

Telework Implications and Leadership on Workforce Sustainability

Subjects: **Others**

Contributor: Ioana Gutu , Camelia Nicoleta Medeleanu

Effective e-leadership can enhance organizational workforce sustainability and is assessed as an opportunity for teleworking.

e-leadership

workforce sustainability

telework

work environment

1. Introduction

Since the disruption created by the COVID-19 pandemic, the simultaneous challenges addressed by the entire business world have been more numerous, with human-induced digital challenges that pose incommensurable risks to the workforce as we know it. Across sustainability science, there are numerous manifest ideas that agree that human needs and the business environment need to go hand in hand ^{[1][2]}.

Across the (post)pandemic experience, telework and its various forms have been subject to a rapid increase, thus resulting in significant changes across the remote and/or flexible working methods that are not subject to any time, location, or technological boundary. To be successfully implemented, companies need to provide technical, social, informational, and organizational support that would be mainly implemented with the help of (e)leadership practices that act as a digital technology facilitator for the progress of the workforce sustainability environment. The sudden rules and regulations specific to the COVID-19 pandemic have acted as a generator for massive and sudden operational changes for all the companies that were subject to the new strategic online business environment ^[3]. Remote working was a natural result of social distancing and newly adopted space between individuals ^[4], resulting in various forms of remote working. The new remote organizational context could not be developed unless information and communication technologies (ICTs), which outline the imminently necessary telework procedures, thus allowing workers to ensure the sustainability of their work environment by working from anywhere and at any time, were adopted ^[5]. The post-pandemic literature speculates telework and any form of remote work, fairly enhanced by evolving e-leadership solutions, to continue even after all the traces of COVID-19 have passed. The newly arrived form of global work ^{[3][6][7]} has visibly impacted the operational strategies of companies along with employer–employee and leader–employee relationships. The newly created online work environment, subject to risks, opportunities, and flexible business arrangements, enhanced a long-dormant change in leadership practices that need to adapt to online and remote working conditions in order to ensure the sustainability of the workforce. For this reason, one could argue that in becoming a leader ^[8], leaders are born, not made, thus transforming their abilities to achieve online organizational performance and ensure (and even enhance) adequate levels of workforce sustainability by engaging teleworkers to thrive within their tasks and fructify the online work environment

[9]. There is no question that leadership has become a decisive organizational factor for the new labor reality of the decade. As patterns in nature often show, factors that do not respond fast to crises and do not adapt are undoubtedly subject to extinction. Considering the previous literature, there is a gap in regard to the online leadership practices that relate to telework and the specific variables to which organizational workforce sustainability relates; for this reason, scholars try to reveal the answer to the following research question: what is the role of online leadership practices within the relation of telework workforce sustainability within an underdeveloped online working framework specific to the post-pandemic era. Moreover, studying the impact of telework on organizational workforce sustainability, independence in the industry or the economic sector was identified as a research gap within the literature.

2. Telework Implications and Leadership on Workforce Sustainability

The business environment has been subject to a high array of challenges due to the COVID-19 pandemic; new configurations and uncertainty about workplaces, employment, and careers, along with the speed increase specific to organizational digitization and digitalization, adapting leadership instruments to an online environment, and reducing to extinction informal contacts, led to a shift in regard to communication behavior and the sustainability of work–family framework while teleworking.

The new developments of digital technology act as a forerunner for working conditions outside and organization, commonly known as remote/telework. Within a private business environment, the perspectives of telework does not rely on a consensus root definition of the concept. Moreover, the concepts of home working and telework are subject to frequent confusion, the reason for which the Brussels Labor Court of Appeal (2019) ruled that the correct interpretation of teleworking implies carrying out work within any place outside the business offices [10][11] by making use of digital telecommunication. According to the European Framework Agreement on Telework (Art. 2), “Telework is a form of organizing and/or performing work, using information technology, in the context of an employment contract/relationship, where work, which could also be performed at the employer’s premises, is carried out away from those premises on a regular basis”.

As a consequence of the increased volatility and unconventionality of the work environment, the necessity of increased geographical dispersion of workers (as employees) was deemed as necessary during the pandemic, when telework became mandatory for business activities, and resulted in a helpful work-related framework for both workers and businesses; as a consequence, real estate and transport costs led to a positive environmental impact, while the work–life balance was subject to a change in equilibrium.

Leadership and workforce sustainability have been previously proven to be strong pillars for the organizational workforce condition; with the expectancy of hybrid and telework participation to continue [12][13], the aftermath of the COVID-19 pandemic emphasizes the importance of the long-term impact of these practices on the workforce sustainability of any organization, public or private. The migration of leadership tools and practices that lead to the generation of a new theory related to e-leadership intensifies and clarifies the residual connection, which implies

the attitudes and behaviors of employees that are quantified as telework and workforce sustainability within the current study.

The organizational challenge to display new work models impacted organizations and employees altogether since organizational resilience was subject to increased attention from both researchers and practitioners. For retaining competitiveness and stability within the COVID-19 pandemic, organizations developed embedded frameworks that nurture resilience and service/product quality preservation. Research within the current fields was subject to a distinct focus on the last decade, emphasizing the telework impact on various organizational dimensions such as leadership, employee behavior, organizational sustainability, organizational culture, or performance at work [14]. The novelty of telework research is emphasized by the fact that prior studies only addressed telework as one single dimension; recent insights reveal that telework research is inconsistent when involving both perspectives, practice, and corresponding impact on any other dimension [15]. The authors' interests consist of either resource availability and outputs as a result of work flexibility (hence teleworking) and/or results as innovations and distinct business opportunities. The business dynamic of telework is rather related to the workplace [16][17], the workload, the employees (as workforce), and the individual work (routine). As the COVID-19 pandemic crisis advanced, the shifting telework paradigm was subject to organizational leadership and employee availability, ultimately resulting in a change in the organizational (workforce) sustainability according to the specifics of the industry and individuals and organizational private needs. Considering that the vast majority of organizations are still part of an experimental phase in regard to online leadership practices and online-adapted organizational sustainability, studies might need to examine whether there is an interaction among broad and/or specific organizational factors that could provide an industry and/or an organization with a clear picture of the required changes.

2.1. Theories in Regard to Telework Challenges

One of the most relayed theories related to telework [18], the expectancy theory expounds telework in light of three main variables: expectancy, instrumentality, and valence [19][20]. In the first variable, employee's expectancy is explained as being related to the self-perception that they are in possession of necessary skills in regard to achieving predetermined objectives, the reason for which a policy related to telework must impact their individual opinions. Employees' perceptions related to the desired results as a result of the work performed explain instrumentality [21][22], while procedural justice relates to the employee's perceived engagement. Moreover, the valence regards a subjective view in regard to expected results, the reason for which the employee's motivation regarding work within a virtual environment relates to an expected value as a result of telework behavior [23][24].

By trying to explain the reasons behind the work challenges within a virtual work environment (as opposed to on-site work-related activities), the boundary theory regards the context shifts that relate to a correspondence of employee behaviors within specific work limits (as temporal, physical, physiological aspects).

Organizational (management control) theory relates to the correspondence of predetermined organizational objectives and the specific employee work-related task [15]. The process requires agreed strategic priorities while settling and implementing control mechanisms to ensure the achieved performance. The prior literature suggests

the control systems to be both (in)formal; as control mechanisms with a formal nature [25][26] consented to processes and regulations that are required, while informal control mechanisms are related to the employee's engagement with a threefold aim: organizational objectives, communication, and information exchange [23][27]. It is important to mention the consistency of the control theory with the telework concept. By allowing managers to perform and adjust embedded similar control systems in regard to employee results within on-site and telework activities, a major challenge is exceeded.

The connection in regard to telework practices and organizational outcomes as a result of a mutually rewarding system explains the social exchange theory [28][29]. At the core of the current theory resides the reciprocity principle, according to which a gain of one of the parties is a favor that will ultimately be repaid. Telework connection to the current theory characterizes the cases when a certain desired level of trust needs to be ensured within virtual teams, an aspect with increased importance compared to the traditional circumstances. Also related to leadership, the reciprocity tenet requires an embedded change within both organizational (increased productivity, communication, absenteeism) and employee (autonomy, behaviors, (personal) attitudes) behaviors, thus resulting in increased benefits for both parties (cost saving, bidirectional trust, flexibility). Previous studies recognize that the opportunity of teleworking induces a worker attitude characterized by increased effort in regard to performing required tasks, and, therefore, rewarding the organization.

As the previous literature only engaged telework through particular singular dimensions when considering the business dynamics [30][31][32] as addressing this gap, the study [33] identifies key factors that regard the inputs as well as the telework outputs in regard to telework. While the telework inputs regard enabling factors suitable to hard infrastructure that are usually expected within work environments, the outputs regard aspects such as community and networking, employee benefits, and productivity, as well as knowledge sharing and both formal and informal interaction. The telework analytical framework regards both inputs and outputs grouped within a list of latent variables identified within previous research. The framework investigation regards the use of a questionnaire as a qualitative research instrument, which was sent to private and public business communication platforms.

Telework inputs were developed in regard to how the employees perceive related factors such as resources availability from work, the available digital infrastructure, and professional relationships. Referring to the information and coworker availability, resource availability is a primary enabling factor in regard to telework inputs; the variable considers the lack of interruptions from coworkers as a key factor for telework inputs, contrasting with shared working spaces that characterize the on-site work, a key-enabling factor for focusing on job responsibilities [34][35][36]. Digital infrastructure such as email, videoconference, and group call applications used as interaction instruments were added to the scheduling software and project management instruments used by default in project management [37]. This newly created software infrastructure reshapes the world in terms of accessibility and transparency for teleworkers. While working in remote conditions, many of the employees might be subject to a poor quality of engagement with their peers, thus leading to a lack of wellbeing and deteriorated relationships between employees [38][39].

Telework outputs were primarily engaged with the employee's knowledge exchange and their work–life balance. The knowledge exchange variable regards the employee underestimation of the needed amount of time to perform tasks that result in affecting their goal achievement; for the leadership perspective, the above-mentioned relation is mainly in regard to the stakeholders. The work–life balance as a new work model is regarded from the perspective of flexibility and time saved for personal usage, aspects enhanced by the increased amounts of creativity, self-control in regard to the work tasks, and better concentration ^[40]. Leaders and managers were subject to an improved work–life balance since they benefit from more time for the use of personal purposes while working remotely, the reason for which hybrid and/or telework is considered to be a time-effective solution for avoiding time waste due to traffic while commuting.

A challenge for teleworking is avoiding the isolation feeling that employees might experience, thus creating a challenge for the professional–personal balance. Along with overworking, the two trends specific to the digital workspace could create negative outputs for the teleworkers ^{[41][42]}. Also interpreted as another category of telework outputs, the hybrid work model, along with innovation and business opportunities, is largely reported by the literature as being related to remote working. A hybrid work model implies one's company attempts to adapt to a changing environment, thus preventing common factors such as policies, practices working norms, access, and the use of technology that could result in unplanned tasks and working system problems that need to be surpassed. Furthermore, one might note the possibility of encountering decreased individual/team productivity, a lack of concentration, and inefficient task planning ^[43]. Furthermore, the access of leadership/management and employees to digital technology has the potential to lead to innovative solutions, such as distributed teams, employee engagement, and the sense of belonging to a social cluster. Software such as note-taking, noise canceling, employee reward applications, social media, and team collaboration are only a few additional contributors to individual innovation, which were previously enhanced by employee monitoring software and timeline accomplishment online applications. Telework provides a better opportunity for employees, managers, and leaders to concentrate and focus better on their tasks, thus resulting in higher levels of individual and/or team productivity, which is an incentive for a business opportunity.

2.2. Opportunities and Risks of Teleworking

Potential advantages identified by empirical studies regard telework advantages such as job-related performance and satisfaction, along with fewer turnover intentions and reduced stress ^{[44][45][46][47]}. A reduced work–family imbalance was also observed ^[48]; moreover, the literature highlighted the telework enhancement on life quality ^[49] along with the increased work happiness and satisfaction ^[50]. Social anxiety and negative impacts of social isolation are overcome by managerial and technical support ^[51].

Companies' digitalization adds up to the availability and efficiency of communication and information speed, thus increasing the efficiency of the internal standardization processes ^[52]. An improved family balance is due to teleworking flexibility of working anywhere and anytime ^[53], thus resulting in an increase in the employability potential of isolated work categories, such as women and persons with disabilities ^[54].

Furthermore, the free choice of time, place, and working methods is considered to result in higher individual and group productivity [55] due to reduced stress amounts and personalized working rhythms [56].

Among the highest risks of working remotely, one must count social isolation [21], which leads to demotivation and a gradual decrease in work motivation [53][57] elements that ultimately result in increased turnover intention and work–family imbalances [58]. Since teleworking necessitates great organizational skills [59] remote working activities might lead to reduced learning benefits compared to working from the office [60]. The cost of telework comes at increased anxiety in regard to reducing the area of career prospects due to reduced visibility [61] that originate from intensified work activities; due to this aspect, one of the management concerns in regard to teleworking is the possibility of decreasing job performance due to the lack of trust in employee abilities to perform their tasks under indirect (remote) management surveillance [62]. Common problems of telework regard the digital environments that might be subject to overload, poor team accountability and social alienation, weak social interactions, and low trust that might be due to insufficient (adaptation or training) technological skills [63].

The final point raised in regard to telework risks regard the ethical concerns in regard to e-leaders that might overload employees with work tasks and related information, which could overlap with both private and work settings, thus resulting in an intrusion of employees' private life [52][64]. Despite the visible autonomy of one's self-actions in regard to work and personal life while teleworking, the use of different control mechanisms might lead to an overburden and work intensification, thus promoting greater self-regulation and work efforts from the teleworkers [65]. Furthermore, individuals who appreciate the flexibility of teleworking environments give higher efforts to increase their performance, thus leading to a higher self-sacrifice compared to traditional working environments [66].

2.3. The Evolutionary Perspective of Telework and Leadership

As previously mentioned, teleworking is considered a new organizational work framework that evolved during the pandemic and resulted in an estimated distance in regard to the individual and group relations to the work environment. The COVID-19 pandemic became a cradle of opportunities for companies that offer telework conditions and provided challenges for leaders that handle boundaryless work environments due to technological advances. The telework challenge equally affected follower working behaviors due to the stringent need to adapt and develop technology-supported competencies in order to be coordinated with diminished barriers [67][68].

The practice of leadership within an exclusive online environment (commonly known as e-leadership) does not solely represent an extension of traditional leadership but relates to how both leaders and followers maintain relationships with(in) organizations and stakeholders [69]; it is imperative for the leaders' tools and practices to be subjected to change [70]. Traditional leadership theories need to be explored beyond traditional limits [71] to accurately explain the role of both leaders and leadership within online working environments. Moreover, remote e-leadership implies developing distinct abilities for enhancing organizational virtual work environments [72]. The commonly known social communication skills that characterize traditional leadership might not suffice for working within a virtual environment since complementary characteristics that encourage the use of various communication

platforms need to be in order. The recent literature [73] considers that the generic leadership literature prepositions are subject to e-leadership use, a premise that could be subject to testing as a genuine leadership theory [74]; by following a similar pattern, it highlighted the possibility of new empirical research that would result in developing a new leadership theory [75], thus helping organizations to project, structure, and manage virtual (leadership) teams.

Telework is regarded as the one important solution that has the ability to change the work future and implicitly the business strategy organizational rethinking manner. Further, telework has been the main driver considering leadership actions in terms of collaboration and goal achievement in the context of organizational digitization. The points on which telework resides, namely resource availability, digitalization, and professional relationship resilience, are important drivers for further research and organizational development practices. The management responsibilities have been subject to a rift in the context of telework [76], the reason for which more feedback from peers is deemed necessary in order to receive support and development based on trust.

The literature does not reveal a shared approach related to the development and use of e-leadership; it is mainly described as a multidimensional phenomenon. To avoid fragmented knowledge, e-leadership needs to be approached by various disciplines on both the micro and macro analysis levels. E-leadership is considered an important trend for organizational technological progress but also a challenge to digitalize and benefit from its advantages [73]. In the case when the online processes are not well-addressed and only used for imposing mandates, the e-leadership results could only result in alienation and chaos.

Hybrid teleworking, described as working from home for a limited number of days a week/month, appears to provide a balance between work flexibility as a result of remote working and the benefits of on-site working (interacting with both management and coworkers). In order to support the former idea, it is considered that more evidence is deemed necessary [51][77]. Teleworking productivity is optimum when working 1 to 3 days remotely.

Described in the past as an ineludible organizational challenge [78], the quiet revolution concerning e-leadership was subject to change within companies much earlier [79] as a response to a globalized organization environment submersed within the era of digitization; this feature became crucial for organizational survival, starting with the COVID-19 pandemic, which led to a theory that presents e-leadership as a challenge for the success and sustainability of companies. As results show, e-leadership is considered to be an irreversible organizational tendency, presented to be necessary for a sustainable organizational digital era.

Traditionally, leadership focus relied on an on-site working environment, the reason for which there is a scarcity of leadership and telework studies. E-leadership is in an early stage of progress [63][80]. E-leadership was defined as a process that socially influences AIT processes, thus resulting in a rift in regard to organizational groups and/or individuals in terms of performance, feelings, attitudes, and behaviors [81][82]. In a similar view, the assessment of e-leadership considers the ICT mediation of work processes [83]. Tech leaders should know how to lead efficiently within technology-mediated environments, thus efficiently coping with its complexities [84]. The literature does not provide a well-established and consensual view addressing e-leadership [85].

One major risk that characterizes telework is the isolation among team members, which could be easily avoided through the e-social characteristics displayed by e-leaders [86], among which the capacity to innovate is recognized. Organizational leadership (either traditional or virtual) has the capacity to identify the followers' need for change and promote innovative working solutions, a reason for which it is considered the leaders' responsibility to adapt and counter (tele)work disruptions caused by continuous personnel changes. For this reason, leaders need to display flexibility, innovativeness, and clarity in regard to the organization's mission and vision [87]. For the manuscript [33], based on the initial theories developed by the literature [80], leadership is considered through two of its main components, namely transformational and transactional (by only choosing management by exception active—MBEA—and contingent reward (CR)).

2.4. Telework Implications on Workforce Sustainability

The previous literature suggests that extreme working conditions (such as those created by the COVID-19 pandemic) may have a negative impact on the workforce.

Defined as a property of the workforce to reflect whether it can function according to predetermined standards for a given period of time and by adapting to the organizational and market demands, workforce sustainability enhances the workforce resilience to causes residing within both external and/or personal challenges. A (in/de)creased workforce sustainability level resides in the extent to which its members perform, collaborate, and innovate with respect to various organizational attributes.

The instrument related to workforce sustainability develops eight predetermined attributes to address the viewpoint of groups and individuals and does not engage an organizational perspective [88][89]. With a similar view, telework employees are organizational members that are involved in the organizational processes, directly or indirectly. It is expected that given its applicability, organizational work contexts are favorable to creating a sustainable (tele)workforce.

Deriving from corporate sustainability, the assessment of a sustainable workforce that (partially) activates within virtual environments is new for all industries. For an organization to achieve workforce sustainability, an individual performance assessment is provided in regard to its productivity [90][91]. COVID-19 work-related disruptions lead to simultaneous sustainability challenges for both human and organizational environments [92]. As a result, telework has been proposed to be a requisite part of the after-pandemic recovery strategy as part of an important transition from small to large effective users among workers. Numerous national and international political and legislative organisms argued for the adoption and integration of hybrid and telework systems within business and government processes and planning. Such decisions enhance the creation, achievement, and development of sustainable (workforce) goals. Hybrid work arrangements require an individual to combine on-site and online office work models. They are expected to dominate the future work models through their benefits. The question of whether telework and hybrid work arrangements can provide the cradle for a sustainable organizational workforce perspective is to be addressed.

The current workforce sustainability model presumes three levels of component hierarchy: attributes, indicators, and metrics. While the attributes level regards the fundamental qualities and characteristics in regard to workforce sustainability (nurturing, diversity, equity, health and wellbeing, connectivity, value, community, and maturity), the indicators mainly regard the practices, procedures, and policies on which the level of each attribute is displayed by the active workforce of an active organization, resulting in an overall level of workforce sustainability [93]. Furthermore, the metrics were developed regarding the degree of measurement units and scales of indicators that ultimately result in the actual implementation of practices, procedures, and policies that characterize the workforce sustainability of an organization. Fair treatment, compensation, and evaluation (thus without discrimination) describe the organizational equitable behavior, while the level of workplace health and safety (physical, mental, and social) describe the health and wellbeing attributes. Connectivity relies on the degree of the connection feeling of each employee (including its willingness to connect to peers), a two-way channel where not only fellow employees are involved but also managers, leaders, and/or any decision makers. The value, respect, and appreciation attributed to workers' families for their contribution and loyalty, along with the acceptance level of workers that share common interests, display camaraderie and cohesiveness in the workforce and describe attributes, such as value and community. The last specific workforce sustainability attribute, maturity, reflects the extent to which the workforce might be (further) involved within leadership, accountability, or competence in various technical work teams [94][95]. A mature and sustainable workforce should be able to enhance, develop, and proceed to further develop the individual and group competencies while performing their tasks while being accountable for self and other actions.

By considering each workforce sustainability attribute, nurturing mainly describes the extent to which employees experience support, encouragement, and personal education and training regarding both their work and personal life, thus resuming the degree of diversification and inclusiveness with respect to personal characteristics [95].

Also called the “world’s biggest work from home experiment [96]”, the COVID-19 pandemic led governments and businesses to adopt and integrate telework practices to safeguard business continuity and cope with the lockdown restrictions. The recent literature suggests an increased focus on the scenario where telework reduced travel demands with wide societal impacts, thus linking hybrid and/or telework with impacts on the organizational workforce sustainability. The telework leveraging strategies to achieve workforce sustainability outcomes must not be isolated from an integrated and complete assessment across all industries and study fields.

Due to the massive economic and social lockdown specific to the pandemic, on-site offices and businesses were forced to close and/or quickly reassess the virtual environment conditions to ensure their survival. An immediate shift to working from home occurred, challenging organizational environments to adapt in terms of connectivity and community channels, thus providing value, maturity, diversity, and nurturing behaviors; the workforce sustainability attributes needed to be suddenly adapted to ensure similar levels of health and wellbeing in an ethical manner.

When assessing the key strengths in regard to telework and the workforce sustainability relationship, the previous academic literature puts an emphasis on key factors such as wellbeing and mental health, work flexibility, access to employment, community resilience, and the demand for online learning. On the opposite side of the relationship,

there are threats such as the deterioration of labor rights while working online, income inequality, and inequalities in the share of unpaid care and household work [5][97]. The connection of the two primary concepts relies on a number of inner opportunities, where employee autonomy, skilled employment for remote workers communities, flexible work initiatives, and adoption of information technologies are among the most important aspects. Nonetheless, the telework and workforce sustainability joint does have a number of weak points regarding the sedentary behaviors along with the time pressure and isolation from other organizational members, overworking that leads to a work–family imbalance, and ultimately, 24/7 access to the organizational employees [98].

Despite the major organizational challenges caused by the short-term phenomenon, many workers reported improvements when addressing the work–private life balance while using telework as a work model. Initiated as a stringent organizational necessity, the post-pandemic business (public and private) environment had to adapt to the new workforce preferences for working from home [99]. Overall, productivity was not reported to decline, but scholars argued that hybrid and telework can lead to notable improvements in organizational productivity. A hybrid work model was adopted by a vast majority of organizational participants in the (inter)national business markets, combining traditional office with remote working time. For the paper [33], the assumption is that telework will continue an ascendent trendline, albeit not following a linear fashion but with an accelerated development of telework practices for the distant future [100]. The presumption might affect the evolution of the organizational workforce sustainability through a re-alignment of terms within the diffusion created by multiple actor typologies that will increasingly address the sustainability issues in regard to their (tele)workforce.

References

1. Raworth, K. *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist*; Penguin: London, UK, 2017.
2. Steffen, W.; Richardson, K.; Rockström, J.; Cornell, S.E.; Fetzer, I.; Bennett, E.M.; Biggs, R.; Carpenter, S.R.; de Vries, W.; Sörlin, S. Planetary boundaries: Guiding human development on a changing planet. *Science* 2015, 347, 1259855.
3. Contreras, F.; Baykal, E.; Abid, G. E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go. *Front. Psychol.* 2020, 11, 590271.
4. Prin, M.; Bartels, K. Social distancing: Implications for the operating room in the face of COVID-19. *Can. J. Anaesth.* 2020, 67, 789–797.
5. Muller, J.; Reardon, C.; Hanekom, S.; Bester, J.; Coetzee, F.; Dube, K.; du Plessis, E.; Couper, I. Training for Transformation: Opportunities and Challenges for Health Workforce Sustainability in Developing a Remote Clinical Training Platform. *Front. Public Health* 2021, 9, 601026.
6. Mishchuk, H.; Bilan, Y.; Mishchuk, V. Employment risks under the conditions of the COVID-19 pandemic and their impact on changes in economic behaviour. *Entrep. Bus. Econ. Rev.* 2023, 11,

201–216.

7. Sarihasan, I.; Dajnoki, K.; Oláh, J.; Al-Dalahmeh, M. The importance of the leadership functions of a high-reliability health care organization in managing the COVID-19 pandemic in Turkey. *Econ. Sociol.* 2022, 15, 78–93.
8. Bennis, W.G. *On Becoming a Leader*; Basic Books: New York, NY, USA, 2009.
9. Zada, M.; Khan, J.; Saeed, I.; Zada, S.; Jun, Z.Y. Linking public leadership with project management effectiveness: Mediating role of goal clarity and moderating role of top management support. *Heliyon* 2023, 9, 5.
10. European Commission. *Partnership for Change in an Enlarged Europe—Enhancing the Contribution of European Social Dialogue*; COM(2004) 557 Final; European Commission: Brussels, Belgium, 2004.
11. Shmueli, G.; Sarstedt, M.; Hair, J.F.; Cheah, J.-H.; Ting, H.; Vaithilingam, S.; Ringle, C.M. Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *Eur. J. Mark.* 2019, 53, 2322–2347.
12. Majeed, M.; Irshad, M.; Khan, I.; Saeed, I. The Impact of Team Mindfulness on Project Team Performance: The Moderating Role of Effective Team Leadership. *Proj. Manag. J.* 2023, 54, 162–178.
13. European Commission. *Report on the Implementation of the Social Partners' Framework Agreement on Telework*; Commission Staff Working Paper, SEC(2008) 2178; European Commission: Brussels, Belgium, 2008.
14. Zada, S.; Khan, J.; Zada, M.; Saeed, I.; Jun, Z.Y. Does Servant Leadership Enhance Employee Creativity and Performance?: Mediating Role of Knowledge Sharing and Moderating the Role of Self-Efficacy. *J. Organ. End User Comput. (JOEUC)* 2023, 35, 1–24.
15. Venkatesh, V.; Speier, C. Creating an effective training environment for enhancing telework. *Int. J. Hum.-Comput. Stud.* 2000, 52, 991–1005.
16. Kłopotek, M. The advantages and disadvantages of remote working from the perspective of young employees. *Organ. I Zarządzanie Kwart. Nauk.* 2017, 4, 39–49.
17. Stoian, C.-A.; Caraiani, C.; Anica-Popa, I.F.; Dascălu, C.; Lungu, C.I. Telework Systematic Model Design for the Future of Work. *Sustainability* 2022, 14, 7146.
18. Huws, U.; Robinson, W.B.; Robinson, S. *Telework Towards the Elusive Office*; John Wiley & Sons, Inc.: Hoboken, NJ, USA, 1990.
19. Bailey, D.E.; Kurland, N.B. A review of telework research: Findings, new directions, and lessons for the study of modern work. *J. Organ. Behav. Int. J. Ind. Occup. Organ. Psychol. Behav.* 2002, 23, 383–400.

20. Poutsma, E.; van der Heijden, B.; Bakker, A.B.; de Bruijn, T. Enjoying new ways to work: An HRM-process approach to study flow. *Hum. Resour. Manag.* 2014, 53, 271–290.
21. Pyöriä, P. The concept of knowledge work revisited. *J. Knowl. Manag.* 2005, 9, 116–127.
22. Shin, B.; El Sawy, O.A.; Sheng, O.R.L.; Higa, K. Telework: Existing research and future directions. *J. Organ. Comput. Electron. Commer.* 2000, 10, 85–101.
23. Pyöriä, P. Managing telework: Risks, fears and rules. *Manag. Res. Rev.* 2011, 34, 386–399.
24. Saeed, I.; Khan, J.; Zada, M.; Zada, S. Employee sensemaking in organizational change via knowledge management: Leadership role as a moderator. *Curr. Psychol.* 2023, 1–15.
25. Beauregard, T.A.; Basile, K.A.; Canonico, E. Telework: Outcomes and facilitators for employees. In *The Cambridge Handbook of Technology and Employee Behavior*; Cambridge University Press: Cambridge, UK, 2019.
26. Greer, T.W.; Payne, S.C. Overcoming telework challenges: Outcomes of successful telework strategies. *Psychol. J.* 2014, 17, 87–111.
27. Elshaer, I.A.; Azazz, A.M.S.; Kooli, C.; Alshebami, A.S.; Zeina, M.M.A.; Fayyad, S. Environmentally Specific Servant Leadership and Brand Citizenship Behavior: The Role of Green-Crafting Behavior and Employee-Perceived Meaningful Work. *Eur. J. Investig. Health Psychol. Educ.* 2023, 13, 1097–1116.
28. Mahler, J. The telework divide: Managerial and personnel challenges of telework. *Rev. Public Pers. Adm.* 2012, 32, 407–418.
29. Mello, J.A. Managing telework programs effectively. *Empl. Responsib. Rights J.* 2007, 19, 247–261.
30. Beauregard, T.A.; Henry, L.C. Making the link between work-life balance practices and organizational performance. *Hum. Resour. Manag. Rev.* 2009, 19, 9–22.
31. Beckel, J.L.O.; Fisher, G.G. Telework and Worker Health and Well-Being: A Review and Recommendations for Research and Practice. *Int. J. Environ. Res. Public Health* 2022, 19, 3879.
32. Tavares, A.I. Telework and health effects review. *Int. J. Healthc.* 2017, 3, 30–36.
33. Gutu, I.; Medeleanu, C.N. Assessing Teleworkforce and Electronic Leadership Favorable for an Online Workforce Sustainability Framework by Using PLS SEM. *Sustainability* 2023, 15, 13615. <https://doi.org/10.3390/su151813615>
34. Allen, T.D.; Golden, T.D.; Shockley, K.M. How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings. *Psychol. Sci. Public Interest* 2015, 16, 40–68.
35. Nilles, J.M. Traffic reduction by telecommuting: A status review and selected bibliography. *Transp. Res. Part A Gen.* 1988, 22, 301–317.

36. Waters, K.A. The Lived Experience of Teleworking: A Case Study from the Higher Education Environment. Ph.D. Thesis, Frostburg State University, Frostburg, MD, USA, 2016.
37. Smith, S.A.; Patmos, A.; Pitts, M.J. Communication and Teleworking: A Study of Communication Channel Satisfaction, Personality, and Job Satisfaction for Teleworking Employees. *J. Bus. Commun.* 2015, 55, 44–68.
38. Charalampous, M.; Grant, C.A.; Tramontano, C.; Michailidis, E. Systematically reviewing remote e-workers' well-being at work: A multidimensional approach. *Eur. J. Work Organ. Psychol.* 2019, 28, 51–73.
39. Lund, E.M.; Forber-Pratt, A.J.; Wilson, C.; Mona, L.R. The COVID-19 pandemic, stress, and trauma in the disability community: A call to action. *Rehabil. Psychol.* 2020, 65, 313–322.
40. Beauregard, R.A. *Voices of Decline: The Postwar Fate of US Cities*; Routledge: Abingdon-on-Thames, UK, 2013.
41. Adamovic, M. How does employee cultural background influence the effects of telework on job stress? The roles of power distance, individualism, and beliefs about telework. *Int. J. Inf. Manag.* 2022, 62, 102437.
42. Windeler, J.B.; Chudoba, K.M.; Sundrup, R.Z. Getting away from them all: Managing exhaustion from social interaction with telework. *J. Organ. Behav.* 2017, 38, 977–995.
43. Kern, M.L.; Waters, L.E.; Adler, A.; White, M.A. A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *J. Posit. Psychol.* 2015, 10, 262–271.
44. Coenen, M.; Kok, R.A. Workplace flexibility and new product development performance: The role of telework and flexible work schedules. *Eur. Manag. J.* 2014, 32, 564–576.
45. Fonner, K.L.; Roloff, M.E. Why Teleworkers are More Satisfied with Their Jobs than are Office-Based Workers: When Less Contact is Beneficial. *J. Appl. Commun. Res.* 2010, 38, 336–361.
46. Kossek, E.E.; Lautsch, B.A.; Eaton, S.C. Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. *J. Vocat. Behav.* 2006, 68, 347–367.
47. Vega, R.P.; Anderson, A.J.; Kaplan, S.A. A Within-Person Examination of the Effects of Telework. *J. Bus. Psychol.* 2015, 30, 313–323.
48. Othman, N.; Yusof, S.A.M.; Osman, W.R.S. A Conflict between Professional vs. Domestic Life? Understanding the Use of ICT in Teleworking for Balance in Work and Family Units. *Comput. Inf. Sci.* 2009, 2, 3–15.
49. Azarbouyeh, A.; Naini, S.G.J. A study on the effect of teleworking on quality of work life. *Manag. Sci. Lett.* 2014, 4, 1063–1068.

50. Kazekami, S. Mechanisms to improve labor productivity by performing telework. *Telecommun. Policy* 2020, 44, 101868.
51. Bentley, T.; Teo, S.; McLeod, L.; Tan, F.; Bosua, R.; Gloet, M. The role of organizational support in teleworker wellbeing: A socio-technical systems approach. *Appl. Ergonom.* 2016, 52, 207–215.
52. Cortellazzo, L.; Bruni, E.; Zampieri, R. The Role of Leadership in a Digitalized World: A Review. *Front. Psychol.* 2019, 10, 1938.
53. Fedakova, D.; Ištonová, L. Slovak IT-employees and new ways of working: Impact on work-family borders and work-family balance. *Ceskoslovenska Psychol.* 2017, 61, 68–83.
54. Morgan, R.E. Teleworking: An assessment of the benefits and challenges. *Eur. Bus. Rev.* 2004, 16, 344–357.
55. Pavlova, O. The impact of flexible working arrangements on competitive advantages of organization. *Vilnius Univ. Open Ser.* 2019, 2, 55–61.
56. Salazar-Concha, C.; Ficapal-Cusí, P.; Boada-Grau, J.; Camacho, L.J. Analyzing the evolution of technostress: A science mapping approach. *Heliyon* 2021, 7, e06726.
57. Wojcak, E.; Bajzikova, L.; Sajgalikova, H.; Polakova, M. How to Achieve Sustainable Efficiency with Teleworkers: Leadership Model in Telework. *Procedia Soc. Behav. Sci.* 2016, 229, 33–41.
58. Golden, T.D.; Veiga, J.F.; Dino, R.N. 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? *J. Appl. Psychol.* 2008, 93, 1412–1421.
59. Guțu, I. The It Leadership-Towards Corporate Diplomacy. A Gen. Assessment. *Netw. Intell. Stud.* 2021, 9, 35–42.
60. Cooper, C.; Quick, J.C. (Eds.) *The Handbook of Stress and Health: A Guide to Research and Practice*; John Wiley & Sons: Hoboken, NJ, USA, 2017.
61. Maruyama, T.; Tietze, S. From anxiety to assurance: Concerns and outcomes of telework. *Pers. Rev.* 2012, 41, 450–469.
62. Kaplan, S.; Engelsted, L.; Lei, X.; Lockwood, K. Unpackaging Manager Mistrust in Allowing Telework: Comparing and Integrating Theoretical Perspectives. *J. Bus. Psychol.* 2018, 33, 365–382.
63. Van Wart, M.; Roman, A.; Wang, X.; Liu, C. Operationalizing the definition of e-leadership: Identifying the elements of e-leadership. *Int. Rev. Adm. Sci.* 2019, 85, 80–97.
64. Bolewski, W. Compass for public/private management in turbulent times: Corporate diplomacy. *Int. J. Di-Plomacy Econ.* 2021, 7, 4–18.

65. Bathini, D.R.; Kandathil, G.M. An Orchestrated Negotiated Exchange: Trading Home-Based Telework for Intensified Work. *J. Bus. Ethics* 2019, 154, 411–423.
66. Putnam, L.L.; Myers, K.K.; Gailliard, B.M. Examining the tensions in workplace flexibility and exploring options for new directions. *Hum. Relat.* 2014, 67, 413–440.
67. Alfahaid, L.; Mohamed, E.E. Understanding the influence of E-leadership on Virtual Team Performance Empirical Study. *Int. J. Bus. Appl. Soc. Sci.* 2019, 5, 21–36.
68. Șoitu, C.T.; Grecu, S.-P.; Asiminei, R. Health Security, Quality of Life and Democracy during the COVID-19 Pandemic: Comparative Approach in the EU-27 Countries. *Int. J. Environ. Res. Public Health* 2022, 19, 14436.
69. Stone, A.G.; Patterson, K. *The History of Leadership Focus*; Springer: Berlin, Germany, 2023; pp. 689–715.
70. Malhotra, A.; Majchrzak, A.; Rosen, B. Leading Virtual Teams. *Acad. Manag. Perspect.* 2007, 21, 60–70.
71. Kouzes, J.M.; Posner, B.Z. *The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations*; John Wiley & Sons: Hoboken, NJ, USA, 2023.
72. Roman, A.V.; Van Wart, M.; Wang, X.; Liu, C.; Kim, S.; McCarthy, A. Defining E-leadership as Competence in ICT-Mediated Communications: An Exploratory Assessment. *Public Adm. Rev.* 2019, 79, 853–866.
73. Liu, C.; Van Wart, M.; Kim, S.; Wang, X.; McCarthy, A.; Ready, D. The effects of national cultures on two technologically advanced countries: The case of e-leadership in South Korea and the United States. *Aust. J. Public Adm.* 2020, 79, 298–329.
74. Considine, M.; Giguère, S. (Eds.) *The Theory and Practice of Local Governance and Economic Development*; Springer: Berlin/Heidelberg, Germany, 2008.
75. Dulebohn, J.H.; Hoch, J.E. Virtual teams in organizations. *Hum. Resour. Manag. Rev.* 2017, 27, 569–574.
76. Beno, M. Managing Telework from an Austrian Manager's Perspective. In *Trends and Advances in Information Systems and Technologies, Proceedings of the WorldCIST018 2018, Advances in Intelligent Systems and Computing 2018, Naples, Italy, 27–29 March 2018*; Rocha, A., Adeli, H., Reis, L.P., Costanzo, S., Eds.; Springer: Cham, Switzerland, 2018; pp. 16–29.
77. Bosua, R.; Kurnia, S.; Gloet, M.; Moza, A. Telework Impact on Productivity and Well-Being. In *Social Inclusion and Usability of ICT-Enabled Services*; Choudrie, J., Kurnia, S., Tsatsou, P., Eds.; Routledge: New York, NY, USA, 2017; p. 201.
78. Esguerra, G.A.E.; Contreras, F. Liderazgo electrónico, un reto ineludible para las organizaciones de hoy. *Estud. Gerenciales* 2016, 32, 262–268.

79. Avolio, B.J.; Bass, B.M. Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *Leadersh. Q.* 1995, 6, 199–218.
80. Avolio, B.J.; Kahai, S.; Dodge, G.E. E-leadership: Implications for theory, research, and practice. *Leadersh. Q.* 2000, 11, 615–668.
81. Avolio, B.J.; Kahai, S.S. Adding the “E” to E-Leadership: How it may impact your leadership. *Organiz. Dyn.* 2003, 31, 325–338.
82. Avolio, B.J.; Sosik, J.J.; Kahai, S.S.; Baker, B. E-leadership: Re-examining transformations in leadership source and transmission. *Leadersh. Q.* 2014, 25, 105–131.
83. Al-jedaibi, H.K. Determining how Information Technology is Changing the Role of Leadership in Virtual Organization. Master’s Thesis, The Graduate College University of Wisconsin-Stout, Menomonie, WI, USA, 2001.
84. Gurr, D. ICT, Leadership in Education and E-leadership. *Discourse Stud. Cult. Politics-Educ.* 2004, 25, 113–124.
85. Cowan, L.D. e-Leadership: Leading in a Virtual Environment—Guiding Principles For Nurse Leaders. *Nurs. Econ.* 2014, 32, 312–319, 322.
86. Walther, J.B.; Bazarova, N.N. Validation and Application of Electronic Propinquity Theory to Computer-Mediated Communication in Groups. *Commun. Res.* 2008, 35, 622–645.
87. Hoegl, M.; Muethel, M. Enabling Shared Leadership in Virtual Project Teams: A Practitioners’ Guide. *Proj. Manag. J.* 2016, 47, 7–12.
88. Karakhan, A.A.; Gambatese, J.; Simmons, D.R. Development of Assessment Tool for Workforce Sustainability. *J. Constr. Eng. Manag.* 2020, 146, 4.
89. Murray, W.C.; Holmes, M.R. Impacts of Employee Empowerment and Organizational Commitment on Workforce Sustainability. *Sustainability* 2021, 13, 3163.
90. Gambatese, J.; Karakhan, A.A.; Simmons, D.R. Development of a workforce sustainability model for construction. *Cent. Constr. Res. Train.* 2019.
91. Gambatese, J.A.; Pestana, C.; Lee, H.W. Alignment between lean principles and practices and worker safety behavior. *J. Constr. Eng. Manag.* 2017, 143, 04016083.
92. Dos Santos, L.M. The Relationship between Workforce Sustainability, Stress, and Career Decision: A Study of Kindergarten Teachers during the COVID-19 Pandemic. *Sustainability* 2021, 13, 11521.
93. Buchan, J.; Perfilieva, G. Making Progress towards Health Workforce Sustainability in the Who European Region; World Health Organization: Geneva, Switzerland, 2015.

94. Bjursell, C.; Bergmo-Prvulovic, I.; Hedegaard, J. Telework and Lifelong Learning. *Front. Sociol.* 2021, 6, 642277.
95. Dahlstrom, T.R. Telecommuting and Leadership Style. *Public Pers. Manag.* 2013, 42, 438–451.
96. Banjo, O. A Phenomenological Examination of the Lived Leadership Experiences of Returnee Founders of Successful African Technology Start-Ups. Ph.D. Thesis, The Chicago School of Professional Psychology, Chicago, IL, USA, 2021.
97. Onnis, L. Attracting Future Health Workforces in Geographically Remote Regions: Perspectives from current remote health professionals. *Asia Pac. J. Health Manag.* 2017, 12, 25–33.
98. Moglia, M.; Hopkins, J.; Bardoel, A. Telework, Hybrid Work and the United Nation's Sustainable Development Goals: Towards Policy Coherence. *Sustainability* 2021, 13, 9222.
99. Lasisi, T.T.; Constanța, E.; Eluwole, K.K. Workplace Favoritism and Workforce Sustainability: An Analysis of Employees' Well-Being. *Sustainability* 2022, 14, 14991.
100. Sing, M.C.P.; Tam, V.W.Y.; Fung, I.W.H.; Liu, H.J. Critical analysis of construction workforce sustainability in a developed economy—Case study in Hong Kong. *Proc. Inst. Civ. Eng. Eng. Sustain.* 2017, 171, 342–350.

Retrieved from <https://encyclopedia.pub/entry/history/show/116986>