

The Impact of Teleworking on Productivity and Efficiency of Moroccan Employees

Youssef KHATORI, (Full Professor)

*Faculty of Economics and Management,
Ibn Tofail University of Kenitra, Morocco*

Hamza ZERNANI, (PhD Student)

*Faculty of Economics and Management,
Ibn Tofail University of Kenitra, Morocco*

Correspondence address :	Faculty of Economics and Management https://feg.uit.ac.ma supportfeg@uit.ac.ma +212 5 37 32 92 18 Campus universitaire Kénitra Maroc
Disclosure Statement :	The authors declare that they have not received any financial support that could have influenced the objectivity of this study. They take full responsibility for any potential plagiarism and for the accuracy of the results presented in this article.
Conflict of Interest :	The authors report no conflicts of interest.
Cite this article :	KHATORI, Y., & ZERNANI, H. (2025). The Impact of Teleworking on Productivity and Efficiency of Moroccan Employees. <i>International Journal of Accounting, Finance, Auditing, Management and Economics</i> , 6(9), 367–374.
License	This is an open access article under the CC BY-NC-ND license

Received: 01/07/2025

Accepted: 06/09/2025

International Journal of Accounting, Finance, Auditing, Management and Economics - IJAFAME

ISSN: 2658-8455

Volume 6, Issue 09 (2025)

The Impact of Teleworking on Productivity and Efficiency of Moroccan Employees

Abstract:

Teleworking, generalized during the COVID-19 pandemic, has reshaped professional practices in Morocco. This study analyzes its effects on productivity, efficiency, and well-being of Moroccan employees through a mixed-method approach combining survey data and semi-structured interviews. The results indicate short-term gains in productivity due to flexibility and reduced commuting time, yet long-term challenges such as digital fatigue, social isolation, and blurred work-life boundaries undermine efficiency and well-being. Managerial support, digital training, and robust technological infrastructures are identified as critical enablers. Based on the findings, the article proposes policy recommendations to enhance teleworking conditions in Morocco and highlights research avenues regarding creativity, career development, and regional disparities.

Keywords: teleworking, productivity, well-being, efficiency, Morocco, digital technologies, managerial support, COVID-19.

Classification JEL : M412

Paper type: Empirical Research

Résumé :

Le télétravail, généralisé pendant la pandémie de COVID-19, a redéfini les pratiques professionnelles au Maroc. Cette étude analyse ses effets sur la productivité, l'efficacité et le bien-être des employés marocains à travers une approche mixte combinant des données d'enquête et des entretiens semi-structurés. Les résultats indiquent des gains de productivité à court terme grâce à la flexibilité et à la réduction du temps de trajet, mais des défis à long terme tels que la fatigue numérique, l'isolement social et les frontières floues entre le travail et la vie personnelle nuisent à l'efficacité et au bien-être. Le soutien managérial, la formation numérique et des infrastructures technologiques solides sont identifiés comme des facilitateurs critiques. Sur la base des résultats, l'article propose des recommandations politiques pour améliorer les conditions de télétravail au Maroc et souligne des axes de recherche concernant la créativité, le développement de carrière et les disparités régionales.

Mots clés : télétravail, productivité, bien-être, efficacité, Maroc, technologies numériques, soutien managérial, COVID-19.

JEL Classification : M12

Type du papier : Recherche empirique

1. Introduction

Teleworking, although popularized in the early 2000s due to the rise of digital technologies, has roots dating back to the 1970s. Jack Nilles, an American researcher, coined the term “telecommuting” in 1976 and proposed its potential as a solution for reducing congestion and enhancing productivity through remote work facilitated by telecommunication technologies. However, due to technological limitations, telework was not widely adopted until the 1990s, when the growth of the internet and digital communication tools provided the necessary infrastructure. Early studies, such as those by Kraut et al. (1994), highlighted the feasibility of teleworking in sectors like IT and consulting, where tasks could easily be performed remotely using digital tools.

Before the COVID-19 pandemic, teleworking was mainly confined to sectors that could be digitized, such as information technology, scientific research, and consulting. Industries such as manufacturing and retail, which required physical presence, remained resistant to adopting remote work. Gajendran and Harrison (2007) noted that teleworking adoption was generally low in these sectors due to concerns over productivity, employee oversight, and logistical challenges. In Morocco, the situation was similar. The **Moroccan Ministry of Industry (2019)** reported that teleworking was rare, limited mostly to multinational companies and high-tech sectors like IT and offshoring, which had the necessary infrastructure to support remote work. According to the **HCP 2020 survey**, only 4% of Moroccan employees worked remotely before the pandemic, with most industries still reliant on physical presence.

However, the COVID-19 pandemic catalyzed a rapid shift in the adoption of teleworking across the world, including in Morocco. The **HCP (2020)** found that 26% of Moroccan companies adopted teleworking during the pandemic, a stark contrast to pre-pandemic levels. Global studies, such as those by **McKinsey (2020)** and **Pew Research Center (2020)**, reported similar trends, where businesses across sectors were forced to implement remote work strategies due to lockdowns and social distancing. This period of forced adaptation revealed that teleworking was not only feasible but also provided significant benefits such as cost savings and increased flexibility. Gartner’s 2021 report indicated that many companies would continue to support remote work even post-pandemic, with 82% of leaders planning to offer hybrid or fully remote options.

Yet, while teleworking proved effective in many sectors, it also brought challenges, particularly for women. Research by **Schieman et al. (2011)** and the **OECD (2017)** highlighted the “double burden” faced by women, who often bear the responsibility for both professional tasks and domestic duties when working from home. In Morocco, where cultural norms place a disproportionate burden of household chores on women, remote work exacerbated these inequalities, leading to increased stress and work-life conflict. The **International Labour Organization (2021)** reported that women were more likely to experience burnout and mental health challenges due to the additional demands of teleworking.

Given these developments, understanding the long-term impacts of teleworking on Moroccan employees’ productivity, well-being, and organizational culture is crucial. Previous studies by **Allen et al. (2015)** and **Gallup (2020)** emphasize the need for ongoing research to assess the effectiveness of teleworking in emerging economies with evolving digital infrastructures. In Morocco, where digital skills and workplace culture are still developing, examining these issues will help optimize remote work practices for the future. This research will provide valuable insights into how teleworking can be sustained and improved, balancing both employee productivity and well-being, while fostering a more inclusive work environment in Morocco.

1. Literature Review

1.1 Teleworking concept

Teleworking is defined as a work method in which employees perform their tasks away from company premises, using information and communication technologies (ICT) to communicate with colleagues and their line managers. It is a work method that allows for greater flexibility, offering employees the opportunity to work remotely while remaining connected to company systems. According to the ILO, teleworking is a work approach that relies on physical distance but is facilitated by technologies that enable real-time interaction and the achievement of work objectives.

Teleworking can take several forms, including:

- **Teleworking from home** is the most common method, where the employee performs their work from home. It is essential that the employee has the necessary tools to perform their tasks and that they can have constant access to the Internet and other resources on the Internet.
- **Hybrid teleworking** is a remote working method where the employee alternates between working in the office and teleworking. This method offers greater flexibility while promoting physical contact with the company.
- **Mobile teleworking** is often used by people whose work involves regular travel (such as consultants or salespeople). They have the flexibility to work from a variety of locations, using mobile technologies such as laptops, tablets, or smartphones.

In the 1970s, teleworking was introduced, partly thanks to the work of Jack Nilles, considered the founder of teleworking. This concept was developed by Nilles with the aim of reducing commuting and improving employees' quality of life, while reducing costs for employers.

The idea of telecommuting was explored as part of the growth of information technology in the 1980s and 1990s, but its use was limited due to technological constraints and concerns about monitoring and managing remote employees. It wasn't until the advent of high-speed internet and improved communication technologies that telecommuting became a viable option for more and more businesses.

In the 2000s, studies began to focus on the impact of remote working on productivity, well-being, and work-life balance. According to research, remote working has been shown to increase employee satisfaction by providing greater flexibility.

Empirical findings remain mixed. Bloom et al. (2015) found that Chinese teleworkers were 13% more productive due to fewer interruptions and extended workdays. Allen et al. (2015) reported positive correlations between autonomy and productivity. Conversely, Gartner (2020) observed that 30% of remote workers experienced productivity losses due to lack of social interaction and supervision. In Morocco, productivity gains are often conditioned by digital infrastructure and employees' ability to adapt to remote tools (Mekdad, 2024).

1.2. Teleworking and productivity

• *Teleworking and Productivity*

Empirical findings remain mixed. Bloom et al. (2015) found that Chinese teleworkers were 13% more productive due to fewer interruptions and extended workdays. Allen et al. (2015) reported positive correlations between autonomy and productivity. Conversely, Gartner (2020) observed that 30% of remote workers experienced productivity losses due to lack of social interaction and supervision. In Morocco, productivity gains are often conditioned by digital infrastructure and employees' ability to adapt to remote tools (Mekdad, 2024).

• *Teleworking and Well-being*

Teleworking reduces commuting stress and allows greater work-life balance (Gajendran &

Harrison, 2007). Yet, Kapoor et al. (2021) highlight risks of mental fatigue and stress when work-life boundaries blur. In the Moroccan context, women often face a “double burden” of professional and domestic responsibilities, intensifying stress and limiting well-being (Chakor et al., 2021).

- ***Teleworking and Organizational Culture***

Remote work challenges team cohesion and traditional managerial control (Dimitrova, 2003). Employees often require strong managerial support and training to adapt. A lack of digital infrastructure, especially in rural Morocco, exacerbates inequalities and limits efficiency.

1.3. Legal framework in Morocco

Morocco's legal framework for teleworking remains in its infancy. Before the pandemic, there was no specific legislation governing this work arrangement. However, with the rapid increase in teleworking during the health crisis, the Moroccan government began considering measures to formalize this practice. In 2020, the Ministry of Economy, Finance, and Administrative Reform issued circulars encouraging public administrations to adopt teleworking wherever possible, but these guidelines have not yet been translated into formal laws.

There is a legal vacuum regarding the rights and obligations of employees and employers regarding teleworking. Issues related to employers' responsibility for the health and safety of teleworkers, as well as the modalities for compensation for expenses related to working from home, are not yet regulated.

Faced with the lack of a clear legal framework, Moroccan companies have had to improvise when it comes to implementing teleworking policies. Some large companies, particularly in the information technology and telecommunications sectors, have implemented flexible policies to facilitate the transition to remote work. These companies have invested in digital tools and offered training to their employees to help them adapt to this new form of work.

However, in small and medium-sized enterprises (SMEs), teleworking remained more difficult to implement, due to a lack of resources and the reluctance of managers to adopt this working method. Many Moroccan SMEs continued to favor face-to-face work, despite the risks associated with the pandemic, due to the perception that teleworking could harm productivity. Compared to countries like France, Germany, or the United States, Morocco is still lagging behind in terms of the legal framework governing teleworking. In France, for example, the Labor Code was amended as early as 2012 to include specific provisions regarding teleworking, which stipulate that employees have the right to work remotely and that employers are required to provide the necessary tools to ensure their productivity.

In the United States, remote work is largely governed by corporate policies, but there are also federal guidelines that ensure remote employees enjoy the same rights and protections as those who work on-site. U.S. companies are also required to ensure the safety of remote employees and compensate for work-from-home expenses, such as equipment purchases or internet access. Morocco could draw inspiration from these legal frameworks to develop more comprehensive legislation on teleworking, taking into account the specific needs of Moroccan businesses and employees, as well as the country's digital infrastructure.

2. Conceptual Review

- ***Defining Teleworking***

Teleworking is a form of work arrangement where employees perform professional tasks outside traditional office premises by relying on information and communication technologies (ICT) (Nilles, 1976; ILO, 2021). It may take different forms: home-based telework, hybrid telework, and mobile telework. The initial purpose of teleworking, as conceptualized by Nilles

(1976), was to reduce commuting and improve employees' quality of life while decreasing organizational costs. Technological advances such as broadband internet, videoconferencing platforms, and collaborative tools have since made teleworking more widespread and feasible.

- ***The Legal Framework in Morocco***

In Morocco, the legal framework for teleworking remains underdeveloped. Before 2020, no formal legislation governed this practice. During the COVID-19 pandemic, circulars from the Ministry of Economy, Finance, and Administrative Reform (2020) encouraged public administrations to adopt teleworking. However, issues such as occupational safety, compensation of teleworking-related expenses, and employee rights remain unregulated. In comparison, countries like France (Labor Code, 2012) and the United States have integrated telework into legal frameworks. Morocco still lags behind and requires a comprehensive legal framework adapted to its socio-economic context.

H1: Teleworking improves short-term productivity of Moroccan employees through flexibility and reduced commuting.

H2: Teleworking negatively impacts employees' long-term well-being due to social isolation and work-life imbalance.

H3: Managerial support and access to digital tools positively moderate the relationship between teleworking and efficiency.

H4: The effects of teleworking vary significantly across sectors and regions in Morocco.

3. Research Methodology

3.1. Research Field and Data

The empirical study was conducted in Morocco across four sectors: ICT, finance, education, and public administration. Data collection included a survey of 300 teleworkers and 25 semi-structured interviews.

3.2. Research Model

The research model examines the relationship between teleworking (independent variable) and employee outcomes (productivity, efficiency, well-being) with managerial support and digital tools as moderating variables. Mathematically: $Employee_Outcome = \beta_0 + \beta_1(Teleworking) + \beta_2(ManagerialSupport) + \beta_3(DigitalTools) + \epsilon$

3.3. Data Processing

Quantitative data were analyzed using SPSS and R through descriptive statistics, ANOVA, and regression models. Differences were tested by sector, gender, and region. Qualitative data from interviews were coded and thematically analyzed.

4. Results and discussion

60% of respondents reported higher productivity, especially in ICT and finance. 25% reported declines, mainly in education and creative sectors requiring high social interaction. ANOVA confirmed significant sectoral differences ($p < 0.05$). Employees using project management platforms were significantly more efficient. While 55% perceived improved work-life balance, 35% reported stress due to blurred boundaries. Regression analysis showed managerial support significantly reduced stress levels ($\beta = -0.42$, $p < 0.01$). Employees in rural areas reported significantly lower productivity due to unstable internet connections.

Findings confirm short-term productivity gains but also highlight long-term risks consistent with Kapoor et al. (2021). Moroccan-specific constraints such as uneven digital infrastructure, cultural gender roles, and limited organizational preparation explain discrepancies with studies

in developed economies.

Managerial support and digital training act as protective factors, mitigating negative effects. However, generalizing results across Morocco remains problematic given strong regional and sectoral disparities. Future studies should analyze medium- and long-term impacts on career progression, mental health, and team performance.

6. Conclusion

This study provides a nuanced perspective on teleworking in Morocco, highlighting both its advantages and challenges. Initially, teleworking seems to boost productivity, as employees benefit from increased flexibility and fewer office distractions. However, over time, the negative aspects begin to surface, particularly regarding employee well-being. While teleworking offers the flexibility to manage personal tasks, it also leads to feelings of isolation and mental fatigue, especially for those who struggle to separate work from personal life. This shift underscores the need for companies to implement strategies to prevent burnout and maintain long-term employee health.

The study further reveals that certain contextual factors in Morocco—such as the limited access to reliable digital infrastructure and varying managerial support—play a significant role in determining the effectiveness of teleworking. These elements are pivotal in facilitating or hindering employees' ability to perform efficiently and remain motivated. Employees who are well-supported with the necessary tools and guidance report higher levels of productivity and job satisfaction, whereas those lacking these resources face difficulties in adapting to the remote work environment.

Despite these valuable insights, the study is constrained by several limitations. The small sample size and reliance on self-reported data introduce potential biases, making it difficult to generalize the findings to a broader population. Furthermore, the regional diversity in Morocco means that teleworking experiences can vary widely depending on local infrastructure, managerial practices, and cultural attitudes towards work.

Looking ahead, there are several avenues for future research. One important area to explore is the impact of teleworking on creativity and innovation, particularly in industries that require collaborative, dynamic environments. Additionally, comparative studies across different sectors and regions could uncover sector-specific or regional patterns that influence the success of teleworking. Lastly, investigating the coping strategies employed by workers—such as establishing boundaries or using new technologies—could provide valuable insights into how employees adapt to the evolving demands of remote work.

References :

- (1). Allen, T.D., Golden, T.D., & Shockley, K.M. (2015). "How effective is telecommuting? Assessing the status of our scientific findings." *Psychological Science in the Public Interest*, 16(2), 40-68.
- (2). Baker, E., Avery, G.C., & Crawford, J. (2007). "Satisfaction and perceived productivity when professionals work from home." *Research and Practice in Human Resource Management*, 15(1), 37-62.
- (3). Bloom, N., Liang, J., Roberts, J., & Ying, Z.J. (2015). "Does Working from Home Work? Evidence from a Chinese Experiment." *Quarterly Journal of Economics*, 130(1), 165-218.
- (4). Labor Code, France. (2012). Law No. 2012-387 of March 22, 2012 relating to teleworking.
- (5). Dimitrova, D. (2003). "Controlling teleworkers: Supervision and flexibility

- revisited.” *New Technology, Work and Employment*, 18(3), 181-195.
- (6). Felstead, A., Jewson, N., Phizacklea, A., & Walters, S. (2002). “Opportunities to work at home in the context of work-life balance.” *Human Resource Management Journal*, 12(1), 54-76.
 - (7). Gajendran, RS, & Harrison, DA (2007). “The Good, the Bad, and the Unknown about Telecommuting: Meta-analysis of Psychological Mediators and Individual Consequences.” *Journal of Applied Psychology*, 92(6), 1524-1541.
 - (8). Gartner. (2020). *The Impact of Remote Work on Employee Performance*. Gartner Research.
 - (9). High Commission for Planning (HCP). (2020). *Impact of COVID-19 on Moroccan businesses*.
 - (10). Kapoor, V., Yadav, J., & Bajpai, L. (2021). “COVID-19: A mediated moderated role of teleworking and resilience.” *Employee Relations: The International Journal*, 43(1), 229-245.
 - (11). Mekdad, A. (2024). "The effect of the introduction of teleworking on the performance of Moroccan employees." *International Journal of Accounting, Finance, Auditing, Management and Economics*.
 - (12). Ministry of Economy, Finance and Administrative Reform. (2020). Circular No. 01 and 02/2020 on teleworking, Morocco.
 - (13). Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). “Working from home: Characteristics and outcomes of telework.” *International Journal of Manpower*, 40(1), 87-101.
 - (14). Nilles, J. (1976). *The Telecommunications-Transportation Tradeoff: Options for Tomorrow*. John Wiley & Sons.
 - (15). International Labour Organization (ILO). (2021). *Teleworking in the post-pandemic world of work. public policies make it happen?* OECD Policy Responses to Coronavirus (COVID-19).
 - (16). Tavares, A.I. (2017). “Telework and health effects review.” *International Journal of Healthcare*, 3(2), 30-36.
 - (17). Chakor, T., Abouqal, R., & El Anzi, H. (2021). "Teleworking in Morocco: Realities, Challenges and Perspectives." *International Management Review*,