that some countries have more companies with higher WPI-scores than others, the variation across countries was large. For example: in Denmark there were over 300 companies on the list, whilst in Bulgaria and Greece there were only 34 and 33 companies respectively.

## **A1.2 Measuring instruments, pilots and fieldwork**

### *Interview guide development*

Interview guides were developed for the separate interviews with the manager, the employee group and the employee representatives. Throughout the interviews the five research questions were leading and the Fifth Element-model functioned as a theoretical background. The complete Interview Guide (TNO, IKEL, WPI, April 2014) consisted of six data gathering instruments: a pre-screening telephone interview, a manager interview topic list, an employee group interview topic list, an employee representative topic list, a mini-survey for the manager, and a mini survey for the interviewer. The Interview Guide also contained a set of cards which explained several terms that could be use during the interviews and example letters to facilitate further communication with the companies.

### *Pilot study, training and translation*

Two pilot case studies were carried out to test the Interview Guide (Totterdill and Oeij, June 2014). This led to the question being adjusted to enhance comprehensibility and to demonstrate the validity of the gathered material. A necessary effort was made to transform a number of lists of ‘topics’ into ‘closed questions’; this resulted in fixed answering categories and reduced the number of questions and topics with ‘open answering categories’. This step was essential to ensure the data would be suitable for study with the Qualitative Comparative Analysis (QCA); which demanded comparability of variables across cases.

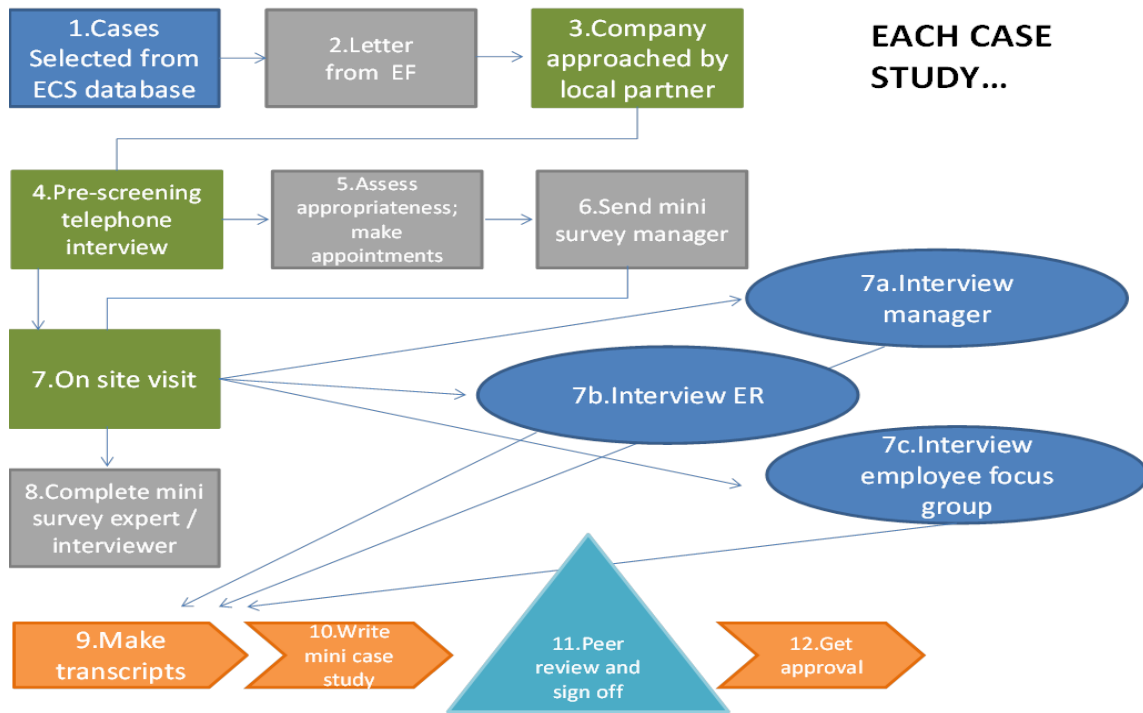
After each company visit, the researchers/interviewers could transform the interview results into pre-coded data and enter this pre-coded data into a ‘coding matrix’, which is an IT-facility. This was then supported with an electronic data-entry file methodology. The coding-matrix contained all the questions of the six data gathering instruments of the Interview Guide (TNO, IKEL, WPI, April 2014). The data of the coding-matrix can be imported with excel and SPSS for statistical processing.

After the pilot study, all partner organisations received training in how to use the Interview Guide. This training was facilitated either through, central training at the TNO premises, on-site in-company training by TNO, and/or video-training using video-conferencing technology. Each partner translated the Interview Guide’s data gathering instruments into their native language before performing the company visits and interviews.

### *Fieldwork and contact strategy*

Figure A1.1 shows a flow-diagram which demonstrates the steps taken per case study and the contacting strategy.

Figure A1.1: Steps in each case study



Not including the pilot studies; the fieldwork began in April 2014 and ended in February 2015. Step 1, which was the case selection discussed above, resulted in the list of more than 1,200 candidate cases. Each research partner per country selected batches of approximately 10 companies. Subsequently, an announcement letter was sent by Eurofound to these companies (step 2) directly followed by a letter (or email) from the partner to initiate contact with the company (step 3). The partner called the company to perform a pre-screening telephone interview with the manager (step 4) to assess the suitability of the company to participate in the project and, if so, to make arrangements for a company visit. During this phone call the interviewer and the manager selected best examples of WPI-practices, which would be discussed during the site visit; it was also determined whether anyone else should be included in the interviews, aside from the manager, the group of employees and employee representative. Concrete appointments were then arranged. Following this telephone call the interviewer would send the ‘Mini Survey for manager’ to the manager, accompanied by a letter that included an Agreement text (6). The manager was requested to complete the Mini Survey and to undersign the Agreement (for publication and use of the materials), and to return those back to the partner preceding the site visit. During the site visit (7) the appointed interviews were held with the manager (7a), the employee representative (7b) and the employee group (7c). Each interview ranged from 45 minutes (this was planned) to more (about average 90 minutes). In several cases it was not allowed or not possible to have interviews with employee representatives (sometimes there was no such institution) or with employees (as a group). All interviews were to be recorded for the production of transcripts afterwards. On return from the site visit the interviewer was to complete the Mini Survey for interviewee/expert (8) and to complete the coding-matrix, the transcripts (9) and the mini case study report (10). The coding-matrix was checked by TNO, the transcripts by WPI, the mini case

study reports by IKEI (for content) and by WPI (for the English) (11). The mini case study reports were to be approved by the companies (some of them did not allow for publication as they wanted to remain anonymous) (12). When all material was received and found in order; the research partners' work was signed off by TNO.

## Response rates and data

**Table A1.2: Gross and net response**

	50-249 employees			250 and more employees			Total
	Gross preselection	Gross approach	Net response	Gross preselection	Gross approach	Net response	Net response
BG	14	5	2	20	20	1	3
DE	78	11	2	117	7	6	8
DK	212	40	6	100	20	0	6
EL	22	14	4	11	6	2	6
ES	105	39	1	114	46	5	6
LT	29	15	2	21	15	5	7
PL	77	53	7	66	46	0	7
UK	106	10	2	118	14	4	6
IE	42	0	1	32	0	0	1
NL	0	0	0	0	0	1	1*
<b>Totals:</b>							
Gross preselection	685			599			1284
Gross approached		187			174		361
Net response			27			24	51

Notes: \*sampled after December 2014. Gross pre-selection = companies from the ECS-list provided by Gallup; Gross approach = letters sent to companies; Net response = case studies performed

The process of acquiring companies to cooperate proved to be very difficult and time consuming. Of the 1,284 pre-selected companies, 361 were sent an announcement letter by Eurofound. From these 361 companies, some 120 could not be reached or were unwilling to partake in the project. The pre-screening telephone call was held with 241 companies. Out of these 241 companies, 208 companies were eliminated from the study because: they (16) were not aware their company took part in the ECS survey; they said they (9) had no WPI-practices of interest; they (46) had an incomplete address; they (15) had incorrect contact details; or they (122) did not want to participate for different reasons (bad timing, respondent no longer worked there, too much changed in the last two years, economic crisis, usefulness was not recognized, etc.). Other than the 33 successfully case studies carried out by September 2014, another 18 were successfully completed from then until end of 2014. Following this, announcement letters were not sent due to time pressure and the decision was made to immediately call the companies remaining on the pre-selected list. Running the risk of being one case short by the end of 2014, when fieldwork was required to finish, it was decided to include one case from the Netherlands case in the list of pre-selected companies, which resulted in a total of 51 cases.

Despite the fact that all these companies, during the ECS survey in 2013, had stated that they were willing to participate in a follow-up research, the research partners stated they had difficulty in convincing quite a substantial number to participate again. One reason that could, potentially,

explain this difficulty is the more time consuming and intense nature of an on-site visit. A more pressing problem was the time that had lapsed since the ECS-telephone survey, which was conducted in 2013. Many of the original respondents had moved on and several companies had been taken over or merged. Even if companies were prepared to partake in the project, it was not always possible to interview employees or an employee representative. As a consequence of the high non-response rate, companies with a lower WPI-Index score had to be included in the study. This enhanced not only the effort needed to acquire cases, but also lowered the ‘quality’ of WPI-examples. The acquisition process was further hindered by the fact that the ECS list of companies, provided by the fieldwork organisation, was lacking. Many contact details – company names, addresses, phone numbers, email addresses, and contact persons/respondents – proved to be incomplete or invalid. Partners indicated that performing the case studies took much more time than was originally planned.

**Table A1.3: Companies in the research**

No.	Code Name	Country	Sector	1]	2]	3]	4]	5]	Size 1=50-249 2>=250	Size (Per- sons)
1	BG-MANU-CLOSURES-L	BG	C MANUFACTURING	•	•	○	•	•	1	350
2	BG-ENER-GAS-S	BG	D ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	•	•	○	•	•	0	200
3	BG-EDUC-UNI-S	BG	P EDUCATION	•	•	○	•	•	0	140
4	DE-EDUC-ACADEMY-S	DE	P EDUCATION	•	○	○	•	•	0	98
5	DE-TRANSP-TRAIN-L	DE	H TRANSPORTATION AND STORAGE	•	○	○	•	•	1	450
6	DE-SOC-HANDICAP-L	DE	Q HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	•	•	•	•	•	1	1400
7	DE-AGRO-HORTICULT-L	DE	A AGRICULTURE, FISHERY, FARMING, LIVESTOCK	•	○	○	•	•	1	910
8	DE-WASTE-WATER-L	DE	E WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND REMEDIAATION ACTIVITIES	•	•	○	•	•	1	360
9	DE-AGRO-PETFOOD-S	DE	A AGRICULTURE, FISHERY, FARMING, LIVESTOCK	•	•	○	•	•	0	60
10	DE-ENER-ELEC-L	DE	D ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	•	•	○	•	•	1	5200
11	DE-SERV-TEST-L	DE	S OTHER SERVICE ACTIVITIES	•	○	○	•	•	1	300
12	DK-MANU-FABRIC-S	DK	C MANUFACTURING	•	•	•	•	•	0	145
13	DK-ART-MUSEUM-S	DK	R ARTS, ENTERTAINMENT AND RECREATION	•	•	•	•	•	0	140
14	DK-WASTE-COLLECT-S	DK	E WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND REMEDIAATION ACTIVITIES	•	•	•	•	•	0	170
15	DK-EDUC-SCHOOL-S	DK	P EDUCATION	•	•	•	•	•	0	90
16	DK-SERV-JOURNAL-S	DK	S OTHER SERVICE ACTIVITIES	•	•	•	•	•	0	75
17	DK-SERV-PARK-S	DK	S OTHER SERVICE ACTIVITIES	•	•	•	•	•	0	118



No.	Code Name	Country	Sector	1]	2]	3]	4]	5]	Size 1=50-249 2≥250	Size (Per- sons)
18	EL-INFO-NETWORK-S	EL	J INFORMATION AND COMMUNICATION	•	•	•	•	•	0	250
19	EL-FIN-BANK-L	EL	K FINANCIAL & INSURANCE ACTIVITIES	•	•	•	•	•	1	425
20	EL-SERV-RETAIL-S	EL	S OTHER SERVICE ACTIVITIES	•	•	•	•	•	0	117
21	EL-SERV-TECH-RET-L	EL	S OTHER SERVICE ACTIVITIES	•	•	•	•	•	1	300
22	EL-SERV-SHIP-S	EL	S OTHER SERVICE ACTIVITIES	•	•	•	•	•	0	120
23	EL-MANU-PAINT-S	EL	C MANUFACTURING	•	•	•	•	•	0	238
24	ES-SCI-PHARMA-L	ES	M PROFESSIONAL, SCIENTIFIC & TECHNICAL ACTIVITIES	•	•	•	•	•	1	300
25	ES-MANU-BUS-L	ES	C MANUFACTURING	•	•	•	•	•	1	260
26	ES-MANU-BAKER-L	ES	C MANUFACTURING	•	•	•	•	•	1	1100
27	ES-SCI-ENVIRONM-L	ES	M PROFESSIONAL, SCIENTIFIC & TECHNICAL ACTIVITIES	•	•	•	•	•	1	270
28	ES-SCI-WORK-L	ES	M PROFESSIONAL, SCIENTIFIC & TECHNICAL ACTIVITIES	•	•	○	•	•	1	752
29	ES-MANU-XXXX-S	ES	C MANUFACTURING	•	○	•	•	•	0	202
30	IE-MANU-PHARMA-S	IE	C MANUFACTURING	•	•	•	•	•	0	124
31	LT-ENER-ELEC-L	LT	D ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	•	•	•	•	•	1	502
32	LT-MANU-RESPIR-L	LT	C MANUFACTURING	•	•	•	•	•	1	1700
33	LT-MANU-CLOTHES-L	LT	C MANUFACTURING	•	•	○	•	•	1	400
34	LT-SERV-POST-L	LT	S OTHER SERVICE ACTIVITIES	•	•	•	•	•	1	6000
35	LT-ACCOM-HOTEL-S	LT	I ACCOMMODATION AND FOOD SERVICE ACTIVITIES	•	•	○	•	•	0	170
36	LT-RETAIL-WHOLESALE-S	LT	G WHOLESALE & RETAIL TRADE, REPAIR OF MOTOR VEHICLE	•	•	○	•	•	0	98
37	LT-CONST-BUILD-L	LT	F CONSTRUCTION	•	•	○	•	•	1	400
38	NL-INFO-NEWS-L	NL	J INFORMATION AND COMMUNICATION	•	○	○	•	•	1	305
39	PL-INFO-LIBRARY-S	PL	J INFORMATION AND COMMUNICATION	•	•	•	•	•	0	183
40	PL-EDUC-MED-SCHOOL-S	PL	P EDUCATION	•	•	•	•	•	0	55
41	PL-EDUC-REHAB-S	PL	P EDUCATION	•	•	•	•	•	0	57
42	PL-MANU-SHIP-S	PL	C MANUFACTURING	•	•	•	•	•	0	156
43	PL-ADM-TAX-S	PL	N ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	•	•	•	•	•	0	108
44	PL-TRANSP-BUS-S	PL	H TRANSPORTATION AND STORAGE	•	•	•	•	•	0	52
45	PL-EDUC-INFO-SCHOOL-S	PL	P EDUCATION	•	•	○	•	•	0	103

No.	Code Name	Country	Sector	1]	2]	3]	4]	5]	Size 1=50-249 2≥250	Size (Per- sons)
46	UK-TRANSP-CAR-S	UK	H TRANSPORTATION AND STORAGE	•	•	•	•	•	0	232
47	UK-SCI-GEO-L	UK	M PROFESSIONAL, SCIENTIFIC & TECHNICAL ACTIVITIES	•	•	•	•	•	1	712
48	UK-MANU-TYRES-S	UK	C MANUFACTURING	•	•	•	•	•	0	110
49	UK-MANU-BATH-L	UK	C MANUFACTURING	•	•	•	•	•	1	320
50	UK-ENER-ELEC-L	UK	D ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	•	•	•	•	•	1	900
51	UK-CONST-BUILD-L	UK	F CONSTRUCTION	•	•	•	•	•	1	5200

Notes: • = performed/available; ○ = not available: 1] Manager interview; 2] Employee group interview; 3] Employee representative interview; 4] Mini survey manager; 5] Mini survey interviewer

The gathered data are presented through three different channels. The interviews are accompanied by completed coding matrices. Each coding matrix consists of: the pre-coded answers of the pre-screening interview, the manager interview, employee group interview and employee representative interview, the answers of the mini survey manager and of the mini survey interviewer, and the answers of the five research questions by the interviewer. Secondly, mini case study reports, consisting of two to three pages of each company, are prepared. Finally, each interview is transcribed, produced and translated into English.

The coding matrices and mini case study reports are used for the purpose of this study. By pre-coding the coding matrix, a full integration of all topics in a systemic and comparable database is guaranteed. In addition, the mini case studies are completed in a short format so that they can be, depending on permissions, used for publication on the Eurofound website. The transcripts are made with the purpose for future analysis by Eurofound.

### A1.3 Analysis

For the analysis, the data were used in several steps. Beginning with the assessment of the presence of WPI-practices and their configurational paths; QCA was applied. More in-depth descriptions of these paths to WPI are made by analysing contextual factors of the companies, such as their: branch and size, motives and drivers, and impact of WPI. For this purpose, qualitative and quantitative data, in the form of cross-tabulations and correlational analyses, was used. The data of the manager interview, employee group interview, and employee representative interview was applied to study the agreements and differences between these three groups of respondents. The Table A1.4 below summarises the aforementioned steps.

**Table A1.4: Steps in the analysis and sources used**

Research questions and analysis	Coding matrix						Mini case study report	Expert assessment
	1] Manager Interview	2] Employee group interview	3] Employee represent. Interview	4] Mini Survey manager	5] Mini Survey interviewer	6] Research Questions interviewer		
	1	2	3	4	5	6		
QCA to assess presence of WPI and configurational paths	X			X	X			X
Qualitative description of types of WPI, contextual factors, motives and drivers, adoption and implementation, impacts	X	X	X			X	X	
Quantitative description of types of WPI, contextual factors, motives and drivers, adoption and implementation, impacts	X	X	X	X	X			
Comparison across managers, employee groups and employee representatives	X	X	X					

### *Methods for analysis and Qualitative Comparative Analysis*

It is useful to apply QCA to case studies if the purpose is to assess what ‘strategies’ companies are using for the application of WPI. QCA is not meant to study how independent variables may explain dependent variables in a causal way, for example, which factors lead to the implementation of WPI or how WPI leads to certain effects or results. Rather, it helps to understand what conditions are necessarily or sufficiently present for WPI to exist.

In this study QCA is applied as a case study comparative method (Ragin, 1987; Ragin, 2008, Rihoux and Ragin, 2009; Schneider and Wagemann, 2012). Comparative methods try to bridge the split between ‘qualitative and quantitative research’ as assumed in the difference between ‘case-oriented versus variable-oriented’ approaches. The strengths of this case-oriented approach lies in a holistic method – treating cases as whole entities and not as collections of parts and understanding causality as conjunctive – in which outcomes are analysed in terms of intersections of conditions and it is assumed that any of several combinations of conditions might produce a certain outcome (Ragin, 1987; Berg-Schlosser et al, 2009). To connect the holistic approach with an analytical one, Ragin proposes Boolean algebra, the algebra of sets and logic, that being that QCA is a technique for solving problems that are caused by making causal inferences on the basis of only a small number of cases (Ragin, 1987). The method attempts to maximize the number of comparisons that can be made across the cases under investigation. The technique aims to alleviate the small number problem by allowing inferences to be drawn from the maximum number of comparisons that can be made across the cases under analysis. By maximising the number of comparisons that can be made across the cases under investigation, according to Ragin, causal inferences are possible. This technique would also allow the analysis of multiple causation and interaction effects. Its rigorous approach makes replication of the research possible. The main advantage of QCA is that it allows for an – albeit limited – scope of generalisation when one is undertaking case study research (Berg-Schlosser et al, 2009).

QCA is what is known as, within the family of set-theoretic methods, a set-theoretic approach and technique. QCA, as an approach, is a ‘process of going ‘back-and-forth’ between ideas and evidence’. It concerns (re-)collection of data, (re-)definition of case selection, and/or (re-)specification of concepts. To do this, researchers need to know much about both the theory of the

field (WPI theory) and the practice of the cases (WPI in practice). QCA as a technique for data analysis that consists of finding (combinations) of conditions (configurations) that (are subsets or supersets) are leading to the outcome (i.e., arriving at sufficient and necessary (INUS or SUIN) conditions. This technique, or the ‘analytic moment’, is considerably less time-consuming than pure case-comparison. However, the technique requires thorough preparation of the study in order to reduce time on the analysis itself.

In short, QCA may be characterised as:

- Qualitative: case-oriented – assessing the relevance of variables in the context in which they occur;
- Comparative: cross-case – looking at similarities and differences;
- Analysis: set-theoretic – analysing the necessary/sufficient conditions;
- Configurational: combinations of factors.

QCA is appropriate for studying WPI because it essentially matches the real experiences of workers that processes in organisations are multi-causal, causal in multi-directions, and equifinal. It treats cases as unique, while acknowledging that they may show general similarities. As a case study method, it is an inductive, theory-based way of doing research. It does not focus on ‘best cases’ or ‘best practices’ because each case is seen as rich and unique. Instead of ‘simplifying complexity’, QCA maintains richness while, simultaneously, reaching a broad range. It requires researchers to be familiar with the topic in question, as both theoretical and substantive expertise is essential to perform these case studies with full rigour.

### *Elaboration of QCA-analysis (Chapter 3)*

#### **QCA in a nutshell and its terminology**

Conventional multivariate statistics assess linear relations between variables in large datasets. Based on the weights of each variable in an equation, that intends to predict a dependent variable – in this case WPI – these variables together explain the presence of WPI. Such an analysis identifies companies that resemble each other on those variables that explain WPI in those multivariate analyses. However, when you research a phenomenon like WPI, you can ‘sense’ that companies may arrive at WPI in many different ways. Companies can apply different combinations of variables to achieve WPI. Multivariate analyses see combinations such as scoring low on one variable and high on another, thus resulting in an absence of statistical relation. Good examples are so-called ‘outliers’ which are discarded from the analysis. QCA uses another approach. It looks for combinations of variables that relate to WPI, and can identify several such combinations. This notion better fits with certain phenomena that are more intricate than linear, such as WPI. The use of QCA is suitable for small number datasets (Vis, 2012; Woodside, 2013).

Here are terms that help the reader to understand Chapter 3 (based on Schneider and Wagemann, 2012):

Anchor - position on a dimension as a boundary-value.

Calibration - process in which set-membership scores are assigned to cases.

Causal condition - see condition variable.

Causal recipe - see configurational path.

Consistency - indicates to what degree empirical cases are in line with the postulated subset relation (somewhat comparable to an ‘if...then...’ hypothesis).

Condition variable - factor used to explain the outcome, comparable to independent variable.

Configurational path - combination of conditions that are sufficient for the outcome.

Outcome variable - phenomenon to be studied, comparable to dependent variable.

Coverage - comparable to explained variance; relation between conditions and outcome also can be understood as of relevance to a necessary condition.

Fuzzy set - set which allows for partial membership in addition to full membership and full non-membership.

Necessity - the outcome is present only if a condition is present.

Operator - logical AND, logical OR; it relates sets whereby membership of cases is determined by their values across cases.

Parsimony - solution with as few as possible conditions and operators.

Set membership - assignment of a case to set membership or non-set membership based on their score.

Sufficiency - whenever the condition is present the outcome is present.

Truth table - sorting of cases into the 2k logically possible truth table rows; each row is a combination of causal conditions that are sufficient (1) or insufficient (0) for the outcome.

### Construction of ‘outcome’-variable Substantial WPI

The companies used in our sample differ in many respects, amongst the most notable differences being: country of origin, economic situation, branch, size, management model, and occupational workforce. They also differ in the kind of WPI-practices that they have developed and implemented, which range from rather singular measures to integral change programmes. In addition, the researchers, who did the company visits, may also be culturally biased in assessing WPI-practices. These researchers come from eight different countries and investigated cases from ten nations. Scanning the collected data provided by these researchers, it was observed that certain researchers had a systematic bias in evaluating WPI-practices. For example, some practices may be considered ‘normal’ in advanced countries, whereas the same practices might be seen as innovative in less advanced countries. To ensure improved inter-evaluator reliability, an expert-evaluation procedure was applied and all 51 cases were evaluated on their degree of WPI, namely in regards to their substantiality.

### *Evaluation of the substantiality of WPI*

This procedure followed the steps outlined here. Assessed from a theoretical perspective, the main elements of WPI were based on four criteria:

1. The presence of **employee engagement** topics: These are measures and behaviours that enable a culture and an attitude to involve employees in the process of change and innovation. It reflects ‘empowered working’ and employees having a ‘voice’. These practices are often related to the HR-system/HR-measures. This aspect is a necessary condition for WPI, as a ‘bigger’ role for employees is paramount in most WPI literature. This criterion stems from the workplace practice ‘culture orientation’.
2. The presence of **‘structure’** topics: These are measures that relate to work organisation, team work and job design. These are WPI-practices that imply more job autonomy, decision latitude and a decisive voice in a structural manner. It is a feature in the division of labour/organisation and not of behaviour. There is a difference if employees are informed, consulted and co-decide. The first two belong to criterion one; only the last one is closest to structural ‘autonomy’. This criterion stems from the workplace practice ‘structure’ orientation.
3. The presence of **enabling leadership**: These are measures and behaviours whereby leadership genuinely stresses the importance of employee involvement/ engagement and in which manner employees are enabled to participate. ‘Charismatic’ or ‘strong leadership’ directed at restructuring the organisation with a focus on economic goals is not meant here; but human-oriented leadership or people management such as transformational leadership. This criterion is linked to an enabling culture in criterion 1.
4. The presence of **‘bundles’ of WPI-practices/measures and ‘WPI-maturity’**: Bundles are present when cases have more than one WPI-practice developed or implemented, recently or in the past. The measures that are mentioned in the interviews are not always

coherent, and it sometimes proves difficult to disentangle them from each other or from other practices and policies. Sometimes measures are presented in a manner that, in their individual capacity, are rather trite or trivial from the viewpoint of criterion 1 or 2. In such instances WPI could be evaluated as non-substantial. However, this would be unjust in the case when a company already has reached a high ‘WPI-maturity level’. Therefore, criterion 4 is also assessed as present when companies have implemented WPI-practices prior to the undertaking of the ECS2013. In order to arrive at an accurate and reliable reflection of the membership in the set of ‘substantial WPI-practice present’, not only recent WPI-practices were assessed, but the organisation’s WPI-maturity as a whole;

**Overall score:** To get an overall score on whether ‘Substantial WPI-practices’ are present or absent per case, each evaluator had to answer this question ‘What is your score for the presence of WPI?’ To arrive at the evaluation score, evaluators were requested to consider these rules:

- Employee engagement: score 1-3 points if present; and -1 if completely absent (because this is a necessary condition; however, ‘-1’ was not scored in our sample);
- Structure topics: score 1-3 points if present;
- Enabling leadership: score 1 point if present;
- Bundles: score 1-3 points if present.

The maximum score was ‘10’ (substantial WPI is fully present).

First, 10 cases that were randomly chosen and stratified into EU Member States were assessed by two expert-evaluators. Afterwards the criteria were refined. Then two extra expert-evaluators were added; all four experts re-evaluated the same 10 cases. The inter-evaluator correlation of .53 (the intraclass correlation coefficient is ‘fair’) was computed. Slight refinements to the criteria were made. In step 3 of 4, expert-evaluators re-evaluated the 10 cases and evaluated the remaining 41 cases: the inter-evaluator correlation was .77 (the intraclass correlation coefficient improved into ‘excellent’). The procedure was concluded to deliver reliable results.

On a scale ranging from 1 (fully absent) to 10 (fully present) three groups of companies were distinguished: ‘highly substantial WPI’ (6.7 or higher 10), ‘medium substantial WPI’ (5 to 6.7) and ‘less substantial WPI’ cases (5 or lower). In the Table A1.5 the dataset of cases is presented according to the three groups.

**Table A1.5: Company-cases according to the degree of Substantial WPI**

Group	Companies
Highly substantial WPI practices, raw scores 6.7 or higher	DE-AGRO-PETFOOD-S, DE-SOC-HANDICAP-L, DK-ART-MUSEUM-S, DK-EDUC-SCHOOL-S, DK-MANU-FABRIC-S, DK-SERV-JOURNAL-S, DK-SERV-PARK-S, DK-WASTE-COLLECT-S, ES-MANU-XXXX-S, IE-MANU-PHARMA-S, LT-MANU-RESPIR-L, NL-INFO-NEWS-L, UK-CONST-BUILD-L, UK-ENER-ELEC-L, UK-MANU-BATH-L, UK-SCI-GEO-L
Medium Substantial WPI practices, raw scores above 5 to 6.7	BG-EDUC-UNI-S, BG-MANU-CLOSURES-L, DE-AGRO-HORTICULT-L, DE-EDUC-ACADEMY-S, DE-ENER-ELEC-L, DE-SERV-TEST-L, DE-WASTE-WATER-L, EL-FIN-BANK-L, EL-MANU-PAINT-S, EL-SERV-SHIP-S, ES-MANU-BAKER-L, ES-MANU-BUS-L, ES-SCI-ENVIRONM-L, ES-SCI-PHARMA-L, LT-ENER-ELEC-L, LT-MANU-CLOTHES-L, PL-ADM-TAX-S, PL-EDUC-REHAB-S, PL-MANU-SHIP-S, UK-MANU-TYRES-S, UK-TRANSP-CAR-S
Less substantial WPI practices, raw scores 5 or lower	BG-ENER-GAS-S, DE-TRANSP-TRAIN-L, EL-INFO-NETWORK-S, EL-SERV-RETAIL-S, EL-SERV-TECH-RET-L, ES-SCI-WORK-L, LT-ACCOM-HOTEL-S, LT-CONST-BUILD-L, LT-RETAIL-WHOLESAIL-S, LT-SERV-POST-L, PL-EDUC-INFO-SCHOOL-S, PL-EDUC-MED-SCHOOL-S, PL-INFO-LIBRARY-S, PL-TRANSP-BUS-S

**Table A1.6: Construction of condition variables for QCA**

Condition	Composition/construct	Source
<i>Control-structure orientation</i>		
Participation in organisational model (PARTMOD)	Participation in decisions about the organisational model reflects participatory role in organisational design of agents/stakeholders: middle management, first line workers (in addition to top management).  Compute: PartMod = P3D9a + P3D9b + P3D9c. RQ3Q9.	Manager Interview
Autonomy & Participation (AUTPAR) (Cronbach's $\alpha = .7$ )	1. In our organisation employees decide how they do their jobs 2. In our organisation employees share common tasks and goals AND/OR work in teams 11. People feel understood and accepted by each other 12. Employees in this organisation feel free to bring up problems and tough issues 20. Employees speak up with ideas for new ways of working or changes in procedures 21. Managers and employees actively discuss decisions about the present and future of the organization 23. The expertise of the work floor is considered important to strategic decisions  Compute: AUTPAR= 1+2+11+12+20+21+23 / 7	Mini Survey Manager
<i>Commitment-culture orientation</i>		
Innovative behaviour of employees (INNOBEH) (Cronbach's $\alpha = .8$ )	9. Taking initiative as an employee is highly supported 13. Employees in this organisation are always searching for fresh, new ways of looking at problems 14. Employees in this organisation cooperate to help develop and apply new ideas 15. There are real attempts to share information throughout the organisation 16. Our organisation frequently seeks new information that leads us to make important changes 18. We regularly take time to figure out ways to improve our organisation's work processes 19. Employees develop and make recommendations on issues that affect our organisation's work  Compute: INNOBEH= 9+13+14+15+16+18+19 / 7	Mini Survey Manager
Bottom-up and people driven initiative (BOTUPIN)	This is a composite variable whether initiative for WPI is bottom up <b>and</b> people driven: <ul style="list-style-type: none"> <li>• bottom up initiative of WPI: this concerns if the initiative for WPI was top-down or bottom-up; the score for this variable is either 0 (top-down initiative) or 1 (bottom-up initiative).</li> <li>• people-driven initiative of WPI: this concerns whether the WPI initiative is driven by intrinsic arguments (score 1 = people and organisation driven) or by extrinsic arguments (score 0 = business and market circumstances)</li> </ul> BOTUPIN = bottom up initiative of WPI * people-driven initiative of WPI  Computed variable	Manager interview

Participatory implementation (CONOR)	<p>This is a composite variable whether WPI is implemented participative and supported by employees:</p> <p>-How do you judge the way the change process for the workplace innovation practices was conducted? (Participative-top down)</p> <p>-To what degree was the change process for the workplace innovation practices characterised by support from employees? (None – much)</p> <p>CONOR = Factor extraction from P3E10 and P3E11.</p>	Manager Interview
<i>Contextual factors</i>		
Decision latitude of the organisation (DECLAT)	<p>The organisation's autonomy about changing work organisation, systems structure, learning reflection, workplace partnership/voice; the total score for this variable ranges from 4 to 12.</p> <p>DECLAT = P3D1a + P3D1b + P3D1c + P3D1d. Sum of RQ3Q1.</p>	Manager Interview
Organisation model (ORGMOD)	<p>The organisation or management model mirrors a preference for limited or extreme division of labour:</p> <p>- ORGMOD - Quality of organisation and quality of working life driven philosophy: this concerns if the management philosophy is grounded in a good quality of the organisation or also in a good quality of working life (the first was weighted by 1; the latter was weighted by 2); the total score for this variable ranges from 14 to 75.</p> <p>ORGMOD = P3D81a + P3D81b + P3D81c + P3D81d + P3D82a*2 + P3D82b*2 + P3D82c*2 + P3D82d*2 + P3D82e*2. Sum of RQ3Q8, 1] and 2]; 2] weighted by 2.</p>	Manager Interview

**For an explanation of the QCA analysis, see Table 5 of the main report (reference given on p.1 of this report).**



**Table A1.7: Configurations explaining Substantial WPI (parsimonious solution)**

Solution	Causal conditions							Descriptives					
	ORGMOD	DECLAT	INNOBEH	AUTPAR	PARTMOD	BOTUPIN	CONOR	Raw coverage	Unique coverage	Consistency	Solution coverage	Solution consistency	Number of cases
1			•			○	•	0.12	0.051	0.841			4
2	○	•		•	•			0.22	0.056	0.835			8
3	•	•	•			•		0.19	0.017	0.837			7
4		•			•	•	•	0.22	0.05	0.827			9
5	•		•		○			0.16	0.027	0.686			3
Model											0.521	0.811	
	Contextual factors		Feature of WPI			Adoption and implementation aspects							

Note: Table A1.7 corresponds to Table 5 from the main text. The description below is based on table A1.7.

### QCA - Some technical background

#### Step 1: Calibration

In order to enter the data into a data file that can be run with the fsQCA-software (Ragin et al, September 2008) the scores must be made suitable for this technology. This is called ‘calibration’. In fsQCA, the original data must be transformed into an interval scale (0 = non membership, 1 = full membership) using the ‘calibration’ method (Ragin, 2008). First, the values for the anchor points (.05, .5, and .95 in a scale from 0 to 1) must be determined. An anchor is a boundary that determines if a score represents a degree of ‘set-membership’ or not. Normally anchors are set using 25, 50 and 75 percentiles of each variable separately. An original score of the variable that represents 25th percentile gets a new calibrated value of .05 (non-membership), 50th percentile score gets a new calibrated value of .5 and 75th percentile score is re-evaluated to .95 (full membership). In case of overlapping percentile values, the next closest score was chosen for calibration. As the software cannot interpret the score of .5 (it is neither in, nor out of the set), this score is manually changed into .51 because cases that score exactly .5 are excluded from the analysis by the programme. The fsQCA-programme calculates new values for the scores, unless researchers chose to set them manually. Anchor points can be re-calibrated on the basis of substantial, theoretical arguments, for example, after inspecting the cases. This is in fact what was executed for the 51 scores of the expert-evaluation of all cases, as is explained elsewhere in this Annex Methodology. For ‘Substantial WPI’ the anchors were set as follows: 5, 5.9 and 6.7 accordingly to the thresholds of .05, .5 and .95. In table A2.4 (Annex 2 Tables) uncalibrated scores are provided for all variables used in the QCA. Those scores were calibrated automatically by submitting the aforementioned threshold values into the fs-QCA software. Besides the scores for these variables, Annex 2 Tables also provides tables A2.5 and A2.6 with uncalibrated and calibrated scores for all cases on each of the outcome and condition variables.

#### Step 2. Analysis of necessary conditions

In theory, ‘necessary’ conditions are essential for the outcome to occur. That is, if the condition is absent, the outcome is absent as well. This is called the ‘consistency’ of necessary conditions. In order to see whether the outcome has necessary conditions, it was paired with every possible condition, positive and negative. To serve as a consistent condition, the consistency threshold is 0.75 (Ragin, 2008; Fiss, 2011). The consistency scores, however, are all below the threshold (see table A2.4; Annex 2 Tables; for a visualised example see Figure A1.2 below), meaning that none of the conditions is a necessary condition. In other words, companies who are reflecting substantial WPI do not

necessarily have to dispose of any particular condition variable.

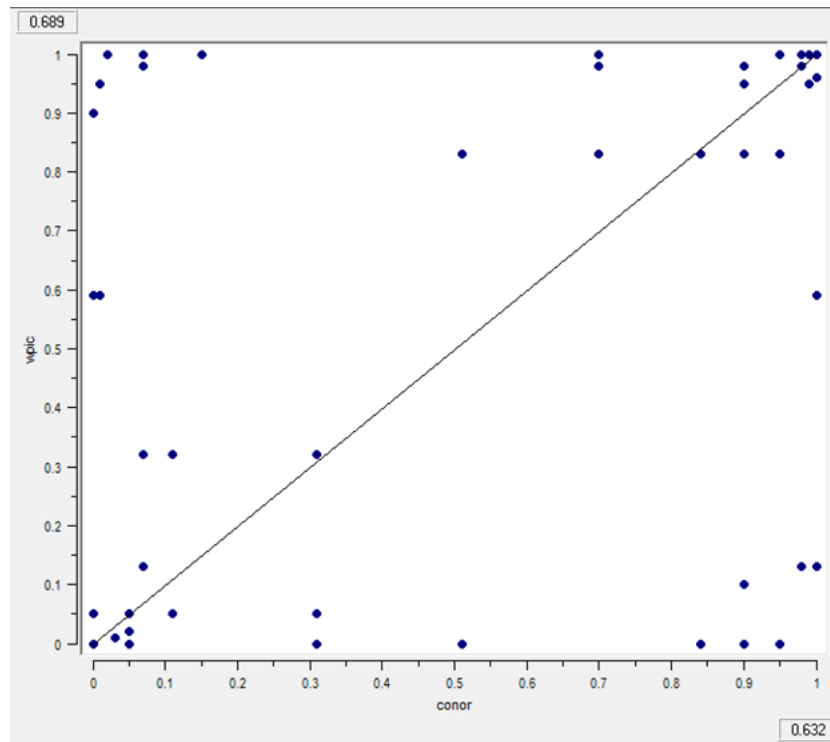
#### Step 3: Truth table analysis

The truth table analysis first presents all theoretically possible combinations of causal conditions that may lead to the outcome. All (51) cases are assigned to logical configurations. For each path its consistency and frequency scores are calculated, for which threshold to drop a path is the .75 consistency value. This rule would lead to having to drop too many cases and losing an interesting path with noteworthy cases. Therefore, .68 consistency threshold was used initially. This led to one path having a quite low consistency of .69 and four paths having a consistency of not less than .82; this resulted in a .81 consistency for the whole solution in the end. Paths are included in further analyses when there is at least one observed case for that path. In order to reach the clearest solutions, logical remainders (consistent path but without enough cases) are automatically calculated by the programme (set to 1 or 0) in a way that delivers the most parsimonious solution.

#### Step 4: Finalising solutions

The final analysis is to select plausible solutions (configurations, paths) that lead to outcomes and concludes which cases correspond to certain solutions. It is aimed to find solutions with: the highest coverage score (cover as many empirical cases as possible, similar to explained variance), the highest consistency score and with as 'minimal' as possible number of conditions (most parsimonious solution).

*Figure A1.2: Example of an XY plot: WPI and CONOR*



In the example, XY plot outcome variable WPI (marked as 'wpic' in the picture) is plotted against condition variable CONOR. Blue dots indicate cases in the analysis. The more dots there

are in the upper left corner, the lower the consistency of the condition variable. Such cases indicate that the outcome is present, but that they score low on the condition variable.

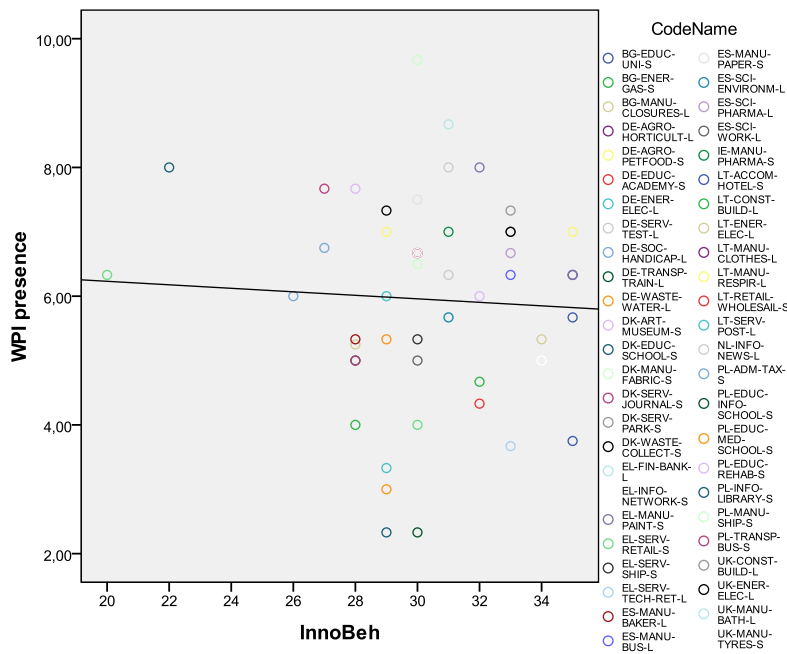
In this analysis the consistency is .632, indicating that this variable CONOR is not consistent enough (less than .75) to be considered as a necessary condition for the outcome WPI.

*Test with linear regression (as robustness test)*

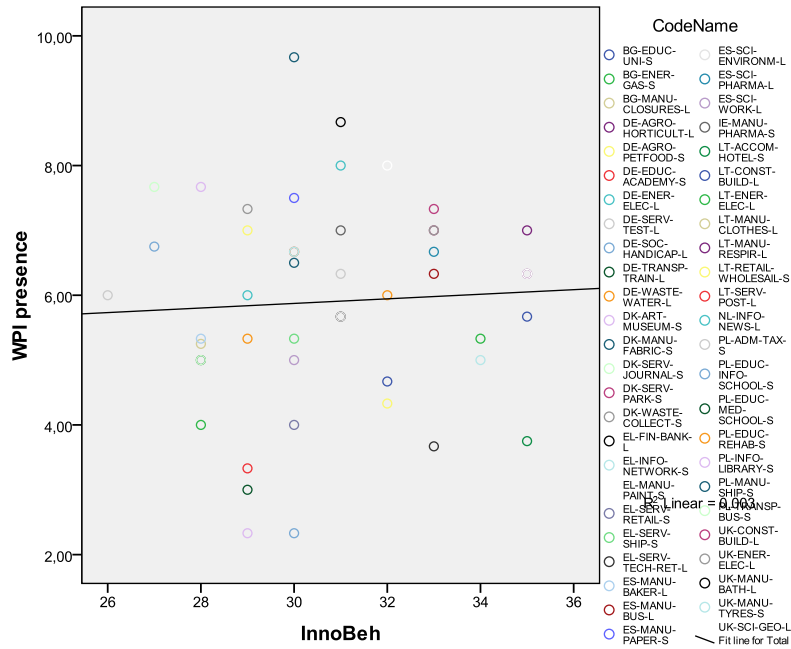
This analysis is done as a test to support the decision to use QCA and not a linear technique. Linear regression analysis was performed with the same variables that will be used in QCA. Dependent variable was WPI expert evaluation and ORGMOD, CONOR, INNOBEH, DECLAT, PARMOD, AUTPAR and BOTUPIN were the independent variables. Applying backward elimination procedure, the final solution that covered 18.1% of variance included INNOBEH ( $\beta_1=-.3$ ), AUTPAR ( $\beta_2=.38$ ) and DECLAT ( $\beta_3=.35$ ) as predicting substantial WPI. This outcome proved the pitfalls of conventional statistics – only one ‘path’ of variables was indicated, and those variables explained less than one fifth of the variance in the outcome variable (Vis, 2012; Woodside, 2013). Regression is very sensitive to outlying cases. In the final solution of regression analysis INNOBEH has a negative relation with WPI. This relation can also be seen in a simple scatter plot below (a). However, only removing two outlying cases the relation between INNOBEH and WPI changes into a positive one (b). QCA uses combinations of variables, and in this way deals with variables that can have non trivial influence for the outcome variable.

*Figure A1.3: Scatter plot of WPI and INNOBEH*

a.



b.



## 2 Supplementary tables

### A2.1 Chapter 2: Practices

**Table A2.1: Types of practices applied and drivers (percentages)**

	not HPWP	HPWP					
	WPI						
Drivers	WPI-structure	WPI-culture	WPI-mixed	Total WPI	HR	Other	Total
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
N	23	34	32	89	65	14	168

**Table A2.2: Types of practices in different companies (percentage)**

	Size		Sector		
Practices	SME	Large	Industry	Commercial services	Social services
WPI: structure orientation	11,4	15,7	10,8	15,0	16,7
WPI: culture orientation	16,5	23,6	28,4	12,5	14,8
WPI: mixed	22,8	15,7	13,5	22,5	24,1
<b>Total WPI</b>	<b>50,6</b>	<b>55,1</b>	<b>52,7</b>	<b>50,0</b>	<b>55,6</b>
HR-related	38,0	39,3	37,8	42,5	37
Other	11,4	5,6	9,5	7,5	7,4
<b>N=168 (total practices, absolute number)</b>	<b>79</b>	<b>89</b>	<b>74</b>	<b>40</b>	<b>54</b>

**Table A2.3: Types of practices in different European regions (percentage)**

Practices	CW	ME	CE
WPI: structure orientation	18,7	6,1	13,6
WPI: culture orientation	30,7	14,3	9,1
WPI: mixed	18,7	18,4	20,5
<b>Total WPI</b>	<b>68,0</b>	<b>38,8</b>	<b>43,2</b>
HR-related	25,3	59,2	38,6
Other	6,7	2,0	18,2
<b>N=168 (total practices, absolute number)</b>	<b>75</b>	<b>49</b>	<b>44</b>

## A2.2 Chapter 3: QCA Analysis

**Table A2.4: Uncalibrated values used for QCA calibration procedure**

	<b>.05 threshold</b>	<b>.5 threshold</b>	<b>.95 threshold</b>
<b>Outcome</b>	<b>Uncalibrated values</b>		
Substantial WPI	5	5.9	6.7
PARTMOD	6	7	8
INNOBEH	29	30	33
AUTPAT	28	29	31
BOTUPIN	0	-	1
CONOR	-.77	.14	.67
DECLAT	10	11	12
ORGMOD	53	56	64

In the table below, uncalibrated scores are provided for all variables used in the QCA. Those scores were calibrated automatically by submitting the aforementioned threshold values into the fs-QCA software.

**Table A2.5: Uncalibrated data (raw scores) for all cases**

No.	Code Name	Substantial WPI	ORGMOD	DECLAT	CONOR	INNOBEH	PARTMOD	BOTUPIN	AUTPAR
1	BG-MANU-CLOSURES-L	5.25	54	12	0.53	28	6	0	27
2	BG-ENER-GAS-S	4	51	12	-0.77	28	8	1	26
3	BG-EDUC-UNI-S	5.67	67	12	-0.48	35	9	0	35
4	DE-EDUC-ACADEMY-S	6.67	64	11	-1.4	30	7	1	29
5	DE-TRANSP-TRAIN-L	5	65	11	-0.48	28	7	0	29
6	DE-SOC-HANDICAP-L	6.75	47	12	1.44	27	7	1	26
7	DE-AGRO-HORTICULT-L	6.33	50	12	0.29	35	8	1	32
8	DE-WASTE-WATER-L	5.33	47	12	1.59	29	9	0	27
9	DE-AGRO-PETFOOD-S	7	44	11	-0.63	29	7	1	26
10	DE-ENER-ELEC-L	6	54	12	-1.69	29	7	0	28
11	DE-SERV-TEST-L	6.33	50	12	0.14	31	8	0	31
12	DK-MANU-FABRIC-S	9.67	60	12	-0.63	30	3	0	30
13	DK-ART-MUSEUM-S	7.67	53	11	-0.39	28	9	1	29
14	DK-WASTE-COLLECT-S	7.33	65	11	0.67	29	8	1	28
15	DK-EDUC-SCHOOL-S	8	51	11	-1.01	22	9	0	29
16	DK-SERV-JOURNAL-S	7.67	57	11	0.67	27	7	1	30

No.	Code Name	Substantial WPI	ORGMOD	DECLAT	CONOR	INNOBEH	PARTMOD	BOTUPIN	AUTPAR
17	DK-SERV-PARK-S	7.33	58	10	1.44	33	9	0	34
18	ES-SCI-PHARMA-L	6.67	55	12	0.53	33	8	1	31
19	ES-MANU-BUS-L	6.33	61	8	0.53	33	9	1	31
20	ES-MANU-BAKER-L	5.33	66	12	-0.63	28	6	1	27
21	ES-SCI-ENVIRONM-L	5.67	55	8	-0.63	31	7	0	34
22	ES-SCI-WORK-L	5	51	12	-1.93	30	8	0	25
23	ES-MANU-XXXX-S	7.5	59	12	1.44	30	5	1	30
24	EL-INFO-NETWORK-S	5	64	8	-0.1	34	8	1	34
25	EL-FIN-BANK-L	5.67	70	11	-0.1	31	7	1	28
26	EL-SERV-RETAIL-S	4	57	11	0.67	30	7	1	31
27	EL-SERV-TECH-RET-L	3.67	70	8	-0.1	33	8	1	30
28	EL-SERV-SHIP-S	5.33	56	8	0.82	30	8	1	30
29	EL-MANU-PAINT-S	6.33	66	9	0.43	35	9	1	34
30	LT-ENER-ELEC-L	5.33	51	12	1.97	34	7	1	29
31	LT-MANU-RESPIR-L	7	64	12	0.53	35	7	1	30
32	LT-MANU-CLOTHES-L	6.67	56	12	1.06	30	7	1	28
33	LT-SERV-POST-L	3.33	53	12	-2.22	29	7	0	28
34	LT-ACCOM-HOTEL-S	3.75	53	12	0.43	35	5	1	33
35	LT-RETAIL-WHOLESAIL-S	4.33	65	12	-0.92	32	7	0	28
36	LT-CONST-BUILD-L	4.67	57	12	-0.77	32	7	0	28
37	NL-INFO-NEWS-L	8	49	12	1.06	31	7	0	32
38	PL-INFO-LIBRARY-S	2.33	54	6	-0.77	29	6	0	24
39	PL-EDUC-MED-SCHOOL-S	3	60	10	0.53	29	7	0	31
40	PL-EDUC-REHAB-S	6	63	12	1.59	32	8	1	33
41	PL-MANU-SHIP-S	6.5	48	8	-1.93	30	5	0	30
42	PL-ADM-TAX-S	6	56	8	-1.16	26	6	0	27
43	PL-TRANSP-BUS-S	5	62	12	-0.77	28	6	1	26
44	PL-EDUC-INFO-SCHOOL-S	2.33	55	10	0.14	30	7	0	29
45	UK-TRANSP-CAR-S	6.33	70	10	0.67	20	8	0	27
46	UK-SCI-GEO-L	8	55	12	0.82	32	9	0	31
47	UK-MANU-TYRES-S	6.67	55	11	-1.16	30	7	0	29
48	UK-MANU-BATH-L	8.67	65	12	0.29	31	9	1	29

No.	Code Name	Substantial WPI	ORGMOD	DECLAT	CONOR	INNOBEH	PARTMOD	BOTUPIN	AUTPAR
49	UK-ENER-ELEC-L	7	46	12	0.29	33	5	1	29
50	IE-MANU-PHARMA-S	7	59	11	-0.63	31	8	0	28
51	UK-CONST-BUILD-L	7	62	12	0.82	33	0	1	30

**Table A2.6: Calibrated data (scores) for all cases**

No.	Code Name	Substantial WPI	ORGMOD	DECLAT	CONOR	INNOBEH	PARTMOD	BOTUPIN	AUTPAR
1	BG-MANU-CLOSURES-L	0.1	0.12	0.95	0.9	0.0	0.05	0	0.0
2	BG-ENER-GAS-S	0.0	0.01	0.95	0.05	0.0	0.95	1	0.0
3	BG-EDUC-UNI-S	0.32	0.98	0.95	0.11	0.99	1.0	0	1.0
4	DE-EDUC-ACADEMY-S	0.95	0.95	0.51	0.01	0.51	0.51	1	0.51
5	DE-TRANSP-TRAIN-L	0.05	0.97	0.51	0.11	0.0	0.51	0	0.51
6	DE-SOC-HANDICAP-L	0.96	0.0	0.95	1.0	0.0	0.51	1	0.0
7	DE-AGRO-HORTICULT-L	0.83	0.0	0.95	0.7	0.99	0.95	1	0.99
8	DE-WASTE-WATER-L	0.13	0.0	0.95	1.0	0.05	1.0	0	0.0
9	DE-AGRO-PETFOOD-S	0.98	0.0	0.51	0.07	0.05	0.51	1	0.0
10	DE-ENER-ELEC-L	0.59	0.12	0.95	0.0	0.05	0.51	0	0.05
11	DE-SERV-TEST-L	0.83	0.0	0.95	0.51	0.73	0.95	0	0.95
12	DK-MANU-FABRIC-S	1.0	0.82	0.95	0.07	0.51	0.0	0	0.82
13	DK-ART-MUSEUM-S	1.0	0.05	0.51	0.15	0.0	1.0	1	0.51
14	DK-WASTE-COLLECT-S	1.0	0.97	0.51	0.95	0.05	0.95	1	0.05
15	DK-EDUC-SCHOOL-S	1.0	0.01	0.51	0.02	0.0	1.0	0	0.51
16	DK-SERV-JOURNAL-S	1.0	0.59	0.51	0.95	0.0	0.51	1	0.82
17	DK-SERV-PARK-S	1.0	0.68	0.05	1.0	0.95	1.0	0	1.0
18	ES-SCI-PHARMA-L	0.95	0.27	0.95	0.9	0.95	0.95	1	0.95
19	ES-MANU-BUS-L	0.83	0.87	0.0	0.9	0.95	1.0	1	0.95
20	ES-MANU-BAKER-L	0.13	0.98	0.95	0.07	0.0	0.05	1	0.0
21	ES-SCI-ENVIRONM-L	0.32	0.27	0.0	0.07	0.73	0.51	0	1.0
22	ES-SCI-WORK-L	0.05	0.01	0.95	0.0	0.51	0.95	0	0.0
23	ES-MANU-XXXX-S	1.0	0.75	0.95	1.0	0.51	0.0	1	0.82



No.	Code Name	Substantial WPI	ORGMOD	DECLAT	CONOR	INNOBEH	PARTMOD	BOTUPIN	AUTPAR
24	EL-INFO-NETWORK-S	0.05	0.95	0.0	0.31	0.98	0.95	1	1.0
25	EL-FIN-BANK-L	0.32	0.99	0.51	0.31	0.73	0.51	1	0.05
26	EL-SERV-RETAIL-S	0.0	0.59	0.51	0.95	0.51	0.51	1	0.95
27	EL-SERV-TECH-RET-L	0.0	0.99	0.0	0.31	0.95	0.95	1	0.82
28	EL-SERV-SHIP-S	0.13	0.51	0.0	0.98	0.51	0.95	1	0.82
29	EL-MANU-PAINT-S	0.83	0.98	0.0	0.84	0.99	1.0	1	1.0
30	LT-ENER-ELEC-L	0.13	0.01	0.95	1.0	0.98	0.51	1	0.51
31	LT-MANU-RESPIR-L	0.98	0.95	0.95	0.9	0.99	0.51	1	0.82
32	LT-MANU-CLOTHES-L	0.95	0.51	0.95	0.99	0.51	0.51	1	0.05
33	LT-SERV-POST-L	0.0	0.05	0.95	0.0	0.05	0.51	0	0.05
34	LT-ACCOM-HOTEL-S	0.0	0.05	0.95	0.84	0.99	0.0	1	1.0
35	LT-RETAIL-WHOLESAIL-S	0.01	0.97	0.95	0.03	0.88	0.51	0	0.05
36	LT-CONST-BUILD-L	0.02	0.59	0.95	0.05	0.88	0.51	0	0.05
37	NL-INFO-NEWS-L	1.0	0.0	0.95	0.99	0.73	0.51	0	0.99
38	PL-INFO-LIBRARY-S	0.0	0.12	0.0	0.05	0.05	0.05	0	0.0
39	PL-EDUC-MED-SCHOOL-S	0.0	0.82	0.05	0.9	0.05	0.51	0	0.95
40	PL-EDUC-REHAB-S	0.59	0.93	0.95	1.0	0.88	0.95	1	1.0
41	PL-MANU-SHIP-S	0.9	0.0	0.0	0.0	0.51	0.0	0	0.82
42	PL-ADM-TAX-S	0.59	0.51	0.0	0.01	0.0	0.05	0	0.0
43	PL-TRANSP-BUS-S	0.05	0.9	0.95	0.05	0.0	0.05	1	0.0
44	PL-EDUC-INFO-SCHOOL-S	0.0	0.27	0.05	0.51	0.51	0.51	0	0.5
45	UK-TRANSP-CAR-S	0.83	0.99	0.05	0.95	0.0	0.95	0	0.0
46	UK-SCI-GEO-L	1.0	0.27	0.95	0.98	0.88	1.0	0	0.95
47	UK-MANU-TYRES-S	0.95	0.27	0.51	0.01	0.51	0.51	0	0.51
48	UK-MANU-BATH-L	1.0	0.97	0.95	0.7	0.73	1.0	1	0.51
49	UK-ENER-ELEC-L	0.98	0.0	0.95	0.7	0.95	0.0	1	0.51
50	IE-MANU-PHARMA-S	0.98	0.75	0.51	0.07	0.73	0.95	0	0.05
51	UK-CONST-BUILD-L	0.98	0.9	0.95	0.98	0.95	0.0	1	0.82

**Table A2.7: Analysis of Necessary Conditions**

<b>Outcome variable: WPI</b>		
<b>Conditions tested</b>	<b>Consistency</b>	<b>Coverage</b>
PARTMOD	0.668	0.623
INNOBEH	0.575	0.627
AUTPAR	0.603	0.651
BOTUPIN	0.587	0.616
CONOR	0.632	0.689
DECLAT	0.664	0.597
ORGMOD	0.526	0.589

### A2.3 Chapter 4: Mechanisms underlying WPI implementation

**Table A2.8: General motives for WPI for the ‘organisation as a whole’**

	<b>Manager</b>	<b>Group of Employees</b>	<b>Employee Representatives</b>
	<b>Percentage of companies</b>		
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
N of respondents	51	45	34

**Table A2.9: Motives for WPI from managers’ and employees’ perspective**

	<b>Manager</b>	<b>Group of Employees</b>	<b>Employee Representatives</b>
	<b>Percentage of companies</b>		
<b>Economic and business goals</b>	<b>94</b>	<b>89</b>	<b>88</b>
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

**Table A2.10: 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
Organisational, non-conflictive climate	49	42	50
Resources, enough money and people	33	38	29
Time, no interference from reorganisation	18	20	24
N of respondents	51	45	34

**Table A2.11: Impacts for the organisation**

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
Employee engagement	82	78	85
Longer term sustainability	73	64	62
High performance	67	56	59
Better customer focus, client focus	65	56	56
Establishing good work	63	47	62
Efficiency	61	58	59
Profitability	55	53	59
Enabling culture	47	56	44
More positive employment relations	45	42	59
Resilience	35	40	38
N of respondents	51	45	34

**Table A2.12: Impacts for managers/managers' interests**

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
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
Effectiveness	49	47	41
Profitability	49	47	56
Good labour market image	49	36	47
N of respondents	51	45	34

**Table A2.13: Impacts for employees/employees' interests**

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
Learning opportunities	71	67	59
Voice, participation	59	56	59
Challenging, active jobs	57	64	44
Healthy work	43	49	56
Job security	39	24	35
Flexibility	35	47	38
Good quality of jobs, autonomy	33	36	35
Good terms of employment	31	29	35
Balance work and private life	25	24	21
N of respondents	51	45	34

**Table A2.14: Impacts for employee representatives/union interests**

	Manager	Group of Employees	Employee Representatives
	Percentage of companies		
Employees voice	79	67	85
Sustainable organisation	56	33	50
Equality, fairness	35	33	41
Job security/income security	29	30	26
Union membership	18	15	18
N of respondents	34	33	34

**Table A2.15: Comparing substantial WPI cases with non-substantial WPI cases**

	Top 16 cases (fully in in QCA)	Lowest 14 cases (fully out in QCA)	Significance
	Mean (SD)	Mean (SD)	p value
<b>Contextual factors</b>			
Size	56% small, 44% large	64% small, 36% large	No significant differences
Type of products/services	56% standard, 44% custom	54% standard, 46% custom	No significant differences
Motives of actors			
For employees: balance private-work situation	.06 (.25)	.36 (.5)	.072
Adoption & Implementation			
Main leverage factors: top management commitment	.56 (.51)	.93 (.27)	.039
Process: Planned-ad hoc, Slow-big-bang, Tempo low-high, Goals vague-clear			No significant differences
<b>Impacts (manager perspective)</b>			
Most important outcomes of WPI for			No significant

organisation			differences
Most important impacts from the perspective of the management/employer: more sustainability of the organisation	.56 (.51)	.93 (.27)	.039
Most important impacts from the perspective of the employees: balance work and private life	.00 (.0)	.29 (.47)	.037
Most important impacts from the perspective of the employee representatives: employee's voice	.75 (.45)	.36 (.5)	.063

### 3 WPI-Practices

**Table A3.1: Types of practices against their driver/target**

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
1	Practices that are directed at both	BG-EDUC-UNI-S: Lifelong learning and support for all opportunities: the company offers a good-quality infrastructure (such as a sport centre) and a variety of classes for the continuous personal and professional development of the staff. Lifelong learning is promoted and supported at the university.				1	
2	Practices that are directed at both	BG-EDUC-UNI-S: Self-managing teams: within the entity a large part of the organisation of the administration is based on the self-managing teams. This is a system of organisation of day-to-day duties and activities. This approach ensures that the team members will have sufficient flexibility to decide how to implement their tasks while taking into account their own capacities and time schedule.	1				
3	Practices that are directed at both	BG-EDUC-UNI-S: Weekly meetings of consent: weekly round table discussions of the employees and the management of the Educational Activities Directorate. Employees can make suggestions and give ideas on how to solve issues that come up in the working process. The aim of the meetings is to consider all possible options for solving a certain problem, discuss the proposed solutions, and take a joint decision on how to proceed. The meetings can also involve members of other university departments should the need arise.			1		
4	Practices that are directed at both	BG-ENER-GAS-S: 'Internship Academy' is a summer internship programme that was launched to alleviate human power shortage. Experienced workers of the company act as mentors for the interns.				1	
5	Practices that are directed at both	BG-ENER-GAS-S: The Knowledge Management System, OGPedia, is a voluntarily developed IT-based information sharing measure. All employees can share and gain new knowledge.		1			
6	Practices that are directed at both	BG-MANU-CLOSURES-L: The company offers introductory, regular and ad-hoc trainings for all employee groups – technical, administrative and managerial personnel. They are delivered by both internal and external experts. There is regular assessment of the annual training demand.				1	
7	Practices that are directed at both	DE-AGRO-HORTICULT-L: Health promotion during working time: Developed by a health circle (with participation of the company's medical officer, the employees representatives, management representatives) e.g. training for back muscles, financial support for fitness centre, etc. are offered to the employees. Because there is still a lot of physical hard work to do, this is helpful to do the work in an ergonomic way. Training for back muscles is made in-house in meeting rooms but also at the work floor beside the production machines and in the peat lands. The training is also offered to the customers.				1	
8	Practices that are directed at both	DE-AGRO-HORTICULT-L: Improvement system: Innovation proposals from the workers are asked for in a systematic and formal way (written down in a company agreement). 80 to 100 proposals a year are coming from the administration staff and production workers. A fair selection process is guaranteed by the strict and anonymous procedure that is followed. A feedback and money for relevant (workplace) innovation are offered, small gifts for not selected but creative proposals.				1	
9	Practices that are directed at both	DE-AGRO-HORTICULT-L: Junior Staff Development: A personnel development measure for 30-35 years old engineers, new employees and managing demographic change (bringing together old and young			1		

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
		employees to exchange knowledge). Elder skilled workers (practitioners) and young engineers are coming together at the production machines exchanging practical knowledge.					
10	Practices that are directed at both	DE-AGRO-HORTICULT-L: On Feet Meetings: Spontaneous meetings of the staff on their feet at the operating areas, the work floor. Cooperation workers, managers, clerks etc. meet each other spontaneously to discuss problems, strategies, work division etc. This reduces the number of formal meetings sitting at a table and the meeting times, improves the day-to-day work organisation and management timely, and makes the meetings, adjustments and cooperation more lively and productive, short-termed, effective and efficient.	1				
11	Practices that are directed at both	DE-AGRO-HORTICULT-L: Theatre Pedagogy Factory/Workshop. This project together with the University of Osnabrück is a personnel development measure to improve the team spirit and bring together or 'bridging' different 'cultures' of working groups (e.g., commercial and production related staff, old and young employees, different professions). The participants develop an own play presented before all the employees as an audience. Teamwork, work division and organisation are the main themes, presented by a dialogue, scene of different working cultures.		1			
12	Practices that are directed at both	DE-AGRO-PETFOOD-S: Overall Competences: An overall qualification was given to production staff ready to do any job on the production line, enabling employees to take over any job in the production process. After the mechanisation of production, most of the employees had the chance to upskill and take over a skilled worker's task.			1		
13	Practices that are directed at both	DE-AGRO-PETFOOD-S: Training and Career Plan. New company and individual qualification objectives were fixed based on the (future or recent) needed qualifications and individual career perspectives. The initiative came from the employees' representatives. Every employee was given the opportunity to develop his skills and competences.			1		
14	Practices that are directed at both	DE-AGRO-PETFOOD-S; Self-responsible work organisation. The workers at the production site have leeway to organise their work. E.g. in particular situations (like football championship games, social meetings) they could have a break, fulfilling the production objectives later. The main orientation is the need to fulfil the deadlines given by the customers.	1				
15	Practices that are directed at both	DE-EDUC-ACADEMY-S: Employee Survey and Participation System. Every 2 years an employee survey takes place. Since the beginning (2000/2002) more than 10 focus teams (depending on the agreed personnel and organisational developments) were setup to transfer the results of the surveys into active measures.		1			
16	Practices that are directed at both	DE-EDUC-ACADEMY-S: Overall Training Concept. Continuous training of the employees.				1	
17	Practices that are directed at both	DE-ENER-ELEC-L: Innovative Working World is a concept that summarises the idea behind new working areas with improved surroundings such as: friendly atmosphere oriented arrangements, desk sharing, places for informal meetings, self-service for free coffee/tea, relaxation room, more homeworking, open to workers from other departments. All the mentioned changes enhanced communication and working conditions.					1
18	Practices that are directed at both	DE-SERV-TEST-L 'Institutionalised Employee Participation' is stimulated by several HR-related instruments. For example yearly appraisal interviews and team meetings are setup to integrate the employee perspective, knowledge and their continuous training.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
19	Practices that are directed at both	DE-SERV-TEST-L holds 'Company internal fairs': parts of the company are presenting to each other; the whole company participates to learn from each other and from mistakes.		1			
20	Practices that are directed at both	DE-SERV-TEST-L made a structural change of the organisation and workplaces lead to 'subject or theme related teams' across the different departments.	1				
21	Practices that are directed at both	DE-SOC-HANDICAP-L: Employee and Customer Participation Measures. Employee participation and satisfaction is a main concern of the company. 1] measures are continuous employee surveys, 2] direct availability of the senior executives or managers, 3] yearly employee-line manager conversations (appraisal interview), 4] 'employees days' for information and discussions of new developments, 5] a company related bottom-up innovation and improvement system. Every employee could propose improvements within a formal procedure (filling in a form, being proofed by the management, the best proposals are taken up and are rewarded). Such measures are implemented to ensure that the employees' voice is heard, to improve the organisation and to avoid major problems at the workplace.			1		
22	Practices that are directed at both	DE-SOC-HANDICAP-L: Internal Re-entry Management. After being sick for more than 42 days the employer is organising a dialogue with the employee about the main reasons of the sickness and company related factors that could help to avoid the repeating of absenteeism. This meeting is to integrate him or her in the day-to-day work and to avoid a new sickness or to find a new job in the company that will overcome existing constraints or 'handicaps' of the employee.				1	
23	Practices that are directed at both	DE-SOC-HANDICAP-L: Know-how Transfer between Employees. 1] company related vocational training agreement for all the sites was made. If the training is relevant for a large number of employees, some employees take part in external training sessions and then train the other employees in in-house seminars or courses. 2] know-how transfer of knowledge of long-term employed staff to new staff members, from elder to younger people.				1	
24	Practices that are directed at both	DE-SOC-HANDICAP-L: Yearly Working Time Account. The yearly working time account allows employees to collect overtime working hours on a yearly basis and to take an extra time for vacation (in accordance with the company necessities).				1	
25	Practices that are directed at both	DE-TRANSP-TRAIN-L: Employees involvement in innovation development and projects is needed due to market requirements. Employees from various departments can participate. Project groups and steering committees consist of various staff levels.			1		
26	Practices that are directed at both	DE-TRANSP-TRAIN-L: Employee surveys and appraisal interviews. The latter is mainly focused on training necessities. The survey is seen as a personnel development strategy, which is combined with yearly interviews. During the interview; goals are set for both, the managers and the employees.				1	
27	Practices that are directed at both	DE-TRANSP-TRAIN-L: Talent management programme aims to identify, select and foster talented employees. It is not only training, but 'sustainable further development'. Specific adopted and invented tools are used to evaluate personnel. It is noteworthy that employees can nominate themselves.				1	
28	Practices that are directed at both	DK-ART-MUSEUM-S: Partnership with unions. New projects and organisational changes are debated in a joint committee with union representatives, OHS representatives and management representatives. This committee is initiating new practices such as training and support for new employees.		1			
29	Practices that are directed at	DK-EDUC-SCHOOL-S: 'Work organisation: New autonomous and interdisciplinary teams'. Instead of being responsible as an individual	1				



No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
	both	teacher for teaching specific subjects across year groups, teachers now are responsible for an entire year group.					
30	Practices that are directed at both	DK-MANU_FABRIC-S: 'ensuring employee participation' evolves around organisational culture issues, focused on direct and informal dialogue; 1] proposing changes directly to the management; 2] The product development department, for example, conducts continual innovation meetings. All sorts of utopian and 'crazy' ideas about how to organise our work can be proposed, and sometimes the organisation transforms them into specific solutions; 3] The company inspires the employees to renew the products by inviting artist and arranging trips to art museums.		1			
31	Practices that are directed at both	DK-MANU_FABRIC-S: 'new multidisciplinary customer segment teams' were introduced, where product developers, designers, customer service assistants, logisticians and representatives from the department of quality and environment are working together across countries. The subsidiary companies take part in the team work as well.	1				
32	Practices that are directed at both	DK-SERV-JOURNAL-S: '60 % knowledge': Reducing vulnerability. The employees train their colleagues to have approximately 60 % of each other's knowledge.			1		
33	Practices that are directed at both	DK-SERV-JOURNAL-S: 'Helicopter meetings': Debating the future topic-focused, such as employment policies and priorities in the collective agreements. These meetings are extensions of the meeting culture where employees, management and politicians discuss how they can develop the organisation in the future.		1			
34	Practices that are directed at both	DK-SERV-PARK-S: Partnerships with union representatives. Organisational changes (restructurings, collective agreements and the like) are discussed by the manager and the union representatives at a monthly meeting.		1			
35	Practices that are directed at both	DK-SERV-PARK-S: Team work: 'Self-managing work gangs'. The employees at Street & Park Bornholm work in self-managing work gangs.	1				
36	Practices that are directed at both	DK-SERV-PARK-S: Workplace innovation practice: 'Joint Management' project together with KL (interest group and member authority of Danish municipalities) and 3F (United Federation of Danish Workers). The project began with training for the management group, representatives and employees, where the cooperation between employees, management and union representatives began to flourish. The Joint Management Project aimed to inspire workplaces to make partnerships and change their work organisation to support more autonomy for employees.			1		
37	Practices that are directed at both	DK-WASTE-COLLECT-S: Workplace Innovation practices: a participatory design-oriented approach. 1] A design-oriented approach where employees, managers and union representatives are working together in developing new ways of organising work and technical solutions that make work safer and easier for employees. The company has developed two new trucks. The employees have been involved in developing the new trucks and union representatives have been participating in the process as well. The main point of the new trucks is to make work safer and easier for employees in order to prevent accidents and increase performance. 2] An approach to benefit from the employees' talents and reflections on their daily work. This is a more ad hoc process to embrace new ideas that are initiated by employees. The company has worked with gas extraction of shredder waste – an idea that was initiated by employees. Shredder waste is what you have left when you have crushed a car and extracted all of the metal.			1		
38	Practices that are directed at	EL-FIN-BANK-L: 'Breakfast with the CEO': CEO meets a group of 10 employees every Friday and discusses the developments of the company		1			

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
	both	(without having a specific agenda). Almost all employees have been invited in this open dialogue procedure.					
39	Practices that are directed at both	EL-FIN-BANK-L: A learning academy 'For Your Improvement' (FYI). Courses are longitudinal; cover various work-related topics.				1	
40	Practices that are directed at both	EL-FIN-BANK-L: A new platform of corporate social networking named S.A.M. (Show All that Matter). An interactive tool not only for a one side communication but for enabling dialogue (they do 'like', form communities, share problems), or in the context of a project they can share files. It also serves as a common data base.		1			
41	Practices that are directed at both	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, they gain experience.			1		
42	Practices that are directed at both	EL-FIN-BANK-L: Improvement and innovation is enabled by a new WPI: an innovation team (comprised of volunteers) discusses their views about the improvement of specific company areas with the executive committee.		1			
43	Practices that are directed at both	EL-INFO-NETWORK-S Enabling work environment (open spaces and technologically advanced solutions) helps to enhance more efficient and easier distribution of information. This inspires and supports collaboration, allows ideas to flow freely, and various people can meet in a more informal way.			1		
44	Practices that are directed at both	EL-INFO-NETWORK-S: Online Learning Academy supports learning and combines formal and informal learning with efficient knowledge-sharing processes. Employees feel empowered and responsible for driving their own professional development.				1	
45	Practices that are directed at both	EL-INFO-NETWORK-S: Workplace Surveys give feedback in working life issues and this initiates an action plan. E.g., the aim of 'Dialogue Survey' is to ensure the voice of employees is heard. The issue that is measured is the progress made in regard to corporate culture and employee development. This helps senior leaders to estimate the overall capabilities of the organisations. In this way employees and managers share their needs and goals.				1	
46	Practices that are directed at both	EL-MANU-PAINT-S: A people focus into managing change. Change management focuses on the development of employees' potentials and the full exploitation of their job experience. They put a people focus into a structured change methodology that focuses on people-related issues. They emphasize more on training their staff on how they can cooperate and communicate more successfully, how they can minimize job frustration and how people can become real change agents and champions. By acquiring additional skills, project managers have become business change champions. The company benefits by building the capability of its own people, creating a higher level of employee commitment to change and implementing more successful change initiatives. All project managers have acquired skills in project management, change management techniques as well as interpersonal skills.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
47	Practices that are directed at both	EL-MANU-PAINT-S: Performance improvement through Dialogue. A holistic approach, My Career Performance and Development Dialogue-PDD, for the improvement of the employee performance in conjunction with their personal and company's development, is implemented. The purpose is every staff member to agree on performance assessment, individual business goals and his/her personal development plan, set objectives and goals for the remaining year, eliminate any misalignments and give and receive feedback on performance.				1	
48	Practices that are directed at both	EL-SERV-RETAIL-S New performance management and employee development approach was developed, that focuses on results and leadership. This new approach includes effective, company values and targets based meetings between managers and employees.				1	
49	Practices that are directed at both	EL-SERV-SHIP-S: Specifically organised training system: Analysis and Selection of Training Needs, Elaboration of the annual Training Plan, Selection of the most adequate trainers, Organization and Materialization of the Educational Program, Evaluation of the Educational Program. This lends to an efficient (in terms of time) and safe working environment.				1	
50	Practices that are directed at both	EL-SERV-TECH-RET-L: Employees bonus scheme 'All good employees can sell' is innovative since the bonuses are given to the in store employees, e.g., to grocery sellers. It motivates to 'win' more customers and sets a new mind-set to the sellers, i.e. acting as 'a store owner'. This increases their productivity and sales orientation. Their engagement and loyalty is raised and the company's culture and values are developed as well as the reinforcement of the commercial business aspects of the company.	1				
51	Practices that are directed at both	ES-MANU-BAKER-L: A fluent social dialogue with employee representative groups. Information on the main activities developed by the company, existing plans as well as information on the economic evolution of the company is provided to employee representatives, so they could transmit this information to employees.		1			
52	Practices that are directed at both	ES-MANU-BAKER-L: Fostering ideas from employees: suggestion boxes, 'manufacture of ideas' (best ideas get a prize), 'quality circles' (groups of selected employees meet in order to identify areas of improvement in different domains).				1	
53	Practices that are directed at both	ES-MANU-BAKER-L: Training policy for company employees (for general knowledge, specific technical knowledge or general abilities).				1	
54	Practices that are directed at both	ES-MANU-BAKER-L: Work in departments is organised on the basis of teams. In some departments (e.g., R&D, Export Department, etc.) teams have a relatively high degree of autonomy to self-organise.	1				
55	Practices that are directed at both	ES-MANU-BUS-L: 'Mentoring in abilities' practice: the company has selected individuals with key, well recognised, skills and competences within his/her competence domain and who have a positive attitude towards teaching other individuals. Mentors devote part of their time (on a voluntary basis) to mentor other selected workers who benefit from these mentoring activities to fully develop their professional potential. These mentors receive special training from the company before becoming mentors.				1	
56	Practices that are directed at both	ES-MANU-BUS-L: A strong risk prevention policy: a comprehensive management of risk prevention and weekly meetings by departments, where cleaning, security and risk-related elements are exposed and discussed within departments/teams. This practice has given important results for the company, in the sense that five company working groups have managed to have 0-accident rates in the last 8 years.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
57	Practices that are directed at both	ES-MANU-BUS-L: Active and continuous training policy for the employees, adapted to their job contents and identified needs. Two main initiatives: 1) 'Development Management System' when an employee annually meets his superior and management and sets individual Action Plan and 2) 'Lead' initiative, which is suited for the key individuals in the company.				1	
58	Practices that are directed at both	ES-MANU-BUS-L: A fluent labour relation with legal employee representation is guaranteed by regular formal and informal meetings (more than 20 per year). Meetings help to inform on the evolution of the company, identify problems and their solutions.		1			
59	Practices that are directed at both	ES-MANU-BUS-L: The company is very active in the development of a regular policy intended to bring employee ideas and communicate with them. Various measures are used: notice boards, publication of an internal magazine, workshops with different working groups, suggestion box and prizes for the best ideas.				1	
60	Practices that are directed at both	ES-MANU-XXXX-S: 'the presence of innovative work organisation practices' 1] The 'sliding work organisation system', by which employees are encouraged to partially assume activities that correspond to their immediately higher position rank, and in different production lines. 2] the 'biological calendars', an innovative working time organisation practice (suggested by the employee representatives) intended to conciliate the company's demands with the needs of the workforce. 3] the work is organised around self-managing teams.			1		
61	Practices that are directed at both	ES-SCI-ENVIRONM-L: Bonus payment systems are for the employees who are regarded as the key personnel of the company.				1	
62	Practices that are directed at both	ES-SCI-ENVIRONM-L: Competence development system is aimed at improving the human resources and development of skills in different domains. Company developed 3 main tools: 1) 'domain management process', where concrete individuals are responsible for specific domains (the main market and competence trends for the future), so the company can lead their future activities accordingly; 2) a number of general and work-specific courses and training opportunities; 3) 'Performance Management System': each individual is assessed every year via a 360 degree exercise. This tool allows to identify concrete individuals with high growth potential that can be supported by an ad-hoc career plan or individuals with low motivation that are demanding individual improvement actions, as well as areas of improvement for each one of the assessed individuals.				1	
63	Practices that are directed at both	ES-SCI-ENVIRONM-L: Flexitime approach in relation to working time – employees have a certain level of flexibility about their in/exit times.			1		
64	Practices that are directed at both	ES-SCI-ENVIRONM-L: Minimising organisational 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.	1				
65	Practices that are directed at both	ES-SCI-ENVIRONM-L: Social dialogue with employees, mainly via employee representatives. Representatives are informed on different elements of the company and they negotiate with managers different employee-related issues.				1	
66	Practices that are directed at both	ES-SCI-PHARMA-L: 'Development of a model of 'management by values', to identify common 'values' A participatory process that defines five main values which is then used for improvement and evaluating the work of employees				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
67	Practices that are directed at both	ES-SCI-WORK-L: Continuous training aimed at both, sector specific skills as well as general abilities. These activities are carried out in a formal manner. The average time devoted to training activities is 5% of employee's time.				1	
68	Practices that are directed at both	ES-SCI-WORK-L: Flexitime practices allow workers to have a say on their working times: they can adjust their starting and exiting hours, also ad-hoc exits (with manager's permission) are allowed.			1		
69	Practices that are directed at both	IE-MANU-PHARMA-S: Beyond the engagement survey. Annual engagement surveys are carried out as part of the global '[company] Voices' engagement initiative. After the results had been communicated to the workforce the company was keen to engage employees in finding solutions. A workshop, open to all employees, used mind-maps and storytelling techniques to build a shared vision for change and improvement.		1			
70	Practices that are directed at both	IE-MANU-PHARMA-S: Building an effective management culture. The global 'Shared [company]' initiative is aimed at ensuring cultural consistency based on the company's values and principle behaviours. Positive two-way communication based on common values and behaviours is recognised as one of the principal enablers of employee engagement, strengthening both employment relations and the capacity for improvement and innovation. The company invested in Stephen Covey's 7 Habits of Highly Effective People. Initially managers and directors took part in a three day programme, one outcome of which was a greater emphasis on listening, clear and complete communication, open dialogue and common language at management meetings. A further one day course was arranged for the entire workforce.		1			
71	Practices that are directed at both	IE-MANU-PHARMA-S: Embedding quality and improvement (Lean and Six Sigma). A strong emphasis on quality control and regulatory compliance is vital and 1) an active continuous improvement (CI) programme has been in place. Several innovations have been led by employees. Cross functional groups created to address specific issues typically involve employees at every level. 2) Led by a CI Engineer, a programme of voluntary training involves a substantial number of employees as Six Sigma Yellow, Green and Black Belts. 3) The culture of improvement extends to team level. Regular Toolbox Talks review safety procedures, learn from incidents and address employee concerns about risk.					1
72	Practices that are directed at both	IE-MANU-PHARMA-S: Workplace partnership. During the period of restructuring: issues were brought formally to management by union representatives on a regular basis. In time a sense of mutual trust and understanding developed, allowing many problems to be resolved informally without recourse to formal procedures.		1			
73	Practices that are directed at both	LT-ENER-ELEC-L: The Innovation Committee practice is already well established and showing tangible results. This is a system when each person in the company, despite its position in the hierarchy, has equal rights and possibilities to make suggestions for company improvements or innovation. A call for suggestions on improvements or innovation is announced twice a year. There are two main categories: technological innovations and mastery/excellence innovations. These can be brought to the Operations Development Unit directly or put in the post box throughout the company. Operations Development Unit then looks through all suggestions, sorts them out and presents to The Innovations Committee consisting of company's top managers of various fields for reviewing and consideration.				1	
74	Practices that are directed at both	LT-MANU-CLOTHES-L: Building organisational culture – 1) to make the company a good working environment for their current employees and become attractive to potential employees and 2) to communicate				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
		company values and practices to its clients and suppliers. The company has developed internal polices/values in the area of ethical standards, intolerance, corruption. The company organises all company employee events; once a year all company's employees with their family members gather for one all company event (for instance, theatre performance and reception afterwards). The company also publishes a newsletter with major company announcements, introduction to new company's employees, acknowledgements of best achievements and similar.					
75	Practices that are directed at both	LT-MANU-CLOTHES-L: Improving internal company communication and cooperation, better experience for the clients. This relates to two main information systems: 1) A new business organisation and management information system that facilitates internal working processes, integrates all company parts and processes (HR, orders' management, procurement, storage, quality accounting, salary etc.), and e.g. facilitates monitoring of company results. This solution has helped the company to enable its employees to start working in the way that constant attention would be paid to the complexity of company's functioning, i.e. that all units are related and dependent on each other (before each unit worked in their own (separate) systems, so no one had an overall picture and therefore a sense of responsible for the whole company was hard to imagine). 2) Another piece of software that was deployed for the purpose of production and time cost reduction and improvement of the experience of company's clients. The company is the first in the world among high street high fashion lady's wear manufacturers adopting the system for product development solutions to facilitate and accelerate the collection development cycle and to build a better product (the system, for instance, includes the ability of pattern-making, grading and 3D prototyping). The deployment of the system changed the way that the Production Preparation unit's work in the company and especially the work of garments constructors. It has changed the garments constructor – tailor relations: with this software the tailor of the first garment prototype in one or another garment line receives better elaborated pattern-making, which then helps to concentrate on sewing mastery. This contributes very much to more effective production processes in the company, but also to better experience for the company' product and services clients as they can see the product in 3D before the product is put on the production line.					1
76	Practices that are directed at both	LT-MANU-CLOTHES-L: The development of team work and good working environment, for instance: 1) re-designing of working processes in terms of team responsibility for results, where each team consists of about 10-15 production line (for instance, cutters, sewers, ironers etc.) people and their manager. Each team receives annual result targets and can plan individually on how to achieve them; 2) training of middle and higher level managers in the area of facilitation of team work in the company regarding work tasking, motivation, conflict resolution. 3) re-designing of motivation and reward system for results. For instance, the salary consists of the basic salary, and then additional percentage is added for additional quantity and good quality of the end product, for the team members of the team which achieves their results six months in a row.			1		
77	Practices that are directed at both	LT-MANU-RESPIR-L: 'Supporting employee initiatives', this implies that each person is invited to submit proposals of product or production process improvements. Each proposal is assessed, if proceeded; responsible persons are assigned for the implementation process and are assigned resources.		1			

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
78	Practices that are directed at both	LT-MANU-RESPIR-L: a range of HR-related measures 'Organisational learning and development'. Five aspects : 1) constant learning and professional development through training and development programmes and the review of performance of high skills employees; 2) internal career opportunities, support to develop either internally (training, assessment, career orientation) or externally (for instance, gaining formal education diploma); 3) learning and awareness sessions. Clients show how a product is used in practice, which then contributes to mutual learning; 4) investing in people – the company brings over high level specialists from abroad for internal company training, it sends teams abroad for training, and runs apprentice programme in the company, etc.; 5) use of new technologies in the learning and professional development process.				1	
79	Practices that are directed at both	LT-SERV-POST-L: 'Loyalty Day' aims to enhance communication and knowledge sharing between managers and first line workers. Managers voluntarily visit workers on their working site and gather information about specific processes and possible issues. This raises sustainability, efficiency and good organisational communication.		1			
80	Practices that are directed at both	NL-INFO-NEWS-L :the new CEO stimulated Dialogue and idea management, and introduced lunch sessions in which every employee is offered the opportunity to have lunch with the CEO and tell him their ideas for improvements or innovations.		1			
81	Practices that are directed at both	NL-INFO-NEWS-L: four cross functional teams for innovation projects are established to realise an innovation project. Teams are composed from all departments and the members actually got a new job.	1				
82	Practices that are directed at both	PL-ADM-TAX-S: Evaluations and awards system is promoting effective and efficient performance, activities and initiatives aimed at upgrading public awareness about the company and its image. Each employee can comment on the results directly to the top management.				1	
83	Practices that are directed at both	PL-ADM-TAX-S: Individual development and training plans are based on biannual evaluations of performance. Various courses, online trainings, postgraduate studies and other are offered, that could help the employee to develop and are in line with company's needs.				1	
84	Practices that are directed at both	PL-ADM-TAX-S: Monthly meeting with managers and union representatives help to communicate changes and current situation status, consult decisions and initiatives.		1			
85	Practices that are directed at both	PL-ADM-TAX-S: Training development plan for new employees and trainees helps new people to get used to their functions and duties. Each person has his/hers delegated supervisor/mentor who helps to adjust.				1	
86	Practices that are directed at both	PL-EDEC-REHAB-S: 'Partnership in management' practice led to creation of a Coordination Team in order to integrate decision procedures that were formerly split up under a single scheme. The integrated team consists of representatives of all groups of workers and management. The body is an informal advisory and consultative structure, and acts as an intermediate element between employees and management.			1		
87	Practices that are directed at both	PL-EDUC-INFO-SCHOOL-S: A new coordinated computer information system which integrates information processing and communication procedures of university was installed. In facilitates; communication among university, students and employees, saves employees' time on simple tasks.					1
88	Practices that are directed at both	PL-EDUC-INFO-SCHOOL-S: Access control system with integrated monitoring - every employee and student is equipped with personalised access card that substituted keys to university premises. This reduces timely tasks of security employees, academics and administrative staff. Students and teachers' presence is visible online and archived which					1

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
		may then be used as reference for administrative actions undertaken.					
89	Practices that are directed at both	PL-EDUC-INFO-SCHOOL-S: Workshops and trainings concerning soft managerial skills, accounting management and human resources management has been performed for all managers employed in the company. These courses provide management with skills and knowledge for more efficient and professional management activities.				1	
90	Practices that are directed at both	PL-EDUC-MED-SCHOOL-S: Development of premises and equipment and an upgraded quality of working environment, e.g., refurbished school premises, new electronic repository, modern social space.				1	
91	Practices that are directed at both	PL-EDUC-MED-SCHOOL-S: Involvement in External projects is highly supported by employees, who take their own initiative, e.g., prepare projects for structural funds.			1		
92	Practices that are directed at both	PL-EDUC-MED-SCHOOL-S: Training opportunities for employees: workers are enabled and financially aided to develop their competences and knowledge by following steps in their development schedules.				1	
93	Practices that are directed at both	PL-INFO-LIBRARY-S: A new department was created (Department for Scientific Documents and Works) in order to enable more efficient evaluation of scientific studies.	1				
94	Practices that are directed at both	PL-INFO-LIBRARY-S: Trainings and courses for librarians related to their scope of interests, ICT technologies and their own development plans.				1	
95	Practices that are directed at both	PL-MANU-SHIP-S: Use of the employees' potential – I Have an Idea competition. Management decided to prepare a tool that would allow the enterprise to make use of ideas from employees. The contest I have an Idea was launched; employees can submit their proposals for various improvements, usually regarding their workplace and activities. Awards are given for the best solutions constituting a form of encouragement for the employees. Yet, the award itself is less important than the possibility of improvement of quality, efficiency and safety at work.				1	
96	Practices that are directed at both	PL-TRANSP-BUS-S: Additional learning opportunities, e.g., courses, offered to the employees in order to improve their performance. Employees feel more accepted and are subsequently more willing to work for the company's efficiency and stability.				1	
97	Practices that are directed at both	PL-TRANSP-BUS-S: Direct (informal) communication practices, beyond company's hierarchy, between individual employees and the president of the company. This had a positive effect for trust, understanding and individual employee's performance.			1		
98	Practices that are directed at both	UK-CONS-BUILD-L: 'Breaking down silos' was to demolish the walls between different parts of the organisation; and centralising 'Enabling Functions' such as HR and Finance.	1				
99	Practices that are directed at both	UK-CONS-BUILD-L: 'Changing management behaviour' with focus on working culture such as, the 'Great Boss initiative', that defines expected management competencies and behaviours, and measures progress through an working climate survey.		1			
100	Practices that are directed at both	UK-CONS-BUILD-L: 'Engaging employees in improvement and innovation' indicates the need for employee initiative. An open and enabling management culture, supported by specific initiatives including local Consultation Forums for frontline workers and union reps, the Company Way Week – a focus for dialogue on important issues such as well-being 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.		1			
101	Practices that are directed at both	UK-CONS-BUILD-L: 'Reinforcing ethical behaviour'. Management team meetings' exploring an ethical dilemma's relevant to the business, which reinforces a values-driven organisation.		1			



No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
102	Practices that are directed at both	UK-ENER-ELEC-L: culture of communication and consultation. Open Forum involving the senior executive team in dialogue sessions with the whole workforce. This investment of time by the Chief Executive and the senior team exposes them to the concerns, ideas and tacit knowledge of employees at all levels of the organisation. The emphasis is firmly on two-way communication. Open Forums stimulate open and constructive dialogue and feedback.		1			
103	Practices that are directed at both	UK-MANU-BATH-L: 'leadership by behaviour' comprises 'Leading by example', the CEO has created a culture of shared leadership, values and behaviours and holds a 'Big Briefing' about the company progress.		1			
104	Practices that are directed at both	UK-MANU-BATH-L: Introduce corporate values, SHINE values - Straightforward, Helpful, Innovation, No Limits to Customer Service and Empower and Engage.		1			
105	Practices that are directed at both	UK-MANU-BATH-L: Training, skills development, apprenticeships and career progression. Employees' individual developments are discussed at conversational one to one meetings and lead to a 'no surprise' year-end appraisal.				1	
106	Practices that are directed at both	UK-MANU-TYRES-S: Competency led appraisals in terms of two – way discussion between employees and managers. The appraisals are not just limited to ticking a box but involve a lot of interaction and discussion about the needs of staff in terms of skills, development and support.				1	
107	Practices that are directed at both	UK-MANU-TYRES-S: Cross functional teams are seen as a way to promote continuous improvement within the company. Through 'Kaizen' activities, employees from different parts of the business are meeting together to discuss and resolve business issues in order to improve understanding as a matter of efficiency and improvement.					1
108	Practices that are directed at both	UK-MANU-TYRES-S: Employee involvement and participation are encouraged through monthly meetings which are non-management led and the 'Town Hall' meetings. Employees are encouraged to raise questions and speak up their ideas. Feedback and collaborative working is sought in terms of innovation and change. (Less strict than Japan but decisions remain at high level).				1	
109	Practices that are directed at both	UK-SCI-GEO-L: Creating a matrix structure was an essential element in making the organisation a more innovative and responsive organisation. There was little cross-over between different functional divisions and many line managers were defensive about their own areas of science. The initial matrix structure was designed to reflect the increasingly multi-disciplinary and multi-functional nature of the organisation's projects, allocating staff to a specialist team leader and a succession of project leaders as well as to a line manager. By enabling staff to move quite easily between teams and going between very different science areas the matrix system broke down the silos.	1				
110	Practices that are directed at both	UK-SCI-GEO-L: Line Manager's role. In practice the line manager's role tended to 'evaporate' leaving some people, especially younger staff, unsure of where they belonged in the organisation as they moved from project to project. The role of the line manager has been strengthened, giving back responsibility for appraisals, annual leave, sickness management and more involvement in an individual's scientific and project work. Line managers have been supported in the re-acquisition of their responsibilities by means of a workshop programme, and the appraisal system has been redesigned to place much more emphasis on open discussion rather than 'box ticking'.	1				
111	Practices that are directed at both	UK-TRANSP-CAR-S: Cross functional groups (project teams) which involve staff from all levels and disciplines are seen as a source of continuous improvement, innovation and teamwork.			1		

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
112	Practices that are directed at both	UK-TRANSP-CAR-S: Feedback sessions improve communication and drive improvement in the company. They have turned out to be important in identifying weaknesses in management styles and to break down silos between staff and managers and bridge communication gaps within the company through Leadership Programmes and training. 'Stimulus Barometer' or Pulse Survey has been used as an effective tool to understand what is going on within the company.				1	
113	Practices that are directed at both	UK-TRANSP-CAR-S: Job autonomy. The employees have the discretion to carry out their job roles. This plays an important role in getting things done as a matter of efficiency.					1
114	Practices that are directed at both	UK-TRANSP-CAR-S: The company is seeing appraisals as a tool for skills development and training beyond merely ticking a box.				1	
115	Practices that are directed at both	UK-TRANSP-CAR-S: The employee representative, whose role is on voluntary basis, plays an important and active role in employee representation in Works Council. 'He asks for issues before, he goes to the meeting and comes back and gives everybody a summary of what's happened as well.'				1	
116	Practices that are directed at employee engagement and quality of work	DE-AGRO-HORTICULT-L: Trust Working Times: employees can work at any time they want, self-responsible without any formal controlling by the management or line-managers. The employees could combine much better private and family life with working times and relate working times to their own personal bio-rhythm. But they have to tune their own preferences with the working team and given work peaks. Apart from this no constraints are given. This Trust Working Times are part of an official agreement between the management and the employees and their representatives.			1		
117	Practices that are directed at employee engagement and quality of work	DE-EDUC-ACADEMY-S: Team Leader and Small Teams (12-15 Employees) The three level hierarchies were enhanced by an additional level of team leaders. This was done to give the employees more autonomy, to better involve the employees, to make workplace directed decisions together by both employees and managers. 2013 there was a comprehensive structural change: launching new departments, closing and combining different departments. The fourth line of managers (team leader) are replacing some former heads of departments, aiming to have small teams with more self-responsibility at the workplace.	1				
118	Practices that are directed at employee engagement and quality of work	DE-SOC-HANDICAP-L: Overwork Announcement. A where employees can announce substantial problems that hinder them to do a good job was set-up. It is a kind of early warning system, to prevent mistakes or problems negatively influencing the assistance of the clients.			1		
119	Practices that are directed at employee engagement and quality of work	DE-SOC-HANDICAP-L: Social Counselling Service. A counselling service done by a company external contact partner is offered to the employees and also the clients, including all life and work areas, social, private or work related problems (outstanding debts, critical life events, family problems, mobbing, etc.).					1
120	Practices that are directed at employee engagement and quality of work	DE-TRANSP-TRAIN-L: Health programme consists of various activities: ergonomic office equipment, free use of bicycles and fitness studios, health checks, 'health information days' of external institutions, flu shots, etc.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
121	Practices that are directed at employee engagement and quality of work	DK-ART-MUSEUM-S: 'Good hosting project' for the museum hosts. The museum hosts more valued and became an integral part of the workplace. The 'hosting project' was based other businesses (for example Legoland, a Danish theme park) on how to create an exciting experience for the guests. The museum hosts went on training and formulated new 'work codes' on how they greet the guest, which products to sell, how to inspire the guests to explore the exhibitions and the like. The 'codes' formed a great way to involve the employees in the process.			1		
122	Practices that are directed at employee engagement and quality of work	DK-ART-MUSEUM-S: Autonomous team work in the Funen Village. A new team work structure was introduced as a major request from the employees. Teams are able to utilise the professional skills of the individual team worker. Craftsmen, gardeners and other trades are employed at the Funen Village. The craftsmen wished a more flexible work organisation where they had the opportunity to convey their tasks to the audience. The team will self-organise work, task sequence, work mode, etc. It improves their ability to plan. They also have more time to talk about their craft. The team control their work organisation, duty roster and budget.			1		
123	Practices that are directed at employee engagement and quality of work	DK-EDUC-SCHOOL-S: 'Workplace partnership': Discussion forums/ dialogue as a base for innovation' was promoted; Changes are discussed with employees, and with union representatives.		1			
124	Practices that are directed at employee engagement and quality of work	DK-SERV-JOURNAL-S: 'Internal university': Sharing knowledge with colleagues through 'internal university' meetings, and employees making presentations.		1			
125	Practices that are directed at employee engagement and quality of work	EL-MANU-PAINT-S: Health and Safety with employees' participation. The company is committed to applying a health and safety attitude at work and increase the employee engagement in safety (Behavioural Based Safety-BBS). The management team designed company's BBS in cooperation with frontline employees and all employees are involved in the implementation.				1	
126	Practices that are directed at employee engagement and quality of work	EL-SERV-RETAIL-S Health and Wellness programs provide a complete health programme for employees, based on their needs (diets, fitness, smoking reduction, healthy lifestyle). Consultations with specialists and monetary aid are provided.				1	
127	Practices that are directed at employee engagement and quality of work	ES-MANU-BAKER-L: Loyalty enhancement by very attractive working conditions, often established in the enterprise collective agreement (e.g., high salary levels). Other activities include summer camps for children of the workers, health programmes.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
128	Practices that are directed at employee engagement and quality of work	ES-MANU-BUS-L: The company has got a well-defined and comprehensive Equality and Diversity Plan, discussed and elaborated with the participation of different departments and job categories. The company has got an Equality and Diversity Committee (comprised of workers from various levels) that proposes activities in this domain to be developed. E.g., a policy of flexibility in working times in entering/exit times or the availability of an annual maximum working hours bourse of +/-150 working hours per year to be freely disposed by the worker according to his/her needs, the open possibilities for teleworking for recent mothers or pregnant women, 'Weekend for families' (employees' families were invited to see and visit the production facilities).				1	
129	Practices that are directed at employee engagement and quality of work	ES-MANU-XXXX-S: 'High attention to risk prevention activities'. Training and information transfer are developed by the company.				1	
130	Practices that are directed at employee engagement and quality of work	ES-MANU-XXXX-S: 'Availability of a very favourable employment and working conditions within its own enterprise collective agreement' was a result of the existing social dialogue practices. The agreements are favourable compared to collective agreements at provincial, regional and national level.			1		
131	Practices that are directed at employee engagement and quality of work	ES-MANU-XXXX-S: 'Fluent and rich social dialogue' between management and employee representatives, stressing elements of formal and informal communication, consultation and two-way dialogue.		1			
132	Practices that are directed at employee engagement and quality of work	ES-SCI-ENVIRONM-L: Gender Equality plan is implemented at all levels of the company. This plan is already showing results, women being represented in all levels of the company.				1	
133	Practices that are directed at employee engagement and quality of work	ES-SCI-PHARMA-L: 'Active competence development policy for employees' combines several HR-measures: competence development policy covers training; a 'backup' policy where each job could at least be performed by two individuals; recruitment policy; voluntary horizontal and vertical mobility of employees.				1	
134	Practices that are directed at employee engagement and quality of work	ES-SCI-PHARMA-L: 'Emphasis on the health and well-being of employees'; active committee of safety and hygiene at work, related to risk prevention and safety at work; 'flexitime' practices, with a certain degree of flexibility in the working times.			1		
135	Practices that are directed at employee engagement and quality of work	ES-SCI-PHARMA-L: 'Fluent social dialogue with the legal employee representation' on working conditions, wages and working times, etc.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
136	Practices that are directed at employee engagement and quality of work	ES-SCI-PHARMA-L: an 'Open and participative business culture' to sell shares to employees; a profit-sharing scheme; meetings to inform all employees on the main results and future directions; 'open door' business culture, in which each employee is 'welcomed' to discuss with all hierarchical levels, including the CEO.		1			
137	Practices that are directed at employee engagement and quality of work	LT-MANU-RESPIR-L: 'Employee friendly forms of flexible working' are available for families with small children.	1				
138	Practices that are directed at employee engagement and quality of work	LT-MANU-RESPIR-L: 'Self-managing teams'.	1				
139	Practices that are directed at employee engagement and quality of work	NL-INFO-NEWS-L: the Editorial department was restructured to produce more in-depth articles, which for most journalists meant much more professional autonomy, and much more interesting, challenging tasks.	1				
140	Practices that are directed at employee engagement and quality of work	PL-EDEC-REHAB-S: 'Institutional development through individual employee development', several HR-related practices, which provide employees with autonomy and initiatives in the accomplishment of the tasks assigned. 1] The innovative Incentive Scheme (including financial and non-financial aspects) means that the employees receive bonuses. 2] Participation in educational classes, including training, studying and internship is rewarded with additional salary. 3] Employees are entitled to use specialised rehabilitation equipment, and the Centre's premises. 4] allow employees to expand their competence, e.g. by financing postgraduate studies, nationwide and international exchange and internship projects. 5] Self-Education Council, formed by teachers and specialist of the organisation, enables to share knowledge and raise the workers' skills. 6] employees created an Integrated Computer Schedule covering the use of rooms, specialists' working time and the pupils' individual schedules. 7] management and staff willingly participate in planned and spontaneously organised integration meetings.			1		
141	Practices that are directed at employee engagement and quality of work	PL-EDUC-MED-SCHOOL-S: Local events and activities that promote healthy living are initiated and implemented by employees. Those events are focused on disabled people and help to foster a healthy organisational climate. These activities are supported by the management.				1	
142	Practices that are directed at employee engagement and quality of work	UK-CONS-BUILD-L: 'Trade union partnership' to work closely with the trade unions.		1			
143	Practices that are directed at employee engagement and quality of work	UK-CONS-BUILD-L: an 'Injury Free Environment' with safe, healthy working is driven from the top.				1	

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
	work						
144	Practices that are directed at employee engagement and quality of work	UK-ENER-ELEC-L: Improving industrial relations with management-union partnership. 'Working Together; the partnership agreement, focuses on communication and consultation at corporate level and shapes line management behaviour at all levels of the organisation. 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.		1			
145	Practices that are directed at employee engagement and quality of work	UK-MANU-BATH-L: Self-managed team working is empowered to address issues from customers directly.	1				
146	Practices that are directed at organisational performance	BG-ENER-GAS-S: 'The Profession Education Initiative' aims to reduce the lack of technicians. Company works with schools, e.g., trains teachers, sends mentors, and invests in laboratories. In this way company develops their future employees.				1	
147	Practices that are directed at organisational performance	BG-MANU-CLOSURES-L: 5S system (sort, set in order, shine, standardise, sustain) – the workplace organisation system has been implemented in the production facility of the company. All instruments are ordered and labelled - this system increases efficiency, reduces machine and workers idle time, and contributes to better workplace order by introducing new workplace principles and procedures. This also increases safety and adds to a more efficient waste collection.					1
148	Practices that are directed at organisational performance	BG-MANU-CLOSURES-L: Signalling system – each employee on the production facility can signal about problems, bottlenecks and any observations related to the production quality. This is enabled using an internally developed IT system.			1		
149	Practices that are directed at organisational performance	BG-MANU-CLOSURES-L: Technical Council allowed each employee to submit innovative ideas related to the optimisation of production facilities and processes. Depending on the weekly topic, in addition to the permanent core members attending, employees differ each time, including production floor workers.			1		
150	Practices that are directed at organisational performance	DE-WASTE-WATER-L: A new formal education and training programme was created by volunteers from the staff, employee representatives, managers and a formal education institution. This new programme fulfilled the external requirements and demands (EU directive).				1	
151	Practices that are directed at organisational performance	EL-SERV-RETAIL-S: Enterprise resource planning system's implementation was started in order to reduce company's procedures and increase the speed of processes, e.g., reporting. Positive results were seen in various layers and units of the company.				1	
152	Practices that are directed at organisational performance	EL-SERV-SHIP-S: Enhancing organisational culture helped to efficiently execute company's strategic tasks. Company emphasised their values, which helped employees to identify with the company.					1
153	Practices that are directed at organisational performance	EL-SERV-SHIP-S: Knowledge sharing and accumulation is enabled by various means: team-work approach, feedback gathering from clients and close collaboration with external companies. E.g., every product has its own development team and there is a research team that works with all projects of the company; close collaboration with institutions that approve product standards help to increase efficiency and keep high quality; customers provide newest market demands and requirements.			1		

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
154	Practices that are directed at organisational performance	EL-SERV-TECH-RET-L: Student's internship program: a path of finding new talents is created by Human Resources Department. They set up a national network and partnerships with a number of educational institutions including universities and vocational training schools. Talented individuals are invited to join the company permanently.				1	
155	Practices that are directed at organisational performance	ES-SCI-ENVIRONM-L: 'Call for ideas' is a project where individuals can propose new ideas related to the business.				1	
156	Practices that are directed at organisational performance	ES-SCI-WORK-L: Ideas Competition allows employees to identify possible good ideas that could help the organisation to improve. Winners of the competition receive a financial prize.			1		
157	Practices that are directed at organisational performance	LT-ACCOM-HOTEL-S: The Think Guest Feedback practice consists of regular middle management meetings where middle managers from all departments meet and regularly review hotel ratings; discuss particular guest feedback cases and actions that could improve guest stay experience. They brainstorm on how guest feedback could be stimulated and collectively addressed, take important information back to the teams of their departments, produce minutes of their observations and recommendations to top management on improvement of various hotel operation aspects and share experience with each other. This innovation, in addition to better customer satisfaction, leads to the empowerment of employees and a more trustful atmosphere in the company.			1		
158	Practices that are directed at organisational performance	LT-CONST-BUILD-L: Active employee engagement in development and innovations is developed as part of lean system in the company. Various measures to enhance development and more effective working of the company are introduced: special boards for improvement notes, announcements, feedback material. A process on how to manage the suggestions and remuneration was also developed.					1
159	Practices that are directed at organisational performance	LT-RETAIL-WHOLESALE-S: The company has deployed new accounting information system. This completely changed the way a person behind the counter worked. Shop assistants had to learn and adjust a lot; as a result of which they became empowered as well as trusted focal points in their communities.					1
160	Practices that are directed at organisational performance	NL-INFO-NEWS-L: job enlargement to improve marketing activities. Jobs in the advertisement department 'Sales' have been enlarged to 'account management'.	1				
161	Practices that are directed at organisational performance	PL-ADM-TAX-S: New flexible project teams are created for implementation of changes, creation of new services or old service upgrades. Teams are comprised of employees based on their competences; people come from various departments and hierarchical levels. Team leader might be a regular employee (not a manager).	1				
162	Practices that are directed at organisational performance	PL-ADM-TAX-S: There has been an intranet platform created that serves as an information chart, communication channel, repository for documents, etc. Employees can find, edit and add the content. The information flow has increased and improved accessibility.					1

No.	Driver	Description	WPI-structure	WPI-culture	WPI-mixed	HR	Other
163	Practices that are directed at organisational performance	PL-MANU-SHIP-S: Lean Management. Improvement of effectiveness by the program Improvement Journey, consisting of separate projects An achievement of this program was the reduction of large windlasses production time by as much as 35%. 1] Daily PCDA (Plan-Do-Check-Act) meetings, element of Kaizen philosophy, are crucial for constant improvement of efficiency and mutual learning. 2] implementation of the 5S (a lean management tool including 5 steps: Sort, Streamline, Sweep, Standardise and Sustain), which is currently maintained through the 5S competition created in the company. The competition consists in monthly audits of all departments. The points awarded in the framework of each audit are summed up at the end of the year and the winning department gets a prize (e.g. an integration event in a bowling alley). 3] The workplace ergonomics significantly improved as a result of the 5S. There was training on: how to speed up production, how to reduce unnecessary walking and how to organise the workplace properly. The measures significantly influence the continuous improvement of different areas.					1
164	Practices that are directed at organisational performance	PL-TRANSP-BUS-S: Team Working structure on different projects and in the process of decision making.	1				
165	Practices that are directed at organisational performance	UK-MANU-BATH-L: an 'Employee Forum' offers opportunities to discuss improvement, through which Employee Representatives attend meetings senior management.		1			
166	Practices that are directed at organisational performance	UK-MANU-BATH-L: Continuous improvement (CI)/CI champions organise: improvement projects, teams and cross-functional working groups. Every employee is encouraged to sign up for a Kaizen project		1			
167	Practices that are directed at organisational performance	UK-SCI-GEO-L: Skills Leader. In a matrix structure, the career development of individual staff needs to be taken care of as they move from team to team. Skills Leaders from the same 'discipline' area take an overview of an individual's career while at the same time helping the organisation as a whole to meet the competency requirements identified by workforce planning. Initially Skills Leaders were also responsible for appraisals, annual leave and sickness management, often placing significant demand on their time.			1		
168	Practices that are directed at organisational performance	UK-TRANSP-CAR-S: Employee recognition programmes and monetary awards are a way to celebrate success. They encourage employees to bring new ideas to the table and make them feel valued and appreciated.				1	
	Total		23	34	32	65	14



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