

Article

Telework and new work practices: The role of managers

Josep Lladós-Masllorens*, Antoni Meseguer-Artola, Eva Rimbau-Gilabert, Mar Sabadell-Bosch

Economic and Business Department, Universitat Oberta Catalunya (UOC), 08032 Barcelona, Spain

* **Corresponding author:** Josep Lladós-Masllorens, jlladosm@uoc.edu

CITATION

Lladós-Masllorens J, Meseguer-Artola A, Rimbau-Gilabert E, Sabadell-Bosch M. (2024). Telework and new work practices: The role of managers. *Human Resources Management and Services*. 6(2): 3454.
<https://doi.org/10.18282/hrms.v6i2.3454>

ARTICLE INFO

Received: 18 February 2024
Accepted: 18 March 2024
Available online: 15 April 2024

COPYRIGHT



Copyright © 2024 by author(s).
Human Resources Management and Services is published by PiscoMed Publishing Pte. Ltd. This work is licensed under the Creative Commons Attribution (CC BY) license.
<https://creativecommons.org/licenses/by/4.0/>

Abstract: Since the onset of the COVID-19 pandemic, academic research has primarily focused on the challenges posed by flexible working arrangements. However, there has been a lack of exploration into managers' intentions to either promote or reject remote work. This paper utilizes a TAM analysis to examine managers' attitudes and motivations towards implementing telework in a sample of European companies. Our findings reveal that this intention is largely influenced by their perception of its usefulness. Additionally, telework is more likely to be accepted when managerial teams believe that those who hold significance to them also support the implementation of flexible work practices in their companies. Our research contributes to the existing literature by considering the impact of job performance, quality of output, and digital skills on telework adoption. The results confirm that skills related to communication and team building are crucial competencies for successfully implementing telework. The ability of leaders to effectively build, motivate, recognize, and hold accountable teams in virtual environments can make all the difference.

Keywords: telework implementation; remote work; managers' attitudes; digital skills; organizational culture

1. Introduction

The COVID-19 pandemic has led to a widespread adoption of telework in the business community, as it proved to be an efficient solution for continuing work from home (Eurofound, 2022). This experience has allowed companies to evaluate the benefits and drawbacks of implementing this flexible work practice on a regular basis in order to ensure that remote work does not disappear once the pandemic is over (ILO, 2021). With a significant portion of workers currently engaged in some form of remote work, there is a process underway to reshape work organizations. However, it is unclear to what extent companies plan to support further teleworking policies or prevent their expansion (Jemine, 2023).

Previous research on telework has focused on regulatory issues and the new frameworks that have emerged to address the challenges of remote work. Various topics have been explored, including access to telework, organization of working time and resource distribution, prevention of psychosocial and health risks, interaction with co-workers, and the right to disconnect (Sostero et al., 2020). Academic research has also examined the impact of telework on organizational and individual performance, highlighting both the advantages and disadvantages for teleworkers and companies (Eurofound and International Labour Office, 2017).

Mello (2007) found that successful telework initiatives are often supported by broad institutional support and by managers who understand the value of telework and have confidence in its positive outcomes. Recent studies have confirmed the crucial role of management teams in the decision to promote remote work, with telework

adoption being more influenced by leadership than technology (Beauregard et al., 2019). More recent research has provided recommendations for management, such as adapting leadership styles, implementing innovative communication methods, and finding new ways to measure teleworkers' performance. However, there is a lack of research on the factors that determine managers' attitudes towards telework.

This paper aims to contribute to previous investigations by examining the attitudes and motivations of managers and testing the influence of job relevance, output quality, and digital skills on their intention to implement telework. Our main research hypothesis is that underlying factors, such as perceptions, skills, and attitudes of managerial teams, play a significant role in their preference for promoting remote work. Building on Lee's analysis (2021), we expect that managers' attitudes and skills in managing remote work will determine the successful implementation of telework.

To achieve this goal, we conducted a data collection process and a quantitative analysis. Data was collected through a structured questionnaire and a self-administered online survey sent to a sample of entrepreneurs, CEOs, and managers from several European companies. We applied a technology acceptance model (TAM) and a Partial Least Square method to gain insight into the processes underlying the acceptance of this new work practice.

This paper is organized as follows: The first section provides a literature review, providing an overview of existing research on telework adoption and the factors influencing managers' attitudes. The second section presents the research hypotheses that guide our study. The third section describes the data collection process and statistical techniques used for analysis. The fourth section presents the results and discusses their implications. The final section presents the concluding remarks, the limitations of this investigation, and directions for future research.

2. Literature review

The literature on telework is extensive and varied, often presenting conflicting and inconclusive findings. The significant amount of research conducted on this topic, the challenges in comparing results, and the lack of consistent conclusions pose difficulties for both researchers and practitioners. It has even been criticized for lacking a comprehensive theoretical framework that addresses all aspects of remote working (Bélanger et al., 2013).

According to Athanasiadou and Theriou (2021), most recent literature has primarily focused on the productivity and overall performance of organizations that have adopted telework or have compared teleworkers with on-site workers. In general, the literature on telework reports organizational benefits such as increased agility, improved customer service, higher productivity and efficiency through reduced absenteeism, and enhanced organizational performance (Morikawa, 2018; Silva et al., 2019). However, as stated by Gschwind and Vargas (2019), telework often develops differently among companies and countries, depending on the social and economic context. Therefore, while some of the observable advantages of teleworking for employers have been well documented (Jackson and van der Wielen, 1998; Baruch, 2000; Gibson et al., 2002), several challenges remain to be addressed from a managerial perspective. These include the well-being of teleworkers (Oakman et al.,

2020; Azzolari et al., 2021; Chung, 2022), the risk of losing the benefits of face-to-face communication, the potential difficulties in managing and monitoring employees in different locations (Greer and Payne, 2014), and the potential impact on team dynamics and interdependencies.

Research on the factors that facilitate or hinder the adoption of remote working practices has gained increasing interest and attention over time, including the role of managers and organizational culture. Previous studies have highlighted the critical role of managers in the development of teleworking. As they have the authority to approve or deny requests made by their subordinates, their reluctance to adopt this practice may hinder its implementation (Pérez et al., 2004). Additionally, managers' attitudes can significantly influence other critical factors, such as organizational support (Baker et al., 2006), communication and trust (Kowalski and Swanson, 2005), output controls (Groen et al., 2018), and organizational culture (Junça Silva and Coelho, 2022), making their involvement crucial for the successful implementation of telework arrangements.

Previous literature has also focused on the reasons for managers' resistance to telework. A few studies suggest that managers may be hesitant to adopt new work practices because they often require a change in organizational culture and overcoming technological barriers (Pyoria, 2011). The difficulty in anticipating the potential positive impacts of telework on performance may also lead to objections to its implementation, particularly among smaller companies (Gonzalez-Gonzalez et al., 2022). Early studies have also highlighted the essential role of organizational culture and strategy. Managers' attitudes are highly influenced by the organizational context, and they may be more motivated to authorize flexible work arrangements in the context of broader organizational programs that support and legitimize their decision (Hornung et al., 2009). One of the main tensions associated with workplace flexibility arises from the contrast between supportive and unsupportive work climates (Putnam et al., 2014). As a form of flexible working, telework requires a cultural shift to be successful (Breaz et al., 2022), as organizational culture and subcultures can significantly impact work processes and interactions among employees. Therefore, new remote working practices should align with the prevailing organizational cultures and value systems to achieve a higher success rate. Additionally, Cook et al. (2014) have shown that telework is a human resources practice that must be implemented consistently with the organizational strategy. Based on these findings, managers can facilitate the preparation of workers and guide organizational culture changes that will support telework as a successful strategic intervention, fostering its perception as a standard operating procedure through which work is accomplished (Greer and Payne, 2014). Beauregard et al. (2019) conclude that some crucial organizational elements must be in place for telework to succeed, such as an organizational culture characterized by trust and openness and an objectives-based performance management system. Similarly, behavioral intention is affected by previous experiences with remote working practices, as they can reduce uncertainty and increase control over situations (Labrado et al., 2022).

Recent research has focused on the management of telework during the pandemic, including adapting leadership styles (Biron and Casper, 2021), implementing innovative communication mechanisms (Tavares et al., 2020), and

finding new ways to measure teleworkers' performance (Kim et al., 2021). Tokarchuk et al. (2021) highlight the role of organizational readiness, particularly based on institutional objectives. Green et al. (2020) emphasize the communication challenges that arise from this flexible work option, such as preventing social and professional isolation and disruptions in knowledge and information flows. Jemine (2023) confirms the critical role of managers in promoting or preventing telework and reveals the high heterogeneity in their attitudes. In addition to flexibility requirements and the provision of sufficient technology, Saragih et al. (2021) point out the need to manage employee performance by clearly setting concrete goals, reducing ambiguity, and clarifying expectations when working remotely with supervisors and team members. Organizational goal clarity critically influences interpersonal collaboration in telework (Lee et al., 2023). Knoesen and Seymour (2020) find that managers' attitudes towards telework improve after experiencing the practice, making them more likely to support this working arrangement in the organization as it can make the organization more resilient to business interruptions. Fana et al. (2020) highlight the managers' need for direct control, which is not feasible outside the firm's premises, and tends to mutate into new forms of remote control, which can be equally pervasive. However, they also observe that regular contact with managers leads to increased worker engagement and motivation. Finally, Urbaniec et al. (2022) suggest that the way a company and its employees are managed, the approach of superiors to the evaluation and control of work, and the adaptation to the real needs of employees are crucial factors in the adoption of telework.

Several studies have focused on managers' intentions to implement telework using the planned behavior approach and the technology acceptance model. These investigations are inspired by the theory of planned behavior developed by Ajzen (1991) to predict supervisors' acceptance and behavior. This theory states that if someone has a positive attitude or believes they are expected to perform a behavior, they will have the intention to do so and are more likely to exhibit the expected behavior (Da Silva et al., 2022). Consequently, the adoption of a specific technology is affected by users' attitudes, beliefs, and intentions.

In this model, managers' perceptions are evaluated to examine and understand the factors involved in the adoption of telework in their companies. The beliefs preceding behavior can be behavioral (related to an individual's positive or negative attitude), normative (related to the expectations of other people), or related to control (the individual's perception of how easy or difficult it will be to perform the behavior). Two key factors influence an individual's intention to use a new technology: perceived usefulness and perceived ease of use. Perceived usefulness refers to the degree to which an individual believes that using the technology will improve their performance or make their tasks easier to complete. Perceived ease of use refers to the degree to which an individual believes that using the technology will require tolerable effort. Accordingly, most previous studies predicting the intention to implement telework are based on these two critical factors, providing evidence of their positive influence (Langa and Conradie, 2003; Pérez et al., 2004; Ollo et al., 2021). Other researchers have extended the model to reveal the favorable effect of subjective norms (Morrison et al., 2019) or the influence of efficiency, controllability, and manageability (Lang

and Hofer-Fischanger, 2022). Additionally, Silva et al. (2019) included the effects of perceived compatibility, self-efficacy, anxiety, and the importance of work.

Our research complements previous studies by considering the influence of managers' skills and their perceptions of job relevance and output quality. We also explore the potential links between different factors in forming attitudes toward telework.

3. Research hypotheses

When managers and employers are faced with the decision to implement a new work practice, their behavioral intention is influenced by various factors. One of the key factors is the perceived usefulness of the practice, which is determined by the individual's belief that it will enhance their work performance. The Technology Acceptance Model (TAM) is a well-established theory that identifies perceived usefulness as a key variable in explaining the adoption of any innovation (Davis, 1989; Ma and Liu, 2004). In the case of teleworking, it is expected that a greater perceived benefit will be a clear predictor of its adoption. Therefore, the following hypothesis is stated:

- Perceived usefulness positively influences managers' intentions to implement teleworking practices in their companies.

Previous research on the adoption of innovations has also highlighted the importance of perceived ease of use, which refers to the individual's belief that using a particular system will make their work easier (Tornatzky and Klein, 1982). Studies suggest that the perceived ease of use of telework should be considered as a facilitator of its implementation (Ollo et al., 2021). Accordingly, the following hypothesis is formulated:

- Perceived ease of use positively influences managers' intentions to implement teleworking practices in their companies.

From the perspective of companies, teleworking will only be considered if managers and employees perceive it as a useful and manageable way to organize their work. These perceptions will also influence the managers' attitude, which in turn may impact their intention to accept and offer teleworking (Pérez et al., 2004). Therefore, the following hypothesis is considered:

- The intention to implement telework practices positively influences their actual implementation.

In terms of the factors influencing perceived usefulness, this research focuses on the relevance of teleworking to managers' jobs, social influences, and quality of output. One of the key elements in perceiving technology as useful is its ability to help individuals perform their functions. Concerning individual motivations to implement telework, managers have often been reluctant to adopt this practice when they do not see the need for change or perceive too many difficulties in its implementation (Pérez et al., 2004). As alternative work arrangements, such as telework, place new demands on managers and make their jobs more complex, their attitudes towards telework are determined by considerations of usefulness or job performance (Lang and Hofer-Fischanger, 2022). The perception of increased complexity in managerial work may stem from the belief that employees need to be directly supervised to ensure their

performance, making supervision and coordination more difficult (Pérez et al., 2002). Several studies have also revealed managers' concerns about the productivity of employees working remotely (Manochehri and Pinkerton, 2003; Crandall and Gao, 2005). In other words, managers' attitudes towards teleworking policies are heavily influenced by their perception of their employees' level of responsibility (Stout et al., 2013). Therefore, the following hypothesis is formulated:

- Job relevance has a positive influence on the perceived usefulness of telework.

Social influences can also impact the perception of usefulness. Subjective norms refer to an individual's perception of whether important people in their life believe they should perform a particular behavior. This is based on Ajzen and Fishbein's (2005) theory of reasoned action, which suggests that attitudes alone may not be accurate predictors of behavior, and social contexts, exposure to information, and norms may have a larger influence on individuals' actions. This suggests that managers may only promote flexible work practices that they know will continue to perform well and make them look good in the eyes of their colleagues and superiors (Stout et al., 2013). Accordingly, the following hypothesis is formulated:

- Subjective norms have a positive influence on the perceived usefulness of telework.

The decision to facilitate teleworking is also affected by the degree to which managers trust that this work practice will allow their teams to perform their tasks effectively. Recent studies have found that managers' experience with telework has a significant impact on their confidence and perceptions of compatibility, adequacy, and results of teleworking. In general, managers with positive perceptions of their experience with telework also tend to believe that it has a positive impact on their organization (Park and Cho, 2022). This positive perception is reinforced when managers feel that telework is supported by the organization (Silva et al., 2019). Therefore, an environment with adequate information and appropriate incentives will likely drive managers to effectively support telework (Forgacs, 2010). Additionally, the acceptance of remote work will heavily depend on its compatibility with existing organizational norms and cultures (Peters and Heusinkveld, 2010). Therefore, the following hypothesis is formulated:

- Output quality has a positive influence on the perceived usefulness of telework.

Finally, the proposed model analyzes the impact of three factors on perceived ease of use: the self-confidence of management teams in their capabilities and their skills to lead and communicate in the context of remote work. These personal attributes, in addition to organizational characteristics, could be crucial for successful telework adoption and minimizing anxiety and concerns when implementing an emerging work practice.

Self-efficacy, defined as the degree to which managers consider themselves competent to perform a given task correctly, could influence telework adoption. As stated by Silva et al. (2019), managers who have confidence in their team's ability to solve any situation on their own, manage ICTs properly, and do not require supervision to perform their work perceive telework as a useful technology to implement in their functional areas. Based on this, we propose the following hypothesis:

- A high level of self-efficacy favors the perceived ease of use of teleworking.

Managers' attitudes are also decisive as they affect the perception of organizational support, which positively influences teleworkers' job satisfaction and outcomes (Bentley et al., 2016). Previous research has shown that a more relationship-oriented behavior on the managers' side, particularly focused on communication, is crucial for telework implementation, as professional isolation negatively impacts job performance (Golden et al., 2008; Dahlstrom, 2013). Effective supervision, defined as managing results and building proactive communication policies for achieving inclusion and building trusting relationships through communication (Baruch, 2001), as well as the existence of a collaborative relationship (Ionescu et al., 2022), play a significant role in the link between telework arrangements and organizational performance.

Pearlson and Saunders (2001) noted the need to focus on teleworkers' results, clear business objectives and measures, frequent and multiple communications, and well-supported infrastructure. The coordination based on mutual trust addresses the lack of face-to-face contact and direct supervision (Golden, 2006). Performance-based monitoring through teleworking has emerged as one of the most crucial elements for its implementation, which implies adapting forms of leadership to the digital context (Vrchota et al., 2020). The deployment of telework as a new form of autonomy and self-organization for workers could be hindered by the reordering of control based on the reshaping of norms that were normally associated with the traditional workplace and with the use of traditional surveillance methods (Sewell and Taskin, 2015). This highlights the need to adapt forms of leadership to the digital context. Vilhelmson and Thulin (2016) found evidence of increased employers' willingness to permit telework, which implies that essential constraining factors associated with managers' trust, power, and control had been eased through the introduction of increasingly advanced systems for distance monitoring, supervising, and evaluating work.

Bentley et al. (2016) state that the more an individual teleworks, the more support they will need to enhance organizational outcomes. Therefore, it is expected that managers with skills in team management and communication using digital tools will find it easier to implement teleworking. Based on this, we propose the following hypotheses:

- Skills related to team management using digital tools favor the perceived ease of use of teleworking.
- Skills related to interaction using digital tools support the perceived ease of use of teleworking.

4. Data and methods

After introducing the theoretical framework and hypotheses based on relevant literature, this section will outline the methodological stages used to analyze the main factors influencing telework adoption and validate the proposed hypotheses. As a quantitative approach was utilized, a survey instrument was designed to collect data for measuring the latent variables in the TAM model and estimating the causal relationships between them using a PLS methodology. The data collection procedure is outlined in Section 4.1, and some important descriptive statistics of the sample are provided. The survey included adapted items to ensure the validity and reliability of

the measurement model, which is discussed in sections 4.2 and 4.3. The results of the PLS estimation are presented in Section 4.4, demonstrating the validity of the structural model and the statistical significance of the path coefficients used to test all proposed hypotheses. These findings are interpreted within the context of the research objectives and theoretical framework and are detailed in the conclusions section, offering practical insights and managerial implications. The methodological steps taken ensure a systematic and thorough investigation into the factors influencing telework adoption.

4.1. Survey design

To gain a better understanding of the main factors influencing managers and employers to accept and implement telework in their organizations, we designed a questionnaire based on the TAM model, as it provides a comprehensive and integrated framework for studying perceptions about the factors that lead to the intention and use of an innovation.

In order to collect empirical data from the countries participating in the Erasmus+ Working Smart Project, we conducted an online survey using a specific questionnaire. As there was no existing list of members of the target population, participants were recruited through snowball sampling. It is worth noting that participation in the survey was not financially rewarded, and respondents answered out of self-interest.

Out of the 664 people who participated in the survey, only 186 were included in the final sample after cases with incomplete questions and those not matching the targeted population were deleted. The number of participants from each country was not evenly distributed, with 51 from France, 48 from Spain, 47 from Slovenia, 25 from Italy, and 15 from Greece. In terms of sample composition, 44.1% of the respondents were women, 64.0% were over 45 years old, 85.0% had a higher education degree, 58.1% were managers, 18.3% were CEOs, and 23.6% were business owners. Additionally, the majority of responses (87.1%) came from companies with less than 50 employees.

4.2. Methods

We assessed the constructs in the model with self-report scales, all validated by previous studies. All items were measured with a Likert scale, ranging from 1 (“completely disagree”) to 7 (“completely agree”). The actual implementation of telework was measured through a single observable variable (USE).

We analyzed the measurement model and tested the proposed model and hypotheses using the Partial Least Squares (PLS) technique and R software. PLS is particularly suitable for testing complex modeling systems and multivariate, non-normally distributed data (Hair et al., 2014). This is our case, since the structural model includes 34 items (associated with 9 different constructs) and one observable variable, and as shown by the Shapiro-Wilk test ($W = 0.164$, p -value = 0.000), the data do not meet the multivariate normal property.

4.3. Measurement model

All Cronbach's alpha and Dillon-Goldstein's rho values exceeded the minimum required value of 0.70 (Vinzi et al., 2010). The first eigenvalues of the correlation matrix for each set of items were higher than 1, and the second eigenvalues were clearly lower than 1 (Table 1). These analyses led us to affirm that the internal reliability of the constructs in our measurement model was established.

Table 1. Internal reliability of the constructs.

	Number of items	Cronbach's α	Dillon-Goldstein's ρ	First eigenvalue	Second eigenvalue
E-Social skills	3	0.781	0.873	2.090	0.548
E-Team building skills	3	0.771	0.868	2.060	0.546
Job relevance	4	0.912	0.938	3.170	0.420
Subjective norms	4	0.843	0.895	2.720	0.517
Output quality	5	0.898	0.925	3.570	0.537
Self-efficacy	3	0.711	0.822	1.820	0.667
Ease of use	4	0.886	0.921	2.980	0.464
Usefulness	4	0.838	0.892	2.700	0.560
Behavioural intention	4	0.946	0.961	3.440	0.292

Item loadings on the associated constructs exceeded the accepted threshold of 0.70 (Hair et al., 2010), so that the communalities were all above 0.50. In most cases, more than 70% of the variability of the items was captured by their associated latent variables (Table 2). Furthermore, the average variance extracted (AVE) values of all constructs exceeded the minimum value of 0.50. These results indicated that the convergent validity of the constructs was acceptable.

Table 2. Individual item reliability and convergent validity of the measurement model.

	Item	AVE	Weight	Loading	Communality
E-Social skills	SSK1	0.694	0.395	0.793	0.629
	SSK2		0.348	0.843	0.711
	SSK3		0.456	0.862	0.743
E-Team building skills	TSK1	0.680	0.483	0.887	0.787
	TSK2		0.259	0.731	0.535
	TSK3		0.450	0.848	0.719
Job relevance	JR1	0.792	0.296	0.910	0.827
	JR2		0.281	0.892	0.796
	JR3		0.27	0.864	0.746
	JR4		0.276	0.894	0.800
Subjective norms	SN1	0.679	0.260	0.789	0.622
	SN2		0.326	0.851	0.725
	SN3		0.257	0.772	0.595
	SN4		0.363	0.880	0.774

Table 2. (Continued).

	Item	AVE	Weight	Loading	Communality
Output quality	OQ1		0.264	0.840	0.705
	OQ2		0.222	0.861	0.741
	OQ3	0.713	0.261	0.920	0.846
	OQ4		0.194	0.744	0.554
	OQ5		0.239	0.848	0.719
Self-efficacy	SE1		0.504	0.845	0.713
	SE2	0.606	0.382	0.719	0.517
	SE3		0.391	0.766	0.587
Ease of use	PEOU1		0.296	0.888	0.789
	PEOU2	0.746	0.302	0.865	0.749
	PEOU3		0.259	0.835	0.697
	PEOU4		0.299	0.865	0.748
Usefulness	PU1		0.331	0.785	0.616
	PU2	0.674	0.262	0.770	0.593
	PU3		0.304	0.852	0.726
	PU4		0.320	0.872	0.761
Behavioural intention	BI1		0.258	0.936	0.876
	BI2	0.861	0.261	0.930	0.865
	BI3		0.287	0.916	0.840
	BI4		0.272	0.929	0.863

To examine the discriminant validity of the measures, we considered the cross-loadings of the items and the Fornell and Larcker (1981) criterion. The loadings of each item on the corresponding construct (in bold) exceeded the cross-loadings on other constructs (**Table 3**), and the AVE of each construct was above the highest quadratic correlation of that construct with any other construct (**Table 4**). Therefore, discriminant validity was also considered acceptable.

Table 3. Cross-loadings of items.

	e-Social skills	e-Team building skills	Job relevance	Subjective norms	Output quality	Self-efficacy	Perceived ease of use	Perceived usefulness	Behavioral intention
SSK1	0.793	0.506	0.311	0.271	0.357	0.360	0.434	0.277	0.212
SSK2	0.843	0.467	0.224	0.236	0.253	0.349	0.382	0.178	0.204
SSK3	0.862	0.667	0.417	0.378	0.502	0.410	0.501	0.355	0.330
TSK1	0.679	0.887	0.434	0.327	0.540	0.471	0.590	0.365	0.329
TSK2	0.424	0.731	0.303	0.211	0.297	0.335	0.317	0.227	0.260
TSK3	0.508	0.848	0.646	0.604	0.654	0.496	0.549	0.598	0.568
JR1	0.360	0.539	0.910	0.685	0.712	0.595	0.547	0.704	0.721
JR2	0.335	0.493	0.892	0.655	0.639	0.465	0.472	0.669	0.596
JR3	0.367	0.508	0.864	0.737	0.592	0.588	0.509	0.642	0.638
JR4	0.331	0.522	0.894	0.676	0.665	0.483	0.489	0.658	0.654

Table 3. (Continued).

	e-Social skills	e-Team building skills	Job relevance	Subjective norms	Output quality	Self-efficacy	Perceived ease of use	Perceived usefulness	Behavioral intention
SN1	0.385	0.440	0.576	0.789	0.505	0.506	0.463	0.494	0.577
SN2	0.283	0.392	0.669	0.851	0.522	0.481	0.413	0.620	0.580
SN3	0.233	0.320	0.521	0.772	0.374	0.493	0.368	0.488	0.464
SN4	0.303	0.441	0.746	0.880	0.670	0.531	0.503	0.689	0.640
OQ1	0.304	0.553	0.682	0.562	0.840	0.403	0.543	0.671	0.572
OQ2	0.508	0.610	0.594	0.507	0.861	0.572	0.662	0.563	0.445
OQ3	0.474	0.593	0.712	0.611	0.920	0.462	0.575	0.663	0.558
OQ4	0.336	0.409	0.507	0.451	0.744	0.375	0.456	0.491	0.433
OQ5	0.320	0.489	0.576	0.555	0.848	0.477	0.564	0.608	0.569
SE1	0.377	0.503	0.632	0.601	0.579	0.845	0.572	0.613	0.571
SE2	0.299	0.372	0.330	0.319	0.253	0.719	0.433	0.335	0.187
SE3	0.374	0.364	0.394	0.467	0.388	0.766	0.443	0.377	0.357
PEOU1	0.419	0.535	0.527	0.548	0.607	0.579	0.888	0.579	0.497
PEOU2	0.437	0.586	0.622	0.539	0.678	0.514	0.865	0.590	0.532
PEOU3	0.521	0.460	0.303	0.294	0.484	0.480	0.835	0.375	0.315
PEOU4	0.472	0.532	0.482	0.437	0.513	0.586	0.865	0.424	0.461
PU1	0.355	0.504	0.683	0.603	0.704	0.505	0.585	0.785	0.592
PU2	0.280	0.317	0.544	0.464	0.459	0.408	0.340	0.770	0.575
PU3	0.216	0.384	0.589	0.591	0.547	0.475	0.446	0.852	0.642
PU4	0.239	0.430	0.635	0.640	0.614	0.519	0.485	0.872	0.601
BI1	0.271	0.443	0.668	0.582	0.533	0.443	0.449	0.714	0.936
BI2	0.289	0.456	0.678	0.577	0.566	0.471	0.486	0.655	0.930
BI3	0.314	0.478	0.702	0.733	0.604	0.521	0.518	0.670	0.916
BI4	0.256	0.409	0.672	0.659	0.577	0.414	0.501	0.687	0.929

Table 4. Quadratic correlation between constructs.

	E-Social skills	E-Team building skills	Job relevance	Subjective norms	Output quality	Self-efficacy	Perceived ease of use	Perceived usefulness
E-Team building skills	0.444	-	-	-	-	-	-	-
Job relevance	0.153	0.335	-	-	-	-	-	-
Subjective norms	0.131	0.234	0.596	-	-	-	-	-
Output quality	0.210	0.399	0.539	0.410	-	-	-	-
Self-efficacy	0.203	0.289	0.359	0.368	0.293	-	-	-
Ease of use	0.284	0.377	0.321	0.283	0.441	0.393	-	-
Usefulness	0.111	0.254	0.564	0.498	0.513	0.342	0.329	-
Behavioral intention	0.093	0.232	0.539	0.476	0.378	0.249	0.278	0.539

4.4. Structural model

The R^2 values of the four regressions included in the main effects model exceeded the required value of 0.33 for moderate predictive accuracy (Chin, 1998); one of them

had an R^2 very close to 0.67, which implies that we obtained an almost substantial accuracy (**Table 5**).

Table 5. Model estimation.

		Coefficient	Std. Error	<i>t</i>	<i>p</i> -Value	R^2
Regresión 1						0.514
Intercept		0.000	0.052	0.000	1.000	
eSocial →	Ease of Use	0.156	0.070	2.230	0.027	
eTeam →	Ease of Use	0.297	0.074	4.000	0.000	
Self Efficacy →	Ease of Use	0.397	0.062	6.410	0.000	
Regresión 2						0.648
Intercept		0.000	0.044	0.000	1.000	
Job Relevance →	Usefulness	0.324	0.079	4.080	0.000	
Subjective Norms →	Usefulness	0.253	0.070	3.610	0.000	
Output Quality →	Usefulness	0.316	0.066	4.810	0.000	-
Regresión 3						0.556
Intercept		0.000	0.049	0.000	1.000	
Ease of Use →	Intention	0.158	0.060	2.630	0.009	
Usefulness →	Intention	0.643	0.060	10.700	0.000	
Regresión 4						0.396
Intercept		0.000	0.057	0.000	1.000	
Intention →	Use	0.629	0.057	11.000	0.000	

As the data did not follow a multivariate normal distribution, the significance of each path coefficient was tested by bootstrapping (500 resamples). Once *p*-values were calculated for all statistics, the Benjamini-Hochberg method (1995) was used to correct for alpha error ($\alpha = 0.05$) in multiple hypothesis testing. As all *p*-values are less than the corresponding correction (**Table 6**), it is concluded that the coefficients associated with all causal relationships in the model are significantly different from 0 and, therefore, that the proposed hypotheses are supported (**Figure 1**).

Table 6. Bootstrapping results.

		Coefficients (original)	Coefficients (bootstrapping)	Std. Error	<i>p</i> -Value	alpha Correction
eSocial	Ease of Use	0.156	0.157	0.071	0.028	0.050
eTeam	Ease of Use	0.297	0.298	0.070	0.000	0.039
Self Efficacy	Ease of Use	0.397	0.397	0.062	0.000	0.017
Job Relevance	Usefulness	0.324	0.324	0.083	0.000	0.033
Subjective Norms	Usefulness	0.253	0.255	0.069	0.000	0.028
Output Quality	Usefulness	0.316	0.317	0.074	0.000	0.022
Ease of Use	Intention	0.158	0.157	0.068	0.025	0.044
Usefulness	Intention	0.643	0.643	0.064	0.000	0.011
Behavioral Intention	Use	0.629	0.630	0.051	0.000	0.006

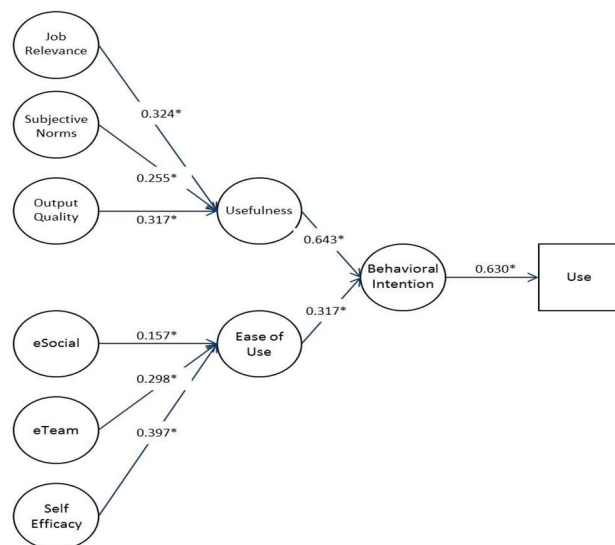


Figure 1. Coefficients of causal relationships.

* p -value < 0.05.

5. Discussion

The results of this study confirm that the decision to adopt telework is strongly influenced by managers' perceptions of its usefulness and ease of use. As suggested, a positive intention to implement telework practices leads to their actual implementation, validating hypotheses H1 to H3. Other factors, such as the skills, attitudes, and perceptions of employers and managers, also play a role in their preference for telework in their organizations. The study found that managers' attitudes towards telework were more favorable when they believed it would improve their job performance. Additionally, managers' positive attitudes towards telework are reinforced by their belief that it is suitable and compatible with their tasks. Consequently, hypothesis H4a is fully confirmed.

Research has verified that the organizational context affects the willingness of management teams to implement flexible working practices. When managers perceive that their organization supports telework, they are more likely to view it as important and useful for their work. One significant finding from the study is that organizational support for telework is reinforced by factors such as peer influence and role models, as suggested by Bloom et al. (2022). The implementation of telework is more acceptable when management teams perceive that their professional peers believe they should implement telework in their companies. When managers see that their role models support telework, they are more likely to implement it in their companies. These subjective norms positively influence the behavior of managers and employers. Consequently, hypothesis H4b is validated.

The data collected supports the idea that a positive perception of the impact of telework on managerial tasks leads to a perception of usefulness. Despite the challenges of objectively measuring the impact of teleworking on efficiency and productivity, the data collected in this research are clear. Previous studies have shown mixed results, depending on factors such as the amount of time spent teleworking (Illegems and Verbeke, 2004; Kazekami, 2020), level of computer skills (Bosua et al.,

2013), management practices (Bosua et al., 2018), and tasks performed by employees (Greer and Payne, 2014). Consequently, hypothesis H4c is corroborated.

Another important finding is that the decision to implement telework is influenced by managers' confidence in their ability to effectively lead and supervise a remote team. Self-confidence plays a crucial role in promoting the adoption of telework, as suggested in Hypothesis H5a. As Raghuram et al. (2003) suggest, individuals who are more confident in their ability to telework are more likely to achieve positive outcomes and proactively adapt their job responsibilities to meet the demands of telework.

As expected, competencies related to building and interacting with teams using digital tools are crucial. In the context of telework adoption, leaders must possess the ability to build, motivate, recognize, and hold teams accountable in virtual environments. According to Van Wart (2019), the capacity to build e-teams is a critical competency for effective leadership. The results obtained confirm the importance of team motivation, interaction, direct communication, accountability, and recognition, as online workers may feel less visible and valued. As noted by Bezzina et al. (2021), managers should utilize essential tools to motivate their teams to adopt remote working and encourage excellent performance from their remote locations. Hypotheses H5b and H5c were supported by the data collected.

6. Conclusions

The adoption of telework was slow before COVID-19, but the pandemic has made it difficult for firms to return to traditional forms of work organization. Workers have become accustomed to remote and hybrid work, and teleworking has the potential to significantly improve organizational performance, as suggested by Labrado et al. (2022). Business owners and managers have gained experience and are now able to assess the advantages and disadvantages of teleworking, leading to the possibility of implementing this flexible working strategy on a regular basis.

This research explores the factors influencing the adoption of telework by European managers and employers. The study delves into previously unexplored aspects, such as the impact of job relevance, output quality, and skills on managers' attitudes and motivations towards telework adoption. Our findings emphasize the significance of managers' perceptions and attitudes, adding to previous studies by demonstrating that personal attitudes, social influences, organizational culture, and contextual factors all play a crucial role in the decision-making process of management teams when considering telework adoption.

Specifically, this research sheds light on the influence of organizational culture, digital skills in communicating and managing remote teams, and subjective perceptions of usefulness, based on job relevance and output quality, on the decision to implement remote working practices. The main theoretical contribution of the paper is to reveal that managers' decision to put into practice telework is also influenced by their belief in its usefulness, its applicability to their job, and their confidence in their ability to successfully lead and supervise a remote team. Additionally, contextual factors also play a role in their motivation. Telework is more acceptable when there is

an organizational culture that supports flexible work practices and when managers and employers perceive it as important for their companies.

Our findings also show that virtual team leadership and technology-mediated communication skills are crucial for managers to feel confident in implementing telework. The ability of leaders to communicate effectively and build, motivate, recognize, and hold accountable teams in virtual environments makes a significant difference.

Regarding practical implications, this research provides valuable insights for organizations looking to implement telework policies. It emphasizes the importance of promoting team-building skills, creating facilitating conditions, and ensuring active participation from individuals in virtual teams. However, some situational factors may hinder the deployment of new work practices, such as a lack of resources required to perform the job effectively. Therefore, supervisors of flexible work arrangements should be well-equipped to respond to these changes and manage them effectively for the benefit of both individuals and the organization. Our findings also highlight the need to consider the motivations and abilities of individuals when introducing new environments, job responsibilities, and career prospects.

However, this investigation has some limitations. Most significantly, a wider sample of managers would be necessary to make the findings more generalizable and applicable to other contexts. Additionally, the use of cross-sectional data to predict intentions and behaviors makes it methodologically difficult to establish the future evolution of causal relationships between variables. Future research should also consider a longitudinal study design to analyze how perceptions change over time. Furthermore, the influence of other competencies, apart from e-communication and e-team building, should also be studied.

Author contributions: Conceptualization, JLM, AMA, ERG and BSB; methodology, JLM and AMA; literature review, JLM, ERG and BSB; data curation and formal analysis, AMA; analysis and discussion of results, JLM, AMA and ERG; conclusions JLM, ERG and BSB; supervision, JLM. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

References

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. & Fishbein, M. (2005). The Influence of Attitudes on Behavior. In: Albarracín, D., Johnson B. T., & Zanna, M. P. (editors). *Handbook of attitudes and attitude change: Basic principles*. Lawrence Erlbaum Associates.
- Athanasiadou, C., & Theriou, G. (2021). Telework: systematic literature review and future research agenda. *Heliyon*, 7(10), e08165. <https://doi.org/10.1016/j.heliyon.2021.e08165>
- Azzolari, D., Fullin, G., Modica, E., et al. (2021). Is everything okay at home? The physical and psychological conditions of workers in smart (Italian). In: Peruzzi, M. and Sacchetto, D. (editors). *Remote Working in the Time of the Pandemic (Italian)*. Giappichelli, Turin.
- Baker, E., Avery, G. C., & Crawford, J. (2006). Home Alone. *Information Resources Management Journal*, 19(4), 1–22. <https://doi.org/10.4018/irmj.2006100101>
- Baruch, Y. (2000). Teleworking: benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment*, 15(1), 34–49. <https://doi.org/10.1111/1468-005x.00063>

- Baruch, Y. (2001). The status of research on teleworking and an agenda for future research. *International Journal of Management Reviews*, 3(2), 113–129. <https://doi.org/10.1111/1468-2370.00058>
- Beauregard, T. A., Basile, K.A. & Canónico, E. (2019). Telework: Outcomes and facilitators for employees. In: Landers, R.N. (editor). *The Cambridge Handbook of Technology and Employee Behavior*. Cambridge University Press.
- Bélanger, F., Watson-Manheim, M. B., & Swan, B. R. (2013). A multi-level socio-technical systems telecommuting framework. *Behaviour & Information Technology*, 32(12), 1257–1279. <https://doi.org/10.1080/0144929x.2012.705894>
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing. *Journal of the Royal Statistical Society: Series B (Methodological)*, 57(1), 289–300. <https://doi.org/10.1111/j.2517-6161.1995.tb02031.x>
- Bentley, T. A., Teo, S. T. T., McLeod, L., et al. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied Ergonomics*, 52, 207–215. <https://doi.org/10.1016/j.apergo.2015.07.019>
- Bezzina, F., Cassar, V., Marmara, V., et al. (2021). Surviving the Pandemic: Remote Working in the Maltese Public Service During the Covid-19 Outbreak. *Frontiers in Sustainability*, 2. <https://doi.org/10.3389/frsus.2021.644710>
- Bloom, N., Han, R., & Liang, J. (2022). How Hybrid Working from Home Works out. National Bureau of Economic Research. <https://doi.org/10.3386/w30292>
- Bosua, R., Gloet, M., Kurnia, S., et al. (2013). Telework, productivity and wellbeing: an Australian perspective. *Telecommunications Journal of Australia*, 63(1). <https://doi.org/10.7790/tja.v63i1.390>
- Bosua, R., Kurnia, S., Gloet, M. & Mendoza, A. (2018). Telework Impact on Productivity and Well-Being. An Australian Study. In: *Social Inclusion and Usability of ICT-enabled Services*. Routledge.
- Breaz, T. O., Fülöp, M. T., & Topor, D. I. (2022). Telework-Its implications and effects during the pandemic on the accounting profession. In: *Proceedings of the 8th BASIQ International Conference on New Trends in Sustainable Business and Consumption; 25–27 May 2022; Graz, Austria*. doi:10.24818/BASIQ/2022/08/037
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In: Marcoulides, G. A. (editor). *Modern Methods for Business Research*. Lawrence Erlbaum Associates Publishers.
- Chung, H. (2022). *The Flexibility Paradox: Why Flexible Working Leads to Self-Exploitation*. Bristol University Press.
- Da Silva Miguez, R. C., & Naranjo-Zolotov, M. (2022). Business not as usual: Understanding the drivers of employees' tacit knowledge sharing behavior in a teleworking environment. In: *Proceedings of the 17th Iberian Conference on Information Systems and Technologies (CISTI); 22–25 June 2022; Madrid, Spain*. doi: 10.23919/CISTI54924.2022.9820089.
- Dahlstrom, T. R. (2013). Telecommuting and Leadership Style. *Public Personnel Management*, 42(3), 438–451. <https://doi.org/10.1177/0091026013495731>
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>
- Eurofound. (2022). *The rise in telework: Impact on working conditions and regulations*. Publications Office of the European Union.
- Eurofound and International Labour Office. (2017). *Working anytime, anywhere: The effects on the world of work*. Publications Office of the European Union, Luxembourg, and ILO, Geneva.
- Fana, M., Milasi, S, Napierala, J., et al. (2020). Telework, work organisation and job quality during the COVID-19 crisis: A qualitative study. In: *JRC Working Papers Series on Labour, Education and Technology*. European Commission, Joint Research Centre.
- Forgacs, T. (2010). Empirical research findings on telework: Management experiences and attitudes. *Business and Economic Horizons*, 1, 6–13. <https://doi.org/10.15208/beh.2010.02>
- Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18(3), 382. <https://doi.org/10.2307/3150980>
- Gibson, J. W., Blackwell, C. W., Dominicis, P., et al. (2002). Telecommuting in the 21st Century: Benefits, Issues, and a Leadership Model Which Will Work. *Journal of Leadership Studies*, 8(4), 75–86. <https://doi.org/10.1177/107179190200800407>
- Golden, T. D. (2006). Avoiding depletion in virtual work: Telework and the intervening impact of work exhaustion on commitment and turnover intentions. *Journal of Vocational Behavior*, 69(1), 176–187. <https://doi.org/10.1016/j.jvb.2006.02.003>

- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93(6), 1412–1421. <https://doi.org/10.1037/a0012722>
- González-González, I., Martínez-Ruiz, M. P., & Clemente-Almendros, J. A. (2022). Does employee management influence the continued use of telework after the COVID-19 pandemic? *Small Business International Review*, 6(2), e537. <https://doi.org/10.26784/sbir.v6i2.537>
- Green, N., Tappin, D., & Bentley, T. (2020). Working From Home Before, During and After the Covid-19 Pandemic: Implications for Workers and Organisations. *New Zealand Journal of Employment Relations*, 45(2). <https://doi.org/10.24135/nzjer.v45i2.19>
- Greer, T. W., & Payne, S. C. (2014). Overcoming telework challenges: Outcomes of successful telework strategies. *The Psychologist-Manager Journal*, 17(2), 87–111. <https://doi.org/10.1037/mgr0000014>
- Groen, B. A. C., van Triest, S. P., Coers, M., et al. (2018). Managing flexible work arrangements: Teleworking and output controls. *European Management Journal*, 36(6), 727–735. <https://doi.org/10.1016/j.emj.2018.01.007>
- Gschwind, L., & Vargas, O. (2019). Telework and its effects in Europe. In: Messenger, J. (editor). *Telework in the 21st century: An evolutionary perspective*. International Labour Organization.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*, 7th ed. Pearson.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. *European Business Review*, 26, 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hornung, S., Rousseau, D. M., & Glaser, J. (2009). Why supervisors make idiosyncratic deals: antecedents and outcomes of i-deals from a managerial perspective. *Journal of Managerial Psychology*, 24(8), 738–764. <https://doi.org/10.1108/02683940910996770>
- Illegems, V., & Verbeke, A. (2004). Telework: What Does it Mean for Management? *Long Range Planning*, 37(4), 319–334. <https://doi.org/10.1016/j.lrp.2004.03.004>
- ILO. (2021) Teleworking arrangements during the COVID-19 crisis and beyond. In: *Proceedings of the 2nd Employment Working Group Meeting under the 2021 Italian Presidency of the G20*. International Labour Organization.
- Ionescu, C. A., Fülöp, M. T., Topor, D. I., et al. (2022). Sustainability Analysis, Implications, and Effects of the Teleworking System in Romania. *Sustainability*, 14(9), 5273. <https://doi.org/10.3390/su14095273>
- Jackson, P. J. & Van der Wielen, M. (1998). *Teleworking: International Perspectives*. The Management of Technology and Innovation Series. Routledge.
- Jemine, G. (2023). Beyond the Storm: an Exploratory Survey on HRManagers' Representations of Epidemic-Induced Telework. *International Journal of Information Technology and Management*.
- Junça Silva, A. & Coelho, N. (2022). The moderating role of organizational culture on the relationship between workers' attitudes towards telework and happiness. *Kybernetes*.
- Kazekami, S. (2020). Mechanisms to improve labor productivity by performing telework. *Telecommunications Policy*, 44(2), 101868. <https://doi.org/10.1016/j.telpol.2019.101868>
- Kim, T., Mullins, L. B., & Yoon, T. (2021). Supervision of Telework: A Key to Organizational Performance. *The American Review of Public Administration*, 51(4), 263–277. <https://doi.org/10.1177/0275074021992058>
- Knoesen, H. & Seymour, L. F. (2020). Examining the Effect of Experience on Managers' Attitudes towards Telework during COVID. In: *Proceedings of the 19th Workshop on e-Business, Virtual Conference*.
- Kowalski, K. B. & Swanson, J. A. (2005). Critical success factors in developing teleworking programs. *Benchmarking: An International Journal*, 12(3), 236–249. <https://doi.org/10.1108/14635770510600357>
- Labrado, M., Rodríguez-Ruiz, O. & Fernández, J. (2022). A time after time effect in telework: an explanation of willingness to telework and self-reported productivity. *International Journal of Manpower*.
- Lang, G., & Hofer-Fischanger, K. (2022). Factors associated with the implementation of health-promoting telework from the perspective of company decision makers after the first COVID-19 lockdown. *Journal of Public Health*, 30(10), 2373–2387. <https://doi.org/10.1007/s10389-022-01717-z>
- Langa, G. Z., & Conradie, D. P. (2003). Perceptions and attitudes with regard to teleworking among public sector officials in Pretoria: applying the Technology Acceptance Model (TAM). *Communicatio*, 29(1–2), 280–296. <https://doi.org/10.1080/02500160308538032>

- Lee, D., Lee, J., & Kim, S. Y. (2023). Paving the Way for Interpersonal Collaboration in Telework: The Moderating Role of Organizational Goal Clarity in the Public Workplace. *Review of Public Personnel Administration*.
<https://doi.org/10.1177/0734371x231190324>
- Lee, H. (2021). Changes in workplace practices during the COVID-19 pandemic: the roles of emotion, psychological safety and organisation support. *Journal of Organizational Effectiveness: People and Performance*, 8(1), 97–128.
<https://doi.org/10.1108/joepp-06-2020-0104>
- Ma, Q., & Liu, L. (2004). The Technology Acceptance Model. *Journal of Organizational and End User Computing*, 16(1), 59–72.
<https://doi.org/10.4018/joeuc.2004010104>
- Manochehri, G., & Pinkerton, T. (2003). Managing telecommuters: Opportunities and challenges. *American Business Review*, 21(1): 9–16.
- Mello, J. A. (2007). Managing Telework Programs Effectively. *Employee Responsibilities and Rights Journal*, 19(4), 247–261.
<https://doi.org/10.1007/s10672-007-9051-1>
- Morrison, J., Chigona, W., & Malanga, D. F. (2019). Factors that Influence Information Technology Workers' Intention to Telework. *Proceedings of the South African Institute of Computer Scientists and Information Technologists 2019*.
<https://doi.org/10.1145/3351108.3351141>
- Oakman, J., Kinsman, N., Stuckey, R., et al. (2020). A rapid review of mental and physical health effects of working at home: how do we optimise health? *BMC Public Health*, 20(1). <https://doi.org/10.1186/s12889-020-09875-z>
- Ollo-López, A., Goñi-Legaz, S., & Erro-Garcés, A. (2021). Home-based telework: usefulness and facilitators. *International Journal of Manpower*, 42(4), 644–660. <https://doi.org/10.1108/ijm-02-2020-0062>
- Park, S., & Cho, Y. J. (2022) Does telework status affect the behavior and perception of supervisors? Examining task behavior and perception in the telework context. *The International Journal of Human Resource Management*, 33(7), 1326–1351.
- Pearlson, K. E., & Saunders, C. S. (2001). There's no place like home: Managing telecommuting paradoxes. *Academy of Management Perspectives*, 15(2), 117–128. <https://doi.org/10.5465/ame.2001.4615008>
- Pérez; M. P., Sánchez, A. M. & De Luis Carnicer, M. P. (2002). Benefits and barriers of telework: perception differences of human resources managers according to company's operations strategy. *Technovation*, 22, 775–783.
- Pérez Pérez, M., Martínez Sánchez, A., de Luis Carnicer, P., et al. (2004). A technology acceptance model of innovation adoption: the case of teleworking. *European Journal of Innovation Management*, 7(4), 280–291.
<https://doi.org/10.1108/14601060410565038>
- Peters, P., & Heusinkveld, S. (2010). Institutional explanations for managers' attitudes towards telehomeworking. *Human Relations*, 63(1), 107–135. <https://doi.org/10.1177/0018726709336025>
- Putnam, L. L., Myers, K. K., & Gailliard, B. M. (2013). Examining the tensions in workplace flexibility and exploring options for new directions. *Human Relations*, 67(4), 413–440. <https://doi.org/10.1177/0018726713495704>
- Pyöriä, P. (2011). Managing telework: risks, fears and rules. *Management Research Review*, 34(4), 386–399.
<https://doi.org/10.1108/01409171111117843>
- Raghuram, S., Wiesenfeld, B. & Garud, R. (2003) Technology enabled work: The role of self-efficacy in determining telecommuter adjustment and structuring behaviour. *Journal of Vocational Behavior*, 63, 180–198.
- Saragih, S., Setiawan, S., Markus, T., et al. (2021). Benefits and Challenges of Telework During The Covid-19 Pandemic. *International Research Journal of Business Studies*, 14(2), 129–135. <https://doi.org/10.21632/irjbs.14.2.129-135>
- Sewell, G., & Taskin, L. (2015). Out of Sight, Out of Mind in a New World of Work? Autonomy, Control, and Spatiotemporal Scaling in Telework. *Organization Studies*, 36(11), 1507–1529. <https://doi.org/10.1177/0170840615593587>
- Silva-C, A., Montoya R, I. A., & Valencia A, J. A. (2019). The attitude of managers toward telework, why is it so difficult to adopt it in organizations? *Technology in Society*, 59, 101133. <https://doi.org/10.1016/j.techsoc.2019.04.009>
- Sostero, M., Milasi, S., Hurley, J., et al. (2020), Teleworkability and the COVID-19 crisis: A new digital divide? In: JRC working papers series on labour, education and technology. European Commission.
- Stout, M. S., Awad, G., & Guzmán, M. (2013). Exploring managers' attitudes toward work/family programs in the private sector. *The Psychologist-Manager Journal*, 16(3), 176–195. <https://doi.org/10.1037/mgr0000005>
- Tokarchuk, O., Gabriele, R., & Neglia, G. (2021). Teleworking during the Covid-19 Crisis in Italy: Evidence and Tentative Interpretations. *Sustainability*, 13(4), 2147. <https://doi.org/10.3390/su13042147>
- Urbaniec, M., Małkowska, A., & Włodarkiewicz-Klimek, H. (2022). The Impact of Technological Developments on Remote Working: Insights from the Polish Managers' Perspective. *Sustainability*, 14(1), 552. <https://doi.org/10.3390/su14010552>

- Vilhelmson, B., & Thulin, E. (2016). Who and where are the flexible workers? Exploring the current diffusion of telework in Sweden. *New Technology, Work and Employment*, 31(1), 77–96. <https://doi.org/10.1111/ntwe.12060>
- Vinzi, V. E., Trinchera, L., & Amato, S. (2010). PLS Path Modeling: From Foundations to Recent Developments and Open Issues for Model Assessment and Improvement. In: Vinzi, E., Chin, W. W., Henseler, J., & Wang, H. (editors). *Handbook of Partial Least Squares*. Springer.