

# Telework - Its Implications and Effects During the Pandemic on the Accounting Profession

# Teodora Odett Breaz<sup>1</sup>, Melinda Timea Fülöp<sup>2</sup> and Dan Ioan Topor<sup>3</sup>

<sup>1)</sup> 1 Decembrie 1918 University, Alba Iulia, Romania and Lucian Blaga University, Sibiu, Romania

<sup>2)</sup> Babeş-Bolyai University of Cluj-Napoca, Cluj Napoca, Romania
<sup>3)</sup> 1 Decembrie 1918 University, Alba Iulia, Romania
E-mail: breazteodora@yahoo.com; E-mail: melinda.fulop@econ.ubbcluj.ro;
E-mail: dan.topor@uab.ro

# Please cite this paper as:

Breaz, T.O., Fülöp, M.T. and Topor, D.I., 2022. Telework - Its Implications and Effects During the Pandemic on the Accounting Profession. In: R. Pamfilie, V. Dinu, C. Vasiliu, D. Pleşea, L. Tăchiciu eds. 2022. 8<sup>th</sup> BASIQ International Conference on New Trends in Sustainable Business and Consumption. Graz, Austria, 25-27 May 2022. Bucharest: ASE, pp.282-289.

DOI: 10.24818/BASIQ/2022/08/037

#### **Abstract**

The digital transformation is facing a significant paradigm shift in our society, it has already profoundly changed our world of work and will continue to do so in the future. The COVID-19 pandemic has greatly facilitated this increase in digitization in recent months. Many companies have had to move from office to home office to protect the health of their employees and ensure their livelihood. As it is not possible to access local files in one's home office, many companies have been increasingly digitizing their data and documents in recent months, securely storing them in digital media and using innovative business content so that the employees should be able to access and edit management solutions anytime, anywhere. In this sense we released a questionnaire to evaluate the perceptions of the accountants about the teleworking during the COVID. Given the problems of professional reasoning and the new technology they faced with the pandemic. The novelty of the article concerns the analysis of the situation in Romania, for which no specific research was carried out on the fields of activity, especially in the field of accounting. The results show that accountants were forced to adapt to telecommuting and learned a lot from this period. Like any research, it has several limitations and leaves room for future research. In the future, the increased focus on multi-cloud or digital media should support companies in achieving their goals and contribute to the maximum added value.

# Keywords

digitalization; COVID-19; telework, teleworking

DOI: 10.24818/BASIQ/2022/08/037

#### Introduction

The crisis caused by the COVID-19 pandemic is a real test for digitization. In a very short period of time, ways and means had to be found to maintain the various types of administrative services, while protecting employees and the population. In many cases, home office work (teleworking, also known as remote work) has been relied upon to protect employees and to protect their overall health (Baicu, et al., 2020).

With the onset of the pandemic in March 2020, project management was able to rely on established project structures. This included detailed project planning in a partially agile process model, transparent project organization, regular meeting and communication structures, established risk management, good technical equipment and, above all, a motivated and highly qualified project team. The cornerstones for the transition to reliable and structured distance work have been the already established project structures and standards. A clear project plan, the division of the project into independent subprojects, effective coordination committees and clearly defined project working days provided the framework for cooperation in a situation where the daily work routine for all project employees changed dramatically in just one week.



After half a year of remote work on the project, several factors emerged that, in reflection with the project staff and other project actors, are considered essential for the success of teleworking. In addition to the acquisition of new additional technologies and the adaptation of control and communication structures, both the familiar work formats and the planned events had to be rethought and adapted to the modified technical requirements and conditions.

To continue the successful operation of the project in the form of telework, it was opportune to stick to the planning of the project, especially in exchange with the departments. Important elements in the project procedure, such as the implementation of the target image workshops and the organizational launch in the departments, as well as specialized and integration tests, were therefore carried out within the planned time frame, but in different formats. A lot of design and coordination effort have been invested in adapting formats and developing new methods. As a result, project stages could be maintained, and all essential work packages could be processed (Beauregard et.al,2019).

The human factor is at the heart of the changes that have resulted from the pandemic. Physical change in the workplace and work environment, lack of direct contact with colleagues, and often sudden changes in family and work compatibility requirements have led to additional challenges that need to be addressed. Since regular shift in the lobby, in the kitchen for coffee or from office to office was no longer necessary, this was offset by phone calls, which often interrupted their own work pace (Mann and Holdsworth, 2003)

It has been helpful for many employees to block fixed calendar times to work on their own topics, as well as fixed break times, including a long enough lunch break. The use of conference calls and web conferencing has increased significantly. In order to facilitate cooperation in such conferences, a remote discipline with rules of the game was introduced from the beginning, the most important point being to deactivate yourself when you are not speaking (Figure no. 1.).

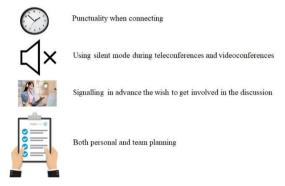


Figure no. 1. Rules for cooperation in a conferences

From one day to the next, remote work has completely changed the workplace for many employees. When it became clear that the distance phase would take longer, a large number of employees bought more comfortable headphones. In addition, the work area itself has often been equipped with a suitable desk and an office chair to prevent back pain. After the teleworking phase began, it quickly became clear that social interaction at work had decreased because people could not see each other. At the same time, personal exchange is inherently important for successful cooperation. For this reason, the project has become active in many places.

## 1. Literature review

Telework has been widely promoted as a future model, but the moderate spread and rapid growth of telework during the crisis raises the issue of the costs and benefits of telework for companies and the economy. The effect on productivity, which has already been investigated in several studies, is particularly relevant for an economic assessment.

In the spring of 2020, there have been decisive changes in teleworking. Thanks to measures to reduce the COVID-19 pandemic and to promote "social distance" worldwide, teleworking has suddenly gained importance. In this context, the question arises as to the extent to which telework will remain so important even after the pandemic. The crisis caused by the pandemic has further increased the importance of digitalization. Instead of physical meetings, employees are now given tools to enable virtual conferencing and work from home (Borgmann 2020). Bitkom President Achim Berg considers the breakdown of existing structures an urgent need: "The COVID-19 pandemic and the drastic damage to public life require a radical rethinking of the culture of many companies. Public employers, for whom the home office is often a foreign word, are even more challenged. Digital technologies are the key to ensuring the functionality of businesses



and public institutions, such as offices and schools, even in this time of extraordinary crisis" (Bitkom, 2020). The paradigm shift described by Berg becomes particularly clear when we look at how often we use cloud services / digital media. According to a representative survey conducted by Bitkom Research industry association on behalf of KPMG AG, 76% of companies surveyed used cloud computing power / digital media in the last year. In 2018 it was 73% and in 2017 only 66%. A steady increase in cloud solutions is clearly visible (Pols and Heidkamp, 2020). If we look at the current literature on "digitization" and its likely effects on the world of work tomorrow, a surprising number of studies refer to layoffs and downsizing due to the growing influence of digitization (Frey and Osborne, 2013; Silva, 2021).

Arntz, Gregory and Zierahn (2016) consider individual activities instead of individual professions or occupational groups and reach a significantly lower probability of 12% compared to the total number of jobs in Germany. According to the authors, a possible explanation for the large discrepancy between forecasts is that employees often perform a large number of interactive, non-routine activities that cannot be automated or can only be automated with great difficulty. Given the person who works, such studies may explain the fears of losing a job. In addition, a transformation of (remaining) activities during digitization is to be expected (Arntz, Gregory and Zierahn, 2016; Montealegre and Cascio, 2017). Giovanis (2019) examines employee loyalty based on the 2004 and 2011 Labor Relations Survey (WERS) survey, which includes all UK companies with at least five employees and includes surveys of both employees and employers. Answers to questions, measured on a Likert scale from one to five, are used to measure employee satisfaction and loyalty. There is a positive correlation between teleworking and satisfaction and loyalty. This is justified by the elimination of unfavorable, stressful conditions on the way to and from work. It is also emphasized that teleworking promotes autonomy and flexibility of working time. In turn, this allows employees to organize their free time, tailored to individual needs, which can sometimes lead to additional stress, as shown in Kazekami (2020). However, this means that telecom companies are more attractive than other companies and can therefore attract more productive workers, which ultimately increases their productivity. In terms of productivity, Bloom et al. (2015) further with their work on CTrip employees that telecommuting can lead to an increase in performance of up to 13%. On the one hand, people worked nine percent more at home, and on the other hand, four percent more calls per minute were made. Both points require closer examination. In the case of the former, it should be noted that the extra work was done voluntarily, but in the long run, it can also lead to increased stress and / or a balance between work and private life, which is consistent with Kazekami results (2020). To increase the number of calls per minute, employees said that changing jobs has led to a quieter environment, which has made it easier for customers to understand the phone and reduce questions. However, working in a call center offers extremely specific conditions, which make it much easier to work remotely. Kazekami (2020) also uses the above data to investigate the effects on the productivity of Japanese companies and employees. The results of the research show that teleworking an adequate number of hours per week can increase labor productivity. According to the results, teleworking around 20 hours a week maximizes the effect on productivity. An extension beyond this number limits productivity gains through telework. This decrease in marginal productivity can be explained by the increase in loneliness, which in turn can have a negative effect on life satisfaction. In addition, the results of the study suggest that teleworking leads to higher productivity increases for employees who travel an hour or more each day. According to the authors, this is due to the additional stress experienced by congested public transport workers in Japan. This can reduce productivity and can be avoided by teleworking. These results largely coincide with those of Giovanis (2019) and thus the negative influence of long commuting times.

Based on the regular ZEW ICT survey conducted by German companies, Viete and Erdsiek (2020) examine more than 1,000 German service companies to what extent the so-called "trust-based working time arrangements", ie flexible agreements where and when the work is carried out, they also include home offices, which affect labor productivity. They show that labor productivity increases as the proportion of these agreements increases. Associated with this are, of course, mobile technology solutions that have a complementary effect and also reinforce this effect. Focused on the prevailing crisis and takes into account the period between February and May 2020 in the United States. Specifically, the authors examine changes in unemployment rates. It can be seen that the federal states that have a higher share of employment in the areas of "information activity, including management, professional and related occupations" 3 have fewer redundancies and leave. This is due to the fact that jobs in these sectors tend to work more in telework than others (Brynjolfsson, et al., 2020). Schymik and Fadinger (2020) also find that teleworking has a strong negative correlation with COVID-19 virus infection rates. NUTS-2 regions in Germany, with a smaller proportion of employees who can work from home because of their jobs, have higher infection rates than other federal states. Subsequently, the authors point out that the economic costs of a blockage are significantly higher in regions with a lower proportion of jobs that can be done from home. Telework also



contributes to a significant part of the resilience of an economy in times of global crisis, such as the COVID-19 pandemic.

#### 2. Methodology

The research was conducted using a questioner based on a descriptive and exploratory methods. The questionnaire, which was addressed to accountants, outlined several aspects regarding the teleworking in during the health crisis. The analyzed sample consisted of 125 validated responses, and the date obtained where validated by using SPSS.

## 3. Covid's implications on work in Romania

The COVID-19 pandemic has considerably changed the labor situation and work pressures of several individuals, who get began working at home, in telecommuting. In adding to homeworking, several families have confronted the position of assisting their children, who, staying similarly limited at home, have started to take space education classes. According to Thulin, Vilhelmson and Johansson (2019), there are just a small number of empirical research on how employees manage their everyday employment. In telecommuting, the worker is available everywhere and every time, and this need meets the pressure of the company (Baruch, 2000). When teleworking, space is ignored, and the employee's technical sketch and self-control are important in the worker's profile so that he can utilize job professionally and successfully (Gálvez, Tirado and Martínez, 2020). This system of work does rigorous use of computer-generated interaction to provide communication among work groups and to concentrate on great managing of individuals and projects (Mann and Holdsworth, 2003; Murphy and Reeves, 2019).

The conceptual model we analyzed was resulting since the crisis-induced telework adjustment structure. The theoretical foundations of the present research lie in the telework analyzed by Dawis and Lofquist (1984) and the interactional model of personal adjustment analyzed by Nelson (1990). The variables that are incorporated in the research are particular for the crisis, i.e. the context of the crisis "generates" them or otherwise changes the relationship with the adjustment of telework. We have considered the following factors (Figure no.2.):

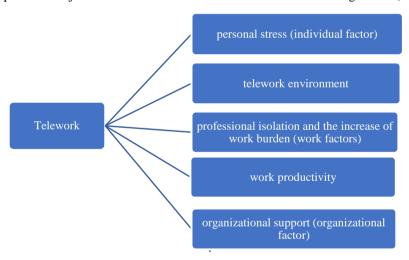


Figure no. 2. Proposed model

We also added as control variables the age, gender, educational level, experience in the field, experience in telework and team size (Table no.1.).

Following the establishment of the basic factors of the specialized literature, we resorted to the formulation of hypotheses that were subsequently tested to confirm or refute them.

The level to which an worker realizes his/her life unpredictable, overworked, even unmanageable as it became with the onset of the pandemic contributes significantly to the individual stressor (Cohen, Kamarck and Mermelstein, 1983). As several researchers in the literature have pointed out, the stress factor can have a negative influence on various labor results (DeTienne, et al., 2012; Yoruk and Acikgoz, 2022).



Table no. 1. Demographical information

Dimension	Subgroup	Distribution	
Gender	Female	87	
Gender	Male	38	
	18-25	0	
	26-35	18	
Age	36-45	86	
	46-55	14	
	Peste 55	7	
	Undergraduate	15	
Education	BA	66	
	MA	44	
	Less than 1 year	0	
Experience in the field	1-5 years	9	
Experience in the nett	5-10 years	13	
	More than 10 years	103	
	Less than 1 hour	5	
	1-2 hours	12	
Experience in telework	2-3 hours	15	
	3-4 hours	17	
	More than 4 hours	76	
Dimension of the team	0-10 employees	49	
	10-50 employees	51	
	50-100 employees	19	
	100-300 employees	5	
	More than 300 employees	1	

Based on these statements found in the literature, we formulated our first hypothesis:

## H1: Stress has a negative impact on the various outcomes of work.

Newman (1977) was concerned with the issue of the work environment, so the degree to which an worker has favorable circumstances for teleworking at at home can influence his performance and performance. Thus, the researchers in the field analyzed the employees' perception regarding their work environment. A good physical work atmosphere can positively influence worker performing (Kacmar, et al., 2009). Disruptions, noise, and interruptions are likely to affect performance as well as inadequate physical condition (Gist and Mitchell, 1992; Staples, Hulland and Higgins, 1999).

## H2: Employees' perceptions of their work environment positively influence their performance.

In a situation free of pandemic crisis, it has been demonstrated that the more than a person understands that he is significant, obvious and concerned in the organizational society (organizational connection), the more than this person adapts to telework (Raghuram, et al., 2001). Thus, it is necessary to analyze the influence of isolation on telework.

# H3: Isolation has a negative influence on teleworking.

With the restrictions brought by the pandemic, the perception of the change of work effort was significantly influenced (Cording, et al., 2014). Workload or efficiency has been recognized as one of the reasons for telework, expected to the anticipation of disruptions and / or the reduction of traveling period. Reasons for efficiency include the need for telework to improve work productivity and performing (Allen, Golden and Shockley, 2015) and thus promote to a good quality variation of work.

#### H4: Labor productivity is positively influenced by telework.

An important role in this period of crisis is also represented by the facilities offered by the organization. Thus, organizational assistance has remained as one of the achievement aspects in the implementation of telework for workers to adapt good to this way (Allen, Golden and Shockley, 2015; Beauregard, Basile and Canonico, 2019).

#### H5: Organizational support negatively influences telework.

Table 2 shows that the load values of the related question factors are greater than 0.40. In addition, the results of the T test in each factor load variable are significant and accurate to less than 0.01. Moreover, based on Cronbach (1955), the acceptable alpha value for model reliability is 0.70, while in the current study the alpha value for each variable is greater than 0.70. Consequently, the composite reliability (CR)



values for the variables are obtained as a value greater than 0.70 for each variable. The average values of variance extracted (AVE) describe that the convergent validity of the variables is convenient (Table no.2.).

Table no. 2. Statistical results

	Sample Mean	Standard Deviation	Cronbach's Alpha	C.R. Value	AVE Value	R Square
H1	2.53	1.1	0.84	0.91	0.77	0.71
H2	3.11	0.96	0.83	0.9	0.76	0.67
Н3	3.31	0.98	0.74	0.86	0.69	0.68
H4	2.24	1.14	0.85	0.91	0.78	0.66
H5	3.51	1.18	0.89	0.92	0.79	0.6

Thus, following the results obtained, the hypotheses formulated by us are confirmed (Table no. 3.):

Table no. 3. Hypothesis confirmation

Factor	Hypothesis relation	Confirm/Reject
Stress	H1 (-)	confirmed
Work environment	H2 (+)	confirmed
Isolation	H3 (-)	confirmed
Work productivity	H4 (+)	confirmed
Organizational support	H5 (-)	confirmed

Absence of contact and confidential interactions with teammates, as good as opinion from the administrator and the organization in general, is one of the most important difficulties facing telework as described in the literature (Feldman and Gainey, 1997; Golden, Veiga and Dino, 2008.). This phenomenon is also underlined by the respondents of the questionnaire who emphasize that they lack face-to-face contact with colleagues, so we emphasize that our research is in line with existing literature, as a robust and substantial negative influence was found on employees in their adaptation. teleworking due to their isolation. The need for adequate teleworking restrictions so that workers can actually work from home has proven to be the second extremely crucial factor affecting employees to adapt to working conditions in the teleworking variant. Here the adaptation was an even bigger challenge among the respondents due to the fact that with the pandemic not only they as employees remained at home but also the rest of the family members, thus or faced with the issue of space and time management. This result is also in line with the literature (Staples, Hulland and Higgins, 1999; Beauregard, Basile and Canonico, 2019; Yoruk and Acikgoz, 2022), not surprisingly because the swift and compulsory environment of the blockage has frequently left workers who were possibly unfamiliar with teleworking before, ill-equipped while their individual and work arenas clashed. Therefore, it is exceptionally hard to resolve the limitations of our expert life with those of our family members. All this has the impact of considerably improving our emotional load, pushing us to assume that we cannot remain engaged on a project or an meeting due to disruptions all around us. Anxiety was discovered to be one of the extremely important crisis-specific factors, with a solid negative effect on change. Occupational wellbeing and ambiguity in the perspective of the epidemic crisis is believed to have remained a key cause of individual stress, as well as the crash of individual and professional life. Thus, it highlights the crucial importance of detecting, controlling and managing employee anxiety when applying new methods of working (Mann and Holdsworth, 2003) and particularly in periods of crisis.

Unusually, our findings also showed that the perception of an increase in capacity take the lead to superior job fulfilment, efficiency and excellence. The fact that the intensification in labor productivity is linked to a improved change might appear amazing at primary look, however, it is in line with one of the initial meanings of applying telework in organizations, namely to provide more flexibility and decrease period and the pressure of moving from home to work and back.

Surprisingly, despite the fact that the literature states that organizational support counterbalances the feeling of professional isolation (Mann and Holdsworth, 2003), our results are contradictory, which can be also explained in terms of the target group where most work in accounting firms and thus have real support from the employer due to the fact that they are both employers and employees within the entity. Moreover, the support that employers can offer is aimed at the software part and not at the work environment where we think especially about space, noise and work-family conflict which was probably the biggest challenge with the assessment of the pandemic.



#### **Conclusions**

Most studies show that teleworking can have a positive impact on productivity. However, studies also show that this depends on the context. A positive correlation is found primarily in people who have a great influence on their work and in employees who carry out creative activities. The number of hours per week that are worked through telework is also important for productivity. As explained above, Kazekami (2020) makes it clear that if telework is high, marginal productivity may decline. Moreover, the positive effects of telework on employee satisfaction and loyalty could be identified, but only to a certain extent. Isolation will probably play a very important role here. Many health issues are also negatively related to teleworking. However, they are increasingly concerned with the long-term consequences and are therefore initially dealt with against the background of the current COVID-19 pandemic and the associated economic and health consequences.

Thus the processes had to be changed quickly and rethought. The restructuring and digitization of a company and its workflows, which otherwise lasted months, had to be implemented in a few weeks. People had to overcome their existential fears and be compelled to act. Government measures have required the search for appropriate tools to enable mobile and flexible operation to further contain the spread of the virus. According to a Bitkom survey, at the beginning of the COVID-19 pandemic crisis in mid-March, every second person remained completely or at least partially in the telework variant (Bitkom, 2020). The long-term effects of these experiences cannot yet be conclusively evaluated. However, it has already been shown that there is a possibility for remote collaboration with appropriate technical and organizational adjustments.

### References

- Allen, T.D., Golden, T.D. and Shockley, K.M., 2015. How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings. *Psychological Science in the Public Interest*, [online] 16(2), pp.40–68. https://doi.org/10.1177/1529100615593273.
- Arntz, M., Gregory, T. and Zierahn, U., 2016. *The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis*. [online] Paris: OECD. https://doi.org/10.1787/5jlz9h56dvq7-en.
- Baicu, C.G., Gârdan, I.P., Gârdan, D.A. and Epuran, G., 2020. The impact of COVID-19 on consumer behavior in retail banking. Evidence from Romania. *Management & Marketing. Challenges for the Knowledge Society*, [online] 15(s1), pp.534–556. https://doi.org/10.2478/mmcks-2020-0031.
- Baruch, Y., 2000. Teleworking: benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment*, 15(1), pp.34-49.
- Beauregard, T.A., Basile, K.A. and Canonico, E., 2019. Telework: Outcomes and Facilitators for Employees. In: R.N. Landers, ed. *The Cambridge Handbook of Technology and Employee Behavior*, *1st* ed. [online] Cambridge University Press.pp.511–543. https://doi.org/10.1017/9781108649636.020.
- Bitkom, 2020. *Corona-Pandemie: Arbeit im Homeoffice nimmt deutlich zu | Bitkom e.V.* [online] Available at: <a href="https://www.bitkom.org/Presse/Presseinformation/Corona-Pandemie-Arbeit-im-Homeoffice-nimmt-deutlich-zu">https://www.bitkom.org/Presse/Presseinformation/Corona-Pandemie-Arbeit-im-Homeoffice-nimmt-deutlich-zu</a> [Accessed 16 March 2022].
- Bloom, N., Liang, J., Roberts, J. and Ying, Z.J., 2015. Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics*, 130(1), pp.165-218.
- Borgmann, V., 2020. Futurehotel Das smarte resiliente Hotel. Wie hilft die Digitalisierung den Hotels in Zeiten der Corona-Krise und danach? [pdf] Fraunhofer Verlag. Available at: <a href="https://www.dwif.de/images/Zahl\_der\_Woche/2020/Fraunhofer\_Smartes\_Resilientes\_Hotel\_2020.pdf">https://www.dwif.de/images/Zahl\_der\_Woche/2020/Fraunhofer\_Smartes\_Resilientes\_Hotel\_2020.pdf</a> [Accessed 20 February 2022].
- Brynjolfsson, E., Horton, J., Ozimek, A., Rock, D., Sharma, G. and TuYe, H.-Y., 2020. *COVID-19 and Remote Work: An Early Look at US Data.* [online] Cambridge, MA: National Bureau of Economic Research.p.w27344. https://doi.org/10.3386/w27344.
- Cohen, S., Kamarck, T. and Mermelstein, R., 1983. A Global Measure of Perceived Stress. *Journal of Health and Social Behavior*, [online] 24(4), pp.385–396. https://doi.org/10.2307/2136404.
- Cording, M., Harrison, J.S., Hoskisson, R.E. and Jonsen, K., 2014. Walking the Talk: A Multistakeholder Exploration of Organizational Authenticity, Employee Productivity, and Post-Merger Performance. *Academy of Management Perspectives*, [online] 28(1), pp.38–56. https://doi.org/10.5465/amp.2013.0002.
- Cronbach, L.J.; Meehl, P.E., 1955. Conctruct validity in psychological tests. Psychol. Bull, 52, pp.281–302.
- Dawis, R.V. and Lofquist, L.H., 1984. A psychological theory of work adjustment: an individual-differences model and its applications. Minneapolis: University of Minnesota Press.
- DeTienne, K.B., Agle, B.R., Phillips, J.C. and Ingerson, M.-C., 2012. The Impact of Moral Stress Compared to Other Stressors on Employee Fatigue, Job Satisfaction, and Turnover: An Empirical Investigation. *Journal of Business Ethics*, [online] 110(3), pp.377–391. https://doi.org/10.1007/s10551-011-1197-y.



- Feldman, D.C. and Gainey, T.W., 1997. Patterns of telecommuting and their consequences: Framing the research agenda. *Human Resource Management Review*, 7(4), pp.369–388.
- Frey, C.B. and Osborne, M.A., 2013. *The future of employment. How susceptible are jobs to computerization?* Oxford: Oxford University.
- Gálvez, A., Tirado, F. and Martínez, M.J., 2020. Work–Life Balance, Organizations and Social Sustainability: Analyzing Female Telework in Spain. *Sustainability*, [online] 12(9), p.3567. https://doi.org/10.3390/su12093567.
- Giovanis, E., 2019. Do the flexible employment arrangements increase job satisfaction and employee loyalty? Evidence from Bayesian networks and instrumental variables. *International Journal of Computational Economics and Econometrics*, 9(1-2), pp.84-115.
- Gist, M.E. and Mitchell, T.R., 1992. Self-Efficacy: A Theoretical Analysis of Its Determinants and Malleability. *Academy of Management Review*, [online] 17(2), pp.183–211. https://doi.org/10.5465/amr.1992.4279530.
- Golden, T.D., Veiga, J.F. and 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*, [online] 93(6), pp.1412–1421. https://doi.org/10.1037/a0012722.
- Kacmar, K.M., Collins, B.J., Harris, K.J. and Judge, T.A., 2009. Core self-evaluations and job performance: The role of the perceived work environment. *Journal of Applied Psychology*, [online] 94(6), pp.1572–1580. https://doi.org/10.1037/a0017498.
- Kazekami, S. (2020). Mechanisms to improve labor productivity by performing telework. Telecommunications Policy, 44(2), 101868
- Mann, S. and Holdsworth, L., 2003. The psychological impact of teleworking: stress, emotions and health. *New Technology, Work and Employment*, [online] 18(3), pp.196–211. https://doi.org/10.1111/1468-005X.00121.
- Montealegre, R. and Cascio, W.F., 2017. Technology-driven changes in work and employment. *Communications of the ACM*, [online] 60(12), pp.60–67. https://doi.org/10.1145/3152422.
- Murphy, M.C. and Reeves, S.L., 2019. Personal and organizational mindsets at work. *Research in Organizational Behavior*, [online] 39, p.100121. https://doi.org/10.1016/j.riob.2020.100121.
- Nelson, D.L., 1990. Individual Adjustment to Information-Driven Technologies: A Critical Review. *MIS Quarterly*, [online] 14(1), p.79. https://doi.org/10.2307/249311.
- Newman, J.E., 1977. Development of a Measure of Perceived Work Environment (PWE). Academy of Management Journal, [online] 20(4), pp.520–534. https://doi.org/10.5465/255354.
- Pols, A. and Heidkamp, P., 2020. Cloud-Monitor 2020. Die Integrationsfähigkeit und Interoperabilität der Cloud stärken. [pdf] KPMG, Bitkom Research, Berlin. Available at: <a href="https://www.bitkom.org/sites/default/files/2020-06/prasentation\_bitkom\_kpmg\_pk-cloud-monitor.pdf">https://www.bitkom.org/sites/default/files/2020-06/prasentation\_bitkom\_kpmg\_pk-cloud-monitor.pdf</a>> [Accessed 25 February 2022].
- Raghuram, S., Garud, R., Wiesenfeld, B. and Gupta, V., 2001. Factors contributing to virtual work adjustment. *Journal of Management*, [online] 27(3), pp.383–405. https://doi.org/10.1177/014920630102700309.
- Schymik, J. and Fadinger, H., 2020. The Costs and Benefits of Home Office during the Covid-19 Pandemic Evidence from Infections and an Input-Output Model for Germany. https://doi.org/10.3886/E124902V2-86000.
- Silva, V., 2021. Adrian Wilkinson and Michael Barry (eds.) (2020) The Future of Work and Employment. *Global Labour Journal*, [online] 12(3). https://doi.org/10.15173/glj.v12i3.4873.
- Staples, D.S., Hulland, J.S. and Higgins, C.A., 1999. A Self-Efficacy Theory Explanation for the Management of Remote Workers in Virtual Organizations. *Organization Science*, [online] 10(6), pp.758–776. https://doi.org/10.1287/orsc.10.6.758.
- Thulin, E., Vilhelmson, B. and Johansson, M., 2019. New Telework, Time Pressure, and Time Use Control in Everyday Life. *Sustainability*, [online] 11(11), p.3067. https://doi.org/10.3390/su11113067.
- Viete, S. and Erdsiek, D., 2020. Mobile Information Technologies and Firm Performance: The Role of Employee Autonomy. *Information Economics and Policy*, [online] 51, p.100863. https://doi.org/10.1016/j.infoecopol.2020.100863.
- Yoruk, S. and Acikgoz, A., 2022. The relationship between emotional labor, job stress and job satisfaction in midwifery. *Journal of Nursing and Midwifery Sciences*, [online] 9(1), p.24. https://doi.org/10.4103/jnms.jnms\_51\_21.