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Remote Work and Knowledge Management: Lessons From Post-Pandemic Europe

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Abstract. The widespread adoption of remote work during the COVID-19 pandemic fundamentally changed how organizations create, share, and retain knowledge. Although fully remote work has declined since the pandemic, remote and hybrid arrangements remain significant features of the European labour market. This article examines the implications of this shift for knowledge management in post pandemic Europe. Using secondary quantitative data from Eurostat and other European institutional sources, the study analyses remote-work patterns between 2019 and 2025, cross-country differences, and their relationship with enterprise digitalization. The findings are interpreted through the distinction between explicit and tacit knowledge and the SECI (Socialization, Externalization, Combination, and Internalization) model. The article argues that digital technologies can strengthen the codification, storage, and distribution of explicit knowledge, while prolonged physical separation may constrain informal learning and tacit knowledge transfer. The European experience suggests that effective remote work depends not only on technological capacity but also on the deliberate design of knowledge processes and meaningful opportunities for interaction.

Keywords: remote work, knowledge management, hybrid work, tacit knowledge.

1. Introduction

The COVID-19 pandemic transformed remote work from a limited practice into a significant feature of European working life. In 2021, 41.7 million employees teleworked in the European Union, approximately twice the number recorded in 2019 (Eurofound, 2022). Although remote work has since declined, remote and hybrid arrangements remain established across many suitable for remote work occupations (Eurofound, 2024). This shift has important implications for knowledge management. Digital technologies facilitate the documentation, storage, and distribution of knowledge, while physical separation may limit informal learning, mentoring, and tacit knowledge transfer. The central challenge is therefore whether organizations can continue to create, share, and retain knowledge effectively in distributed work

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environments.

This article examines how persistent remote and hybrid work has affected the conditions for effective knowledge management in post pandemic Europe. Using Eurostat data, it analyses cross-country differences in remote work and their relationship with enterprise digitalization. The article argues that effective remote work depends on balancing digital knowledge infrastructure with opportunities for social interaction and that well-designed hybrid arrangements may provide the most sustainable model for knowledge-intensive organizations.

2. Literature Review and Theoretical Framework

The expansion of remote work during the COVID-19 pandemic accelerated digital collaboration and changed how organizations coordinate work and exchange knowledge. Although home working has declined from its pandemic peak, hybrid arrangements remain established across many suitable for remote work occupations, with considerable differences between European countries (Eurofound, 2024). For knowledge-intensive organizations, this shift creates both opportunities and risks: digital platforms improve access to information, while reduced informal interaction may constrain workplace learning and the transfer of expertise (Derrick, 2022).

A central distinction in knowledge-management theory is between explicit and tacit knowledge. Explicit knowledge can be documented, stored, and distributed through procedures, reports, and digital repositories. Tacit knowledge, by contrast, is rooted in experience, judgment, and practical understanding and is therefore more difficult to formalize and transfer (Nonaka & Takeuchi, 1995). Remote work may strengthen the management of explicit knowledge by increasing reliance on documentation and digital systems, while making tacit knowledge transfer through observation, informal discussion, and shared experience more difficult.

The study adopts the SECI model as its theoretical framework. The model describes organizational knowledge creation through four interconnected processes: socialization, externalization, combination, and internalization (Nonaka, 1994; Nonaka & Takeuchi, 1995). Remote work may weaken socialization by reducing direct interaction, while strengthening externalization and combination through greater documentation and digital knowledge exchange. The SECI model therefore highlights the

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central tension examined in this study: digitalization can improve access to explicit knowledge, but effective knowledge creation also depends on social processes that may be more difficult to sustain at a distance.

3. Methodology

This study applies a quantitative research design based on secondary data from Eurostat. Long-term remote-work trends are examined using the Labour Force Survey dataset Employed persons working from home by professional status (*lfsa_ehomp*), while the cross-sectional statistical analysis uses 2025 data for all 27 EU Member States (Eurostat, n.d.-a). The analysis combines descriptive and inferential statistics. Cross-country variation in the share of employed people usually working from home is assessed through the mean, median, range, and standard deviation. Pearson's correlation coefficient (*r*) is then used to examine the relationship between the prevalence of usual home working and enterprise digitalization. Digitalization is measured as the percentage of small and medium-sized enterprises reaching at least a basic level of digital intensity, based on Eurostat's Digital Intensity Index (*isoc_e_dii*) (Eurostat, n.d.-b). The correlation analysis matches both variables for the same reference year, 2025, across all 27 EU Member States. Statistical significance is assessed using a two tailed test. As correlation does not establish causation, the results are interpreted as evidence of association and considered in relation to the knowledge-management framework developed in the preceding section.

4. Statistical Analysis and Results

The Eurostat data reveal a clear structural break in patterns of home working across the European Union. Before the COVID-19 pandemic, the share of employed people who usually worked from home had remained broadly stable at approximately 5%. The pandemic produced a sharp increase, with the EU-27 rate reaching 13.5% in 2021. Although the prevalence of home working subsequently declined, it did not return to its pre-pandemic level. By 2025, 8.9% of employed people in the EU usually worked from home, indicating that the pandemic produced both a temporary disruption and a lasting change in the organization of work (Eurostat, n.d.-a).

The persistence of remote work is also evident in the cross-country data. In 2025, the mean share of employed people usually working from home across the 27 EU Member States was

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8.84%, while the median was 8.20%. The standard deviation reached 4.98 percentage points, indicating considerable dispersion between countries.

Table 1
Descriptive Statistics for Usual Home Working Across
EU Member States, 2025¹

Statistic	Value
Number of countries (N)	27
Mean	8.84%
Median	8.20%
Minimum	1.30%
Maximum	21.10%
Range	19.80 percentage points
Standard deviation	4.98 percentage points

The scale of cross country variation becomes particularly clear when the highest and lowest values are compared. Finland recorded the highest rate of usual home working, at 21.1%, followed by Ireland at 19.3%. At the opposite end of the distribution, Bulgaria and Romania recorded rates of only 1.6% and 1.3%, respectively. The resulting range of 19.8 percentage points shows that remote work has not developed uniformly across Europe. An employed person in Finland was approximately sixteen times more likely to report usually working from home than an employed person in Romania.

The country-level distribution also reveals a broader geographical pattern. Several northern and western European countries recorded comparatively high levels of usual home working, whereas rates remained considerably lower in parts of southern and eastern Europe. This divergence suggests that the persistence of remote work cannot be explained by the pandemic alone. Instead, the continuing differences point towards structural factors, including occupational composition, economic specialization, organizational practices, and digital capacity.

To examine the relationship between remote work and enterprise digitalization more systematically, Pearson's correlation coefficient was calculated for all 27 EU Member States. The analysis matched the 2025 share of employed people usually working from home with the percentage of SMEs reaching at least a basic level of digital intensity in the same year.

¹ Calculations are based on the share of employed persons who usually worked from home in the 27 EU Member States. Source: Author's calculations based on Eurostat dataset *lfsa_ehomp*.

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The results showed a statistically significant positive correlation between the two variables, $r(25) = .686, p < .001$. The strength of the relationship can be described as moderately strong, indicating that countries with higher levels of enterprise digitalization tend to have higher rates of usual home working.

Table 2
Correlation Between Remote Work and SME Digital Intensity, EU Member States, 2025²

Variables	N	Pearson's r	p
Usual home working and basic SME digital intensity	27	.686	< .001

The relationship is also visible in the country level distribution. Finland combined the highest level of SME digital intensity, at 94%, with the highest prevalence of usual home working. The Netherlands, Sweden, Belgium, and Ireland also combined comparatively high levels of digitalization with substantial remote work adoption. At the opposite end of the distribution, Bulgaria and Romania recorded both low levels of usual home working and some of the lowest levels of SME digital intensity. These patterns are consistent with the positive correlation identified in the statistical analysis.

The result is theoretically plausible. Remote employees depend on digital systems to access information, communicate with colleagues, collaborate on shared outputs, and retrieve organizational knowledge independently of physical location. In knowledge-management terms, digital maturity provides the infrastructure required for the codification, storage, retrieval, and distribution of explicit knowledge. The correlation therefore supports the argument that remote work is more likely to persist in environments where organizations possess stronger digital capabilities.

Nevertheless, the relationship should not be interpreted as causal. Digitalization may facilitate remote work, but the expansion of remote work may itself encourage organizations to invest in digital technologies. Both variables may also be influenced by occupational structure, income levels,

² Pearson's two-tailed correlation. Remote work is measured as the percentage of employed persons usually working from home. Digital intensity is measured as the percentage of SMEs reaching at least a basic level of digital intensity. Source: Author's calculations based on Eurostat datasets *lfsa_ehomp* and *isoc_e_dii*.

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managerial practices, broadband infrastructure, and the relative size of knowledge intensive sectors. The coefficient should therefore be interpreted as evidence of a significant association rather than proof that digitalization directly causes higher levels of remote work.

From a knowledge management perspective, the findings reveal a further distinction. Digital capacity may create the technological conditions required for remote work, but it does not demonstrate that the social processes underlying tacit knowledge transfer are equally effective at a distance. An organization may be highly capable of exchanging digital information while still experiencing difficulties in mentoring, informal learning, observation, and spontaneous knowledge creation. The empirical results therefore support the theoretical proposition developed in the preceding section: technological capacity and social interaction should be treated as complementary, rather than interchangeable, conditions for effective knowledge management.

4. Conclusion

The findings indicate that remote work has become a lasting, although unevenly distributed, feature of post-pandemic Europe. The substantial differences between EU Member States show that its persistence is shaped by broader structural conditions rather than by the pandemic alone. Most notably, the analysis identified a statistically significant positive relationship between SME digital intensity and the prevalence of usual home working ($r = .686$, $p < .001$), suggesting that stronger digital capacity is associated with a greater ability to sustain remote work.

From a knowledge management perspective, however, technological capacity is only part of the explanation. Digital systems can support the codification, storage, and distribution of explicit knowledge, but they cannot fully replace the social interaction through which tacit knowledge is shared. The principal lesson from post pandemic Europe is therefore that effective remote work requires a balance between digital infrastructure and opportunities for direct interaction. Well-designed hybrid models may offer the most sustainable approach by combining flexibility and digital knowledge access with the social processes needed for learning, mentoring, and collaborative knowledge creation.

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