

Appendix

Supplementary Table S1

Example Items for the "Measurement Instrument for the Assessment of Central Aspects of the New Way of Work"

Subscale	Example item
Digitalization	I depend on digital media (e.g., Internet, e-mail) to complete my work tasks.
Flexibilization	I can schedule my working hours flexibly.
Boundaryless Work	My colleagues and superiors are always able to reach me when I am on vacation.
Participation	My employer offers every employee the opportunity to participate in company decisions (e.g., submit suggestions for process improvements).
Meaningfulness	I feel my work is important.

Supplementary Table S2*Mean Importance of the Challenges of Digitalization for Each Company*

No. company	Knowledge transfer is hampered by digitalization	Documentation becomes more confusing due to digitalization	Digitalization makes time management more difficult (e.g. due to many e-mails)	Employees are skeptical about the WHP project regarding digitalization	Too little awareness of the benefits/harms of social media	No interest in digital development	Employees' overestimation of themselves with regard to digital competences	Managers need to be sensitized to health and digitalization	Independence of employees is reduced by digitalization	Constant availability of employees as a health risk	Mental strain and stress due to digitalization	Harmful physical positions due to PC work
1 (n=2)	1.50	2.00	2.50	1.50	3.50	2.50	2.00	3.50	1.50	2.50	2.50	2.00
2 (n=5)	2.60	2.20	2.40	2.00	2.40	2.00	2.80	2.20	2.00	3.00	3.20	2.75
3 (n=3)	1.33	2.00	2.67	1.67	3.00	2.67	1.33	3.33	2.00	2.33	2.33	3.67
4 (n=4)	1.75	2.25	3.00	2.50	3.50	2.25	2.50	3.75	2.75	2.75	3.25	2.75
5 (n=4)	1.75	1.75	1.50	1.25	3.33	2.00	2.75	3.25	2.25	2.50	2.00	2.25
6 (n=4)	3.00	3.00	3.75	2.67	3.00	3.00	2.00	3.00	2.33	3.50	3.50	3.00
7 (n=6)	2.33	3.00	3.00	2.33	2.20	1.60	2.60	3.83	2.83	4.00	3.83	3.83
8 (n=1)	3.00	3.00	3.00		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
9 (n=1)	2.00	3.00	4.00	4.00	1.00	1.00	4.00	4.00	1.00	4.00	4.00	4.00
10 (n=15)	2.07	2.15	2.60	1.86	2.67	1.85	1.92	2.92	1.31	3.29	2.93	2.64
11 (n=1)	1.00	1.00	1.00	1.00		1.00	3.00	3.00	1.00	1.00	1.00	3.00
12 (n=1)	2.00	2.00	2.00	1.00	4.00	2.00	3.00	4.00	2.00	3.00	4.00	4.00
13 (n=6)	1.50	1.67	1.83	1.67	2.67	2.00	1.83	2.83	1.50	3.17	2.67	2.33
14 (n=2)	2.00	2.00	4.00	2.00	1.00	2.00	1.00	4.00	1.50	4.00	4.00	1.00
15 (n=2)	1.50	2.50	3.00	3.50	3.00	1.50		3.50	3.00	4.00	3.00	2.50
16 (n=2)	3.00	3.00	3.00	2.00	3.50	3.00	1.50	3.00	1.50	2.50	3.00	1.50
17 (n=7)	2.29	2.86	3.50	2.43	3.33	3.00	3.29	3.67	2.14	3.14	3.50	2.29
18 (n=2)	3.00	2.50	3.50	2.00	3.50	2.50	4.00	3.00	3.00	4.00	4.00	3.00
Overall (n=68)	2.10	2.32	2.75	2.05	2.83	2.16	2.40	3.22	1.95	3.17	3.08	2.69

Note. 4=very important, 3=rather important, 2=rather unimportant, 1=very unimportant. Two companies provided no data on this part of the questionnaire.

No statistically significant differences were found.

Supplementary Table S3

Mean Importance of the Opportunities of Digitalization for Each Company

No. company	Knowledge transfer can be optimized through digitalization *	Communication processes can be optimized through digitalization *	Documentation can be unified/simplified through digitalization	Digitalization allows work information to be redesigned more clearly	Creating awareness of the benefits/harms of social media	Creating awareness for dealing with violence on the Internet	Priority setting is facilitated by digitalization	Stress and psychological strain can be reduced through digitalization	Exercise/healthy nutrition/healthy lifestyle of employees can be promoted through digital offers
1 (n=2)	4.00	4.00	3.00	3.00	3.50	3.00	2.50	3.50	3.50
2 (n=5)	3.40	3.60	4.00	3.60	3.20	2.80	3.00	3.20	3.00
3 (n=3)	4.00	3.00	4.00	4.00	2.33	1.67	3.00	2.67	2.33
4 (n=3)	3.33	3.67	3.67	3.33	3.67	3.33	2.33	2.33	2.67
5 (n=4)	3.75	3.75	3.75	3.75	3.50	2.75	3.25	2.50	2.50
6 (n=3)	4.00	3.67	4.00	3.67	3.00	3.00	3.00	3.00	2.50
7 (n=6)	3.50	3.67	3.50	3.83	2.83	3.00	3.17	3.20	3.00
8 (n=1)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
9 (n=1)	4.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00
10 (n=15)	3.50	3.53	3.27	3.36	3.08	3.25	2.92	2.21	1.83
11 (n=1)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00
12 (n=1)	3.00	3.00	3.00	3.00	4.00	4.00	3.00	2.00	2.00
13 (n=6)	3.83	3.83	3.67	3.83	3.17	3.50	2.40	3.00	2.20
14 (n=2)	2.50	3.00	2.50	2.00	1.00	1.00	2.00	2.00	1.00
15 (n=2)	3.00	3.00	3.50		3.00		2.50	3.00	3.00
16 (n=2)	4.00	4.00	3.50	3.50	3.50	4.00	3.00	2.50	3.00
17 (n=7)	3.43	3.00	3.43	3.43	3.71	3.57	2.71	2.86	3.29
18 (n=2)	4.00	4.00	4.00	3.50	3.00	3.00	3.50	4.00	4.00
Overall (n=66)	3.52	3.48	3.48	3.46	3.11	3.03	2.85	2.74	2.64

Note. 4=very important, 3=rather important, 2=rather unimportant, 1=very unimportant. Two companies provided no data on this part of the questionnaire.

* Statistically significant difference between companies ($p < 0.01$)

Supplementary Table S4

Correlation Coefficients Between the Rated Importance of the Challenges of Digitalization and the Central Aspects of the New Way of Work

	Digitalization	Flexibilization	Boundaryless Work	Participation	Meaningfulness
Collaboration made more difficult/impersonal by digitalization	-0.015	-0.192	-0.007	-0.204	-0.202
Knowledge transfer is hampered by digitalization	0.072	-0.071	-0.104	-0.127	-0.118
Communication processes are not optimal	0.265	0.150	-0.061	0.027	-0.115
Documentation becomes more confusing due to digitalization	0.100	0.015	0.004	-0.166	-0.260
Information material is out of date	0.148	0.200	0.112	0.088	-0.061
Workstation equipment/design must be changed	0.029	0.045	0.018	-0.075	-0.188
Digitalization makes time management more difficult (e.g., due to many e-mails)	0.156	0.111	-0.116	-0.031	-0.148
Employees are skeptical about the WHP project regarding digitalization	0.218	0.084	-0.159	-0.119	-0.097
Employees are skeptical about digitalization	0.182	0.114	-0.102	-0.099	-0.117
Too little awareness of the benefits/harms of social media	0.040	0.003	0.131	0.211	0.132
No interest in digital development	-0.015	-0.056	0.128	-0.002	-0.048
Employees' overestimation of themselves with regard to digital competences	0.256	0.002	-0.065	0.036	0.068
Too little awareness of dealing with violence/security/data protection on the Internet	0.033	0.008	0.014	0.015	0.021

	Digitalization	Flexibilization	Boundaryless Work	Participation	Meaningfulness
Managers need to be sensitized to health and digitalization	0.333	0.125	-0.112	0.014	0.000
Employees have too few digital skills	0.232	0.110	-0.075	0.080	0.197
Independence of employees is reduced through digitalization	0.232	0.069	-0.065	-0.037	-0.095
Priority setting must be (re)learned	0.142	0.161	-0.062	-0.166	-0.117
Constant availability of employees as a health risk	0.068	-0.239	-0.218	-0.165	-0.020
Double tracking occurs digital–analog	0.310	0.095	-0.159	0.021	0.075
Mental strain and stress due to digitalization	0.251	0.126	-0.107	-0.034	-0.036
Harmful physical positions due to PC work	0.162	0.053	-0.202	-0.125	-0.260
Eye strain due to screen work	0.175	-0.038	-0.204	-0.246	-0.291

Note. N = 50–64

No statistically significant correlations were found.

Supplementary Table S5

Correlation Coefficients Between the Rated Importance of the Opportunities of Digitalization and the Central Aspects of the New Way of Work

	Digitalization	Flexibilization	Boundaryless Work	Participation	Meaningfulness
Collaboration becomes more flexible through digitalization	-0.097	0.182	0.026	0.078	0.032
Knowledge transfer can be optimized through digitalization	0.045	0.122	0.211	0.165	0.183
Communication processes can be optimized through digitalization	-0.184	0.020	0.071	0.023	0.084
Documentation can be unified/simplified through digitalization	-0.065	0.049	0.040	0.063	0.046
Digitalization allows work information materials to be designed in a new and clearer way	0.205	0.087	0.155	0.111	0.155
Workplaces are made more user friendly (e.g., more efficient equipment)	0.147	0.130	0.036	0.176	0.151
Time management can be improved through digitalization	-0.040	0.205	0.085	0.285	0.155
Digital communication simplifies collaboration (e.g., meetings via Skype possible)	-0.112	0.239	0.061	-0.018	-0.159
Work can be made more flexible (e.g., home office)	0.113	0.249	-0.027	0.019	-0.150
Employees support WHP project on digitalization	-0.021	-0.007	0.000	0.040	-0.086
Creating awareness of the benefits/harms of social media	-0.006	0.012	0.160	0.245	0.092
Employees advocate digitalization	0.265	0.209	0.146	0.347*	0.283
Creating awareness for dealing with violence on the Internet	-0.088	-0.148	0.097	-0.115	-0.015
Managers recognize the potential of digitalization for health	0.063	0.104	-0.011	0.366*	0.192
Employees' digital skills can be strengthened	0.063	-0.091	0.016	0.131	0.112
Employees work more independently through digitalization	0.124	0.259	0.085	0.326	0.127
Priority setting is facilitated by digitalization	0.117	0.249	0.049	0.179	-0.006
Analog processes become more efficient through digital support	0.055	0.261	0.316	0.429*	0.240

	Digitalization	Flexibilization	Boundaryless Work	Participation	Meaningfulness
Stress and psychological strain can be reduced through digitalization	0.034	0.341	0.135	0.345	0.178
Exercise/healthy nutrition/healthy lifestyle of employees can be promoted through digital offers	0.092	0.332	0.099	0.215	0.149

Note. N = 52–65

* $p < 0.01$