



UNCOVERING THE EFFECTS OF E-LEADERSHIP PERCEPTION ON EMPLOYEE ADAPTATION AND PRODUCTIVITY IN INDONESIAN STARTUP ORGANIZATIONS

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ABSTRACT

The objective of this research was to examine the relationships between various variables in the context of startup companies in Indonesia. The study was conducted over the course of one academic year, specifically 2022/2023, within a startup company in Indonesia. A sample of 270 respondents was randomly selected from the target population. Partial least squares structural equation modeling (PLS-SEM) was employed as the analytical technique. The t-test results indicated a positive influence of perceived e-leadership on teleworking output, subsequently impacting employee adaptive performance. Furthermore, transparent communication had a significant positive direct effect on employee adaptive performance, with a path coefficient of 0.286 (positive) and a p-value of 0.001-0.005 (significant). These findings highlight the importance of transparent communication in enhancing employee adaptive performance. The results have practical implications for decision-making processes and can potentially contribute to the development of effective strategies and practices within the industry.

Keywords: Employee Adaptive Performance, Post-Covid-19, Digital Company

INTRODUCTION

Remote work is a way of working that is less tied to a specific time, place, or form of communication (Camacho & Barrios, 2022). Support for remote workers includes e-leadership practices (Elshaer & Saad, 2022; Tan & Antonio, 2022), and technological, social, and organizational infrastructure are effective preventive measures following the COVID-19 pandemic, the implementation of technological, social, and organizational infrastructure has proven to be effective preventive measures. (Tan & Antonio, 2022). Remote work has been mandated as a form of conscious action to reduce contact between individuals (Elshaer & Saad, 2022; Tan & Antonio, 2022). With the help of information technology (ICT), people can do their work anywhere and at any time (Camacho & Barrios, 2022; Marques-Quinteiro et al., 2019). The fundamental differences between work and personal life, the ongoing debate surrounding remote work arrangements stems from the personal and social consequences of not being physically present in the office, as well as the risks and benefits associated with remote work (Van Wart et al., 2017). Uninvolved workers who experience social isolation in the workplace are less productive and more likely to experience work burnout (Chaturvedi et al., 2012; Elshaer & Saad, 2022).

The capacity to manage workplace change and dynamics becomes a necessary skill as businesses and work environments become more difficult to predict (Chaturvedi et al., 2012; Darics, 2020). As a result, the concept of adaptive performance, defined as understanding the dynamic nature of employee output has led to a focus on the ability of workers to adapt to changing working conditions (Camacho & Barrios, 2022; Chaturvedi et al., 2012; Darics, 2020). Engaging in adaptive performance can yield positive

outcomes, including enhanced performance capacity and a successful career trajectory (Tan & Antonio, 2022).

Improvements in areas such as change management and meeting the needs of diverse customer bases are also the result of adaptive performance (Marques-Quinteiro et al., 2019; Stoian et al., 2022). The influence of e-leadership and remote work on adaptive performance has been studied in depth to better understand the factors that lead to successful adaptive performance (Chaturvedi et al., 2012; Darics, 2020; Van Wart et al., 2017). Research has also been conducted on the relationship between e-leadership and remote work, adaptive performance (Camacho & Barrios, 2022; Stoian et al., 2022; Tan & Antonio, 2022), communication with adaptive performance (Elshaer & Saad, 2022; Kulshreshtha & Sharma, 2021; Marques-Quinteiro et al., 2019; Ramos-Maçães & Román-Portas, 2022), and employee resilience and adaptive performance. This study aimed to address the research gaps by investigating the relationship between communication facilitated through electronic media and employee resilience in adaptive performance, with a particular focus on the connection between remote work, communication, and employee resilience to adaptive performance (Britt et al., 2016; Elshaer & Saad, 2022; Kang & Sung, 2017).

In fact, their morals can help guide them through difficult times, which allows them to face changes and adjust to the situations and conditions that are being faced (Stoian et al., 2022; Vătămănescu et al., 2022). In addition, it helps reduce the negative effects of stress on the body. Individuals who clearly articulate their long-term goals are in the best position to handle their circumstances. When personal values are aligned with professional endeavors, they become more interested in work, which ultimately increases the likelihood of achieving

superior results than those achieved by their peers (Elshaer & Saad, 2022; Soelton, 2018). Owing to the capricious nature of work, many companies now place more emphasis on adaptability on the part of the workforce. This requires workers to respond effectively to shifting consumer preferences and the rapid advancement of new technologies. When a person engages in adaptive performance, they can improve their performance abilities and professional achievements, among other benefits derived from their benefits (Indraswari & Martono, 2020; Spencer et al., 1998).

Increased work performance, motivation, participation, and organizational behavior are positive outcomes associated with organizational commitment (Bryant & Merritt, 2021; Butali & Njoroge, 2018; Gross, 1998). The influence of e-leadership on aspects such as teleworking productivity, employee engagement, organizational loyalty, and adaptive performance is a key theme in this study. Limited research has been conducted on the impact of these factors on the adaptive performance of remote workers in the post-COVID-19 era. Employee adaptive performance is a dependent variable, and the independent variables include employees' perceptions of e-leadership demonstrated by their leaders, efficiency of remote teams, loyalty, and commitment to the organization.

LITERATURE REVIEW

In the digital age, perceived e-leadership is an important aspect of leadership (W. Li et al., 2016; Navaridas-Nalda et al., 2020). It encompasses various skills such as e-communication, e-social, e-team building, and e-trustworthiness (Goraya et al., 2021; Luo et al., 2020). The first skill, e-communication, refers to a leader's ability to communicate clearly through electronic media (W. Li et al., 2016; Ramos-Maçães

& Román-Portas, 2022; Van Wart et al., 2017; Vătămănescu et al., 2022). This skill is essential to ensure effective communication in virtual work environments (Elyousfi et al., 2021; Iriqat & Khalaf, 2017; Vătămănescu et al., 2022). The second skill, e-social, refers to the leader's use of richer media, such as face-to-face meetings, telephone calls, and virtual conferencing, when appropriate (Goraya et al., 2021; Luo et al., 2020). This skill enables leaders to build stronger relationships with team members and fosters collaboration. The third skill, e-team building, refers to a leader's ability to conduct virtual teambuilding activities. This skill is important in building a cohesive and productive virtual team (Elyousfi et al., 2021; Iriqat & Khalaf, 2017; Tan & Antonio, 2022; Vătămănescu et al., 2022). The fourth skill, e-trustworthiness, refers to a leader's trustworthy integrity in virtually leading (Elyousfi et al., 2021; W. Li et al., 2016; Tan & Antonio, 2022; Vătămănescu et al., 2022). This skill is crucial for building trust among team members and for promoting a positive work environment. In summary, perceived e-leadership is a multifaceted concept that encompasses the various skills crucial for effective leadership in the digital age.

E-leadership refers to the use of information and communication technology (ICT) to enhance communication, knowledge management, and system advancement in virtual environments, resulting in a comprehensive leadership system (Deng et al., 2019; Green et al., 2006). The concept of e-leadership has evolved to encompass digital leadership, which emphasizes the role of technology in leadership (Chiu & Cho, 2019; Gurr *, 2004). Effective e-leaders possess the necessary technical competencies to manage virtual environments, make informed decisions regarding ICT tools, and utilize them proficiently (Elyousfi et

al., 2021; Iriqat & Khalaf, 2017; Tan & Antonio, 2022). Along with technical skills, e-leaders must also possess communication, social, team-building, and change-management skills to succeed in virtual environments. In addition, successful e-leaders must integrate physical or face-to-face interactions with virtual communication to achieve an appropriate balance between the two (Deng et al., 2019; Elyousfi et al., 2021; Vătămănescu et al., 2022). They must also understand how to use technology in a professional manner to establish trust and to maintain integrity in virtual interactions. Overall, e-leadership requires a combination of technical proficiency, interpersonal skills, and the ability to balance virtual and physical interactions to lead teams in virtual environments effectively.

Teleworking output is the result of remote employees (Tan & Antonio, 2022). Several factors influence teleworking output, including supervisor trust, opportunity to save travel expenses, and ability to work during the most productive time. Employees who feel trusted by their employers are more productive and motivated, making supervisors trust a crucial aspect of teleworking output (Groen et al., 2018; McCann, 2014; Wynne-Jones et al., 2011). Teleworking can also reduce employees' travel expenses, positively impacting productivity (Groen et al., 2018; Y. Li et al., 2021; Peters & Batenburg, 2015). The ability to adjust work schedules and work during the most productive time can boost teleworker productivity. These factors, along with other factors, should be considered when developing new policies.

Teleworking is a term used to describe remote work that involves performing paid work away from the physical location of an organization using information and communication technology (ICT) tools (Camacho & Barrios, 2022; Prodanova & Kocarev, 2021; Stoian et al., 2022; Tan &

Antonio, 2022). In this type of work arrangement, employees have the flexibility to manage their time and achieve organizational goals. Teleworking has been found to offer various benefits, including improvements in work performance, work-life balance, job satisfaction, stress levels, and employee retention (Camacho & Barrios, 2022; Groen et al., 2018, 2018; Peters & Batenburg, 2015). Furthermore, telecommuting has the potential to reduce travel time, traffic congestion, and air pollution while also providing employment opportunities for individuals with disabilities or school-age children. Numerous studies have shown that teleworking is a viable and effective work arrangement that organizations can use to enhance employee performance and well-being as well as contribute to broader societal goals, such as reducing traffic and pollution (Camacho & Barrios, 2022; Fotiadis & Stylos, 2017; Groen et al., 2018; Y. Li et al., 2021). Therefore, teleworking is a valuable option that employers should consider improving their work environment and support their needs.

Research suggests that teleworking has a positive impact on employee happiness and job satisfaction (Niebuhr et al., 2022; Peters & Batenburg, 2015; Smith et al., 2018). By allowing employees to work from home, telecommuting can increase productivity, as individuals may be able to work more effectively without distractions and interruptions in a traditional office setting (Fotiadis & Stylos, 2017; Y. Li et al., 2021; Niebuhr et al., 2022; Stoian et al., 2022). Additionally, teleworking may reduce the cost of absenteeism for both the individual and the organization, as employees can continue to complete their job responsibilities even when they cannot physically access the workplace. Overall, teleworking offers significant potential benefits to both employees and employers,

including increased flexibility, reduced commuting costs, improved work-life balance, and decreased traffic congestion and environmental impacts.

Although teleworking offers numerous benefits, it also has several drawbacks. Research suggests that telecommuting can diminish learning opportunities and knowledge sharing associated with working alongside colleagues (Allen et al., 2015; Davis & Aggarwal, 2020). In addition, social isolation is a potential danger for remote workers as it can lead to detachment from their work and a decline in job performance. Prolonged isolation can also increase employee turnover and create work-family conflicts. Thus, teleworking may be more appropriate for self-directed individuals with good time-management skills. However, with appropriate organizational support, it may be possible to mitigate these negative effects and create a positive teleworking environment. It is important for organizations to carefully consider the pros and cons of teleworking and determine whether it is a suitable option for their specific workforce and work environment.

Moreover, one study has shown that teleworking can raise concerns among employees regarding the potential loss of career opportunities due to a lack of visibility (Tan & Antonio, 2022). Furthermore, one of supervisors' primary concerns regarding remote work is the possibility of reduced employee performance. Finally, teleworking poses ethical challenges for e-leaders, including the potential for worker exploitation and information overload, which can significantly impact the lives of employees.

Transparent communication is essential during organizational changes as it helps reduce uncertainty and anxiety among employees (Darics, 2020; Elshaer & Saad, 2022; Vătămănescu et al., 2022).

Participation, substantiality of information, and accountability are the three dimensions that can be used to measure the transparency of communication during organizational changes. Participation refers to how a firm involves employees in defining the information they need, requests feedback from employees, and considers their viewpoints before making decisions. Substantial information refers to how a firm delivers information in a timely, relevant, complete, precise, and reliable manner and ensures that the information is not complicated for employees to comprehend. Accountability refers to how a firm presents multiple perspectives on controversial matters, is willing to disclose information that may harm the organization, accepts criticism from employees, and acknowledges when it has made mistakes (Al-Jabri & Roztocki, 2015; Arkedis et al., 2021; Norman et al., 2010). By involving employees in the communication process, providing comprehensive and relevant information, and being accountable, firms can enhance communication transparency during organizational changes (Arkedis et al., 2021; Norman et al., 2010; Smith et al., 2018). This can help improve employees' understanding of change, reduce resistance, and increase their commitment to change (Arkedis et al., 2021; Norman et al., 2010; Ramos-Maçães & Román-Portas, 2022). Furthermore, transparency in communication can promote trust and enhance employees' perceptions of fairness and justice in the organization (Arkedis et al., 2021; Norman et al., 2010; Tan & Antonio, 2022).

Transparent communication enhances the trustworthiness, credibility, and loyalty of stakeholders, particularly employees. This process involves three interconnected elements: disseminating relevant and comprehensive information in a way that empowers employees, facilitating their search for required

information, and providing them with timely and balanced feedback about organizational policies and practices (Basit & Siddiqui, 2020; Elshaer & Saad, 2022; Tan & Antonio, 2022). One study has shown that transparent communication within an organization can motivate employee support for organizational change (Basit & Siddiqui, 2020; Elshaer & Saad, 2022; Tan & Antonio, 2022). It can provide accurate information about the current organizational situation and its implications for employees, align employees' goals with those of the organization, promote proactive behavior, clarify misunderstandings, and prevent rumors. These outcomes can foster a sense of control over the information needed for problem-solving, leading to employee engagement and support for the organization. Therefore, transparent communication is highly recommended to strengthen resilience processes within the organization, especially during difficult times (Britt et al., 2016; Elshaer & Saad, 2022; Qiao et al., 2022). It can help organizations maintain their competitive advantage and sustain their operations.

Adaptive performance is the crucial ability of employees to adjust to changing work situations (Hameed, 2016; Marques-Quinteiro et al., 2019; Tan & Antonio, 2022). It involves individuals modifying their behavior to suit new events and working conditions. Studies on adaptive performance have identified eight dimensions of adaptive behavior: adaptive performance encompasses responding creatively to problems, effectively managing work stress, acquiring proficiency in new tasks and technologies, demonstrating interpersonal and cross-cultural adaptability, and adjusting to physically demanding work conditions (Marques-Quinteiro et al., 2019; Tan & Antonio, 2022). Employees who exhibit adaptive behavior are more likely to achieve success in their work and

contribute positively to their organization's overall performance. By embracing uncertainty, taking initiative in learning and development, building strong relationships with colleagues, and adapting to physical demands, employees can demonstrate adaptive performance, which is increasingly recognized as a vital aspect of organizational success. The ability to adapt to change is becoming even more important in the current climate of rapidly changing work environments and the rise of remote work.

An alternative study conducted an assessment of adaptive performance, focusing on five distinct dimensions. These dimensions encompassed creativity, adaptive performance involves the capacity to effectively handle crises or unexpected events, adapt interpersonally, possess training capabilities, and demonstrate proficiency in stress management. The study aimed to evaluate individuals' aptitude for adapting and thriving in dynamic environments. It examined their capacity for generating innovative ideas, navigating challenging situations, flexibly engaging with others, acquiring new skills, and effectively managing stressors. By exploring these dimensions, the study sought to gain a comprehensive understanding of individuals' adaptive performance across various facets necessary for success in evolving contexts (Hameed, 2016; Tan & Antonio, 2022). Creativity pertains to an individual's aptitude for generating novel solutions or strategies in the face of unfamiliar or intricate challenges. Responsiveness to crises or unexpected events denotes an individual's capability to effectively prioritize and adapt in dynamic work environments. Interpersonal adaptation refers to workers' capacity to adjust their communication and interaction styles to collaborate effectively within their organizations or with external partners. Training signifies the inclination to proactively seek

opportunities for personal growth and development. Stress management relates to an individual's competence in maintaining composure and effectively channeling stress within a team setting. These dimensions were developed to assess adaptability across a variety of work situations and determine an individual's ability to modify their behavior to meet changing demands. By assessing these dimensions, organizations can identify employees who are more likely to successfully navigate changing work environments and possess the skills necessary for effective adaptive performance.

Adaptive employee performance is an essential component of organizational success in a dynamic work environment (Hameed, 2016; Marques-Quinteiro et al., 2019; Tan & Antonio, 2022). It comprises a range of skills, including creative problem-solving, learning and training effort, interpersonal adaptability, and physical adaptability. When confronted with new or ill-defined work situations, employees with adaptive performance can leverage various sources of information to develop innovative solutions. These employees also seek opportunities to improve their performance continuously through training and learning. Interpersonal adaptability involves building effective relationships with colleagues, superiors, and subordinates to maximize their effectiveness in the workplace. Finally, physical adaptability refers to the ability to adjust to different working conditions, such as remote work, and deliver high-quality performance. In summary, employees with adaptive performance can effectively navigate through uncertain and changing work environments. They possess the skills necessary to solve problems creatively, seek opportunities for learning and improvement, build positive relationships with peers, and adapt to different working conditions. These qualities enable

employees to thrive in dynamic workplaces and contribute to organizational success.

Traditional leadership is typically reinforced through social interactions, where face-to-face communication and personal connections play a significant role. However, in virtual environments, the influence of social interactions on leadership is facilitated by Information and Communication Technologies (ICTs). These technologies alter the behaviors, emotions, opinions, and performance of workers, enabling them to engage and interact differently compared to traditional settings. The use of ICTs in virtual environments allows for new modes of communication and collaboration, shaping the dynamics of leadership and its impact on individuals and teams (Van Wart et al., 2017). To mitigate the negative effects of physical and psychological distancing, e-leaders need to establish a sense of proximity with their staff, both physically and psychologically. Despite the remote nature of virtual leadership, e-leaders should strive to create a close connection with their team members. Physically, this can be achieved through regular video conferences, virtual meetings, and utilizing technology that enables face-to-face interactions. Psychologically, e-leaders should foster open communication, active listening, and empathy to build trust and maintain a supportive environment. By being physically and psychologically close to their staff, e-leaders can counteract the potential challenges posed by distance and enhance team cohesion and performance (Elyousfi et al., 2021; Iriqat & Khalaf, 2017). In the realm of e-leadership, building trust is crucial for fostering productive relationships and enabling the exchange of ideas. E-leaders must prioritize trust-building efforts to create an environment where team members feel comfortable sharing their thoughts and perspectives. By establishing trust, e-

leaders encourage open communication and collaboration, enabling the free flow of information and ideas among team members. Additionally, e-leaders play a vital role in facilitating the information stream within the virtual team, ensuring that relevant and timely information is shared effectively. Furthermore, e-leaders should encourage and support innovation by creating a culture that values and rewards creative thinking and experimentation. By focusing on trust, facilitating information flow, and fostering innovation, e-leaders can drive positive outcomes and achieve innovative results in virtual team settings (Avolio et al., 2014).

The integration of management and leadership functions becomes particularly important in teleworking situations (Darics, 2020). Managers bear the responsibility of effectively managing performance, implementing suitable solutions, and upholding team identity. They achieve this by developing and sharing the organization's vision, values, and goals within a trusting work environment. Teleworking significantly amplifies the volume and speed of communication, leading to the expansion of communication channels. As e-leaders, it becomes essential for them to possess expertise in utilizing these channels effectively. Moreover, e-leaders play a crucial role in embracing and adopting new technological solutions that facilitate remote work. By fulfilling these responsibilities, e-leaders can navigate the challenges of teleworking and ensure the success of their teams and organizations. (Van Wart et al., 2017). Therefore, the following hypothesis is proposed: H1: Perceived e-leadership affects teleworking output.

In recent times, the effectiveness of communication between leaders and team members in virtual teams has garnered significant attention. This is primarily due to the challenges posed by the transition to

online work environments, where the clarity of task allocation, the accuracy of knowledge sharing, and the interpersonal socio-emotional cues typically present in direct interactions are disrupted. The shift to virtual work settings has necessitated finding alternative means of ensuring clear task allocation, such as utilizing digital task management tools. Additionally, knowledge sharing has been impacted, highlighting the need for efficient virtual collaboration platforms and practices. Furthermore, the absence of face-to-face interaction requires leaders to explore innovative ways to convey socio-emotional cues, such as using video conferencing and virtual team-building activities. By recognizing and addressing these challenges, leaders can enhance the communication process in virtual teams and foster effective collaboration and engagement among team members (Elyousfi et al., 2021; Vătămănescu et al., 2022). A comprehensive study conducted on 80 software development teams comprising programmers from various regions including the United States, South America, Europe, and Asia has revealed that virtual teams can enhance efficiency and deliver better business outcomes. However, these benefits can only be realized through proactive management and the implementation of effective communication processes that optimize advantages and minimize drawbacks. The study highlights several crucial elements for success, including establishing robust processes at the task's outset, efficient communication practices, and maintaining task-focused conflict resolution. To achieve effectiveness and high performance in a virtual environment, certain fundamental conditions of team performance must be met. These conditions encompass clearly defining tasks and objectives, possessing the necessary skills, establishing appropriate and well-defined roles, implementing conflict management strategies,

implementing performance management processes, and fostering effective communication among team members. By addressing these essential factors, virtual teams can maximize their potential and drive successful outcomes. H2: Perceived e-leadership affects Transparent Communication

Accountable, transparent, and timely internal communication plays a crucial role as a significant coping enabler within change events in the workplace. During periods of change, effective internal communication becomes even more important in helping employees navigate and adapt to the new circumstances. Accountability ensures that information is shared responsibly and that individuals are held responsible for their communication actions. Transparency promotes openness and honesty, allowing employees to understand the reasons behind the change and the impact it may have on their roles and responsibilities. Timeliness ensures that information is shared promptly, reducing uncertainty and enabling employees to stay informed and make necessary adjustments. By prioritizing accountable, transparent, and timely internal communication, organizations can empower their employees to cope effectively with change events, fostering a more resilient and adaptable workforce (Avolio et al., 2014; Basit & Siddiqui, 2020; Norman et al., 2010). Prior research has emphasized the importance of providing information in facilitating effective coping mechanisms, such as adaptive performance. Through the provision of timely and relevant information, employees gain better access to necessary resources and organizational support, enabling them to actively adapt to turbulent events. In contrast, a lack of information likely results in a lack of understanding of the stressful situation, which increases employees' feelings of uncertainty and a sense of being out of control. Consequently, this lack of

information may discourage employees from actively engaging in coping activities and exerting effort to address the challenges at hand. Therefore, by ensuring the provision of sufficient information, organizations can empower employees to cope more effectively, fostering a sense of control and enabling them to actively navigate and manage stressful situations. Therefore, we hypothesize as follows: H3: Perceived e-leadership affects Employee Adaptive Performance

The concept of e-leadership has become increasingly relevant in today's work environment, especially with the rise in teleworking (Avolio et al., 2014; Basit & Siddiqui, 2020; Darics, 2020). With the increase in remote work, the role of e-leadership has become crucial for ensuring employees' adaptive performance. Adaptive performance refers to an employee's ability to adapt to changing work situations and environments (Marques-Quinteiro et al., 2019; Tan & Antonio, 2022; Laulita & Setyawan, 2021). One study examined the relationship between perceived e-leadership, teleworking output, and adaptive employee performance. The study found that perceived e-leadership has a positive impact on teleworking output, which in turn affects adaptive employee performance (Tan & Antonio, 2022). Perceived e-leadership refers to an employee's perception of the leadership provided by their supervisor or manager in a virtual work environment.

This study shows that effective e-leadership can increase teleworking output by providing clear goals and expectations, effective communication, and support for employees (Elyousfi et al., 2021; W. Li et al., 2016; Smith et al., 2018). The increase in teleworking output, in turn, can lead to improved adaptive employee performance by enhancing problem-solving skills, creativity, and flexibility. Furthermore, e-leadership can also influence employees' work attitudes

and behaviors, such as job satisfaction, motivation, and commitment, which can lead to better adaptive performance (Avolio et al., 2014; Elyousfi et al., 2021; Iriqat & Khalaf, 2017; Tan & Antonio, 2022).

Overall, this study suggests that e-leadership can play a critical role in enhancing adaptive employee performance through teleworking output. Organizations that promote effective e-leadership can create a virtual work environment conducive to employee performance, satisfaction, and well-being. This, in turn, can lead to better organizational outcomes such as increased productivity, innovation, and competitiveness. H4: Perceived e-leadership affects Employee Adaptive Performance through Teleworking Output

Perceived e-leadership refers to employees' perceptions of the effectiveness of electronic leadership. Transparent communication is an essential element of e-leadership that can affect employees' adaptive performance (Hameed, 2016; Marques-Quinteiro et al., 2019). Transparent communication involves disseminating comprehensive and timely information, encouraging employees to obtain relevant information, and providing feedback on organizational activities and policies. When e-leadership is positively perceived, it can enhance adaptive employee performance through transparent communication (Basit & Siddiqui, 2020; Elshaer & Saad, 2022).

The importance of transparent communication in e-leadership is explained by employees' ability to create trust, credibility, and loyalty. When e-leaders demonstrate transparency in their communication, employees feel that their leaders are trustworthy, which fosters a positive perception of e-leadership. When e-leaders are positively perceived, employees are more likely to comply with their expectations and feel motivated to engage in work activities. Transparent

communication can also help employees understand organizational goals and policies, which can guide their behavior in a manner that aligns with the organizational objectives.

Moreover, transparent communication can lead to enhanced adaptive employee performance by providing employees with information they need to perform their tasks efficiently (Avolio et al., 2014; Basit & Siddiqui, 2020; Tan & Antonio, 2022; Setyawan, 2021). When employees understand their roles and responsibilities, they can take proactive steps to improve performance. Additionally, when employees have access to timely and accurate information, they can quickly adapt to changes in their work environment.

Overall, perceived e-leadership can affect employee adaptive performance through transparent communication. E-leaders can enhance employees' adaptive performance by demonstrating transparency in their communication, providing comprehensive and timely information, and seeking feedback from employees. When e-leaders are positively perceived, employees are more likely to comply with organizational expectations and perform their tasks effectively, leading to improved organizational outcomes. Therefore, e-leadership prioritizing transparent communication can lead to enhanced adaptive employee performance. H5: Perceived e-leadership affects Employee Adaptive Performance through Transparent Communication

METHODS

In this study, the research procedures encompassed the methods employed to achieve research objectives. The chosen approach was quantitative and utilized a survey method as the research design. This study aims to understand the relationships between relevant research variables in the context of startup companies in Indonesia. To accomplish this goal, the first step involved selecting

an appropriate research method. A quantitative approach was chosen because it enables the collection of numerically measurable data, facilitating more in-depth statistical analysis. The survey method was selected as the research design because it allows for efficient and

rapid data collection from a number of respondents. Through the use of a structured questionnaire, the primary data necessary for the study could be systematically standardized.

Table 1. Start-up Company

Company	Total Employee	Monthly Income Estimation
Naisu Studio	50	Rp7.000.000
PT. Berserah Bersyukur Berusaha	50	Rp5.000.000
PT. Arranet Indonesia Sejahtera	50	Rp6.000.000
PT. Brand Communications Indonesia	50	Rp9.000.000
PT. Saga Digital Studio	50	Rp10.000.000
PT. Skincaredoc Telederma Indonesia	50	Rp8.000.000
PT. Tissor Indonesia	50	Rp8.000.000
PT. Medika Nusantara Gumilang	50	Rp8.000.000
PT. Teknologi Permainan Indonesia	50	Rp8.000.000
Trident Digital	50	Rp23.500.000
PT. Vascomm Solusi Teknologi	50	Rp10.000.000
Infinity Energy, Inc.	50	Rp7.000.000
Asclepio Edukasi Media Indonesia	50	Rp3.500.000
PT. Digital Talent Indonesia	50	Rp10.000.000
PT. Telemedia Network Cakrawala	50	Rp8.000.000
PT. Aisensum Bigdata Analytics	50	Rp10.000.000
PT. Sejahtera Murti Lestari	50	Rp9.000.000
Pandatech.co	50	Rp10.000.000
PT. Aku Pintar Indonesia	50	Rp6.000.000
TalentMesh Pte. Ltd.	50	Rp10.000.000
Borong Indonesia	50	Rp10.000.000
PT. Nomura Researach Institute Indonesia	50	Rp7.000.000
PT. Suitmedia Kreasi Indonesia	50	Rp9.000.000
Upscalix	50	Rp7.000.000
PT. Anugerah Inovasi Makmur Indonesia	50	Rp10.000.000
Avana Indonesia	50	Rp9.000.000

The study sample consisted of 270 randomly selected respondents from the target population. This study focuses on start-up companies in Indonesia. An accidental-purposive sampling method was used to ensure a representative

sample. This method involved selecting start-up companies as research objects through both accidental means and specific considerations. These considerations included the criteria for the targeted respondents, namely employees working in the selected companies, remote

workers, and those with the highest monthly income of Rp 10,000,000. Thus, the research sample aimed to encompass relevant variations within the context of start-up companies in Indonesia.

Primary data were collected using carefully designed questionnaires. These questionnaires comprised structured questions developed based on predetermined research variables. These questions were designed to extract relevant and adequate information on the research topic. Questionnaires were distributed to respondents using two methods: offline and online. Respondents

residing in and around the city of Malang were contacted directly to complete the questionnaires offline. On the other hand, respondents from other regions were able to complete the questionnaires online through links distributed via WhatsApp groups such as IDSF (Indonesia Startup Founder) and TES (The Entrepreneurs Society). By combining offline and online methods, it was expected that the obtained data would cover a representative variation of respondents within the context of start-up companies in Indonesia.

Table 2. Variable, Indicator and Them

Variables	Indicator	Item
Perceived leadership	e- e-communication skill	I am fortunate to have a leader who effectively communicates through electronic media, ensuring clarity and promoting efficient collaboration within our team.
	e-social skills	To enhance communication effectiveness and promote deeper engagement with the team, my leader utilizes a range of richer media options, including face-to-face meetings, telephone conversations, and virtual conferencing, when deemed appropriate
	e-team building skills	I actively engage and participate in the virtual team building activities organized by my leader.
	e-trustworthiness	In virtual leadership, my leader demonstrates trustworthy integrity.
Teleworking Output	Supervisor’s trust	I believe my employer places a significant amount of trust in me by providing the opportunity to work from home.
	Possibility to save travel expenses	I choose to work from home in order to reduce travel expenses.
	Flexible working hours allow me to work during my peak productivity times.	Working from home allows me to leverage my most productive hours for work.
Transparent Communication	Participation	The company actively seeks feedback from employees, including myself, regarding the quality of information provided during the change process. The company actively involves employees, including myself, in defining the information required during the change

Substantiality information	<p>process.</p> <p>The company provides employees, including myself, with comprehensive information during times of change.</p> <p>The company actively facilitates the process of finding the information that employees, like myself, need during periods of change.</p> <p>The company actively seeks the viewpoints of employees, including myself, before making decisions during the change process.</p> <p>The company invests time in understanding employees, like myself, during the change process to comprehend our individual identities and needs.</p> <p>The company ensures timely delivery of information to employees, including myself, during times of change.</p> <p>The company provides employees, like myself, with relevant information during times of change.</p> <p>The company delivers comprehensive information to employees, like myself, during times of change.</p> <p>The company delivers information that is easy for employees, like myself, to comprehend during times of change, avoiding unnecessary complexity.</p> <p>The company delivers precise information to employees, like myself, during times of change, ensuring clarity and accuracy.</p> <p>The company provides employees, like myself, with reliable information during times of change, fostering trust and dependability.</p>
Accountability	<p>The company presents multiple perspectives on controversial matters to employees, like myself, during times of change, encouraging a well-rounded understanding and informed decision-making.</p> <p>The company demonstrates transparency by disclosing information that could potentially harm it during times of change, promoting openness and accountability.</p> <p>The company is open to and accepts criticism from employees, like myself, during times of change, fostering a culture</p>

employee adaptive solving problem
 performance creatively
 training and learning
 effort
 interpersonal
 adaptability
 physical adaptability

of constructive feedback and continuous improvement.

The company openly acknowledges and takes responsibility for any mistakes or flaws it has made during the change process, demonstrating accountability and a commitment to learning and growth.

When faced with new or ill-defined work situations in my job, I leverage a diverse range of information sources and types to develop innovative solutions.

I actively seek out every opportunity that allows me to enhance and improve my performance in my job.

Developing strong and positive relationships with all my counterparts is a crucial factor in enhancing my overall effectiveness in my role.

I make a concerted effort to adapt and adjust to the working conditions I encounter while working from home, even if they present challenges or difficulties.

After the collection of primary data, the next step involved data analysis using the structural equation Modeling partial least squares (SEM-PLS) method. This method was chosen because it allows the examination of relationships between research variables by modeling the proposed conceptual structure. The SEM-PLS analysis aimed to identify the effects of the research variables and measure the strength of their relationships. Through this analysis, researchers were able to test the research hypotheses and analyze the impact of the variables involved.

The analysis process commenced by inputting the collected data into SEM-PLS analysis software. The data were then tested to meet the assumptions and requirements for appropriate analysis. Subsequently, model estimation was performed using the Partial Least Squares (PLS) technique to obtain more robust results resilient to non-normal or asymmetrically distributed data.

After the model estimation, the

analysis results were obtained in the form of path coefficients, which depict the strength of the relationships among the research variables. Furthermore, SEM-PLS analysis provides information on the statistical significance of these relationships.

The obtained results were then interpreted to explain the relationships among the research variables and provide a better understanding of the research topic. In the interpretation process, researchers analyzed the statistical significance of path coefficients, the direction of positive or negative relationships between variables, and the relative contributions of each variable to the research outcomes.

The interpretation of the results aimed to provide a comprehensive understanding of the relationships between the research variables and contribute to existing knowledge in the field. During the interpretation process, the researchers analyzed the statistical significance of the path coefficients obtained from the SEM-

PLS analysis. This involved examining whether the relationships between the variables were statistically significant or occurred by chance.

In addition, the direction of the relationships was assessed to determine whether they were positive or negative. Positive relationships indicate that an increase in one variable leads to an increase in another variable, whereas a negative relationship suggests that an increase in one variable results in a decrease in another variable.

Furthermore, the relative contribution of each variable to the research outcomes was analyzed. This involves evaluating the magnitude of the path coefficients to determine the strength of the relationships. Variables with larger coefficients were considered to have a greater influence on research outcomes.

The interpretation of the analysis results involved a careful examination of the findings in light of the research objectives and the existing literature. The researchers compared the results with those of prior studies and theories to validate or expand upon the existing knowledge. They also considered the limitations or potential biases in the data collection process, which could affect the interpretation of the results.

Ultimately, the conclusions drawn from this study are expected to provide a deeper understanding of the research topic and make a significant scientific contribution to the field. The findings can inform decision-making processes in the context of startup companies in Indonesia and potentially contribute to the development of effective strategies and practices in the industry.

The study was conducted for one academic year, 2022/2023, at a startup company in Indonesia. A total of 270 employees participated in the study (Table 1). Several sample criteria were used, including employees working in selected startup companies, remote workers, and

those with a monthly income of at least IDR 10,000,000. The instrument used in this study was based on research by Tan and Antonio (2022) and Elshaer and Saad (2022) (see Table 2). The questionnaire was distributed virtually by collaborators in the project. Partial least squares structural equation Modeling (PLS-SEM) was employed as the modeling technique.

The main variables in Tan and Antonio (2022) and Elshaer and Saad (2022) include perceived e-leadership, teleworking output, transparent communication, and adaptive employee performance. Perceived e-leadership was treated as an independent variable, while employee adaptive performance was the dependent variable in the study. Teleworking output was considered an intervening variable, and transparent communication was the dependent variable. All variables were measured using a five-point Likert scale.

Partial Least Squares Path Modeling (PLS-SEM) was employed to analyze the model in the study. The primary reason for selecting this technique was that the model comprised six Type A composite types (Richter et al., 2016). Indeed, PLS-SEM is often considered more suitable for testing hypotheses in certain cases compared to other techniques like Structural Equation Modeling (SEM). This is particularly true when dealing with complex models that consist of Type A composite types, as PLS-SEM can handle both reflective and formative constructs effectively. Additionally, PLS-SEM is known for its robustness in handling small sample sizes, non-normal data distributions, and high levels of multicollinearity. Hence, the choice of PLS-SEM for hypothesis testing in the study aligns with the specific requirements and characteristics of the model being analyzed (Hair Jr et al., 2021). There are indeed additional reasons for selecting PLS-SEM as the analysis technique. PLS-SEM is well-suited for studying multiple and complex

relationships among variables, as it allows for a flexible modeling approach. It can handle models with a smaller sample size and a higher number of predictors, making it suitable for studies that involve limited data availability. Furthermore, PLS-SEM is effective in analyzing moderating effects, enabling researchers to examine how the relationships between variables may vary based on different conditions or factors. By utilizing PLS-SEM, the study can explore and understand the intricate relationships and potential moderating influences within the model (Aledo-Ruiz et al., 2022). Additionally, PLS-SEM is an appropriate technique because it does not rely on specific distribution assumptions for the indicators. Unlike other techniques like covariance-based SEM, PLS-SEM is more flexible and can handle data with non-normal distributions. This makes it particularly useful when working with variables that may not follow a standard distribution, allowing for a broader range of data types to be included in the analysis. The ability of PLS-SEM to accommodate non-normal data enhances its applicability and makes it a suitable choice for the study at hand (Chin & Dibbern, 2009). Another reason for selecting this technique is that the model was estimated from a causal perspective (Hair Jr et al., 2020). To test the hypotheses, a bootstrapping procedure with 10,000 subsamples was conducted (Henseler, 2018) using SmartPLS 3.3.3 software (Ringle et al., 2015).

RESULTS

A loading factor value above 0.70 indicates that the manifest construct is valid (Hair Jr et al., 2020). It can be seen from Figure 1 that all manifest constructs reflect each variable with a loading factor value of > 0.7 which means the research instrument is valid. This section presents the analysis of the related results, theories, and hypotheses (if any) based on the author's reasoning. Data analysis and discussion should be presented briefly and clearly, and should not be dominated by the presentation of tables.

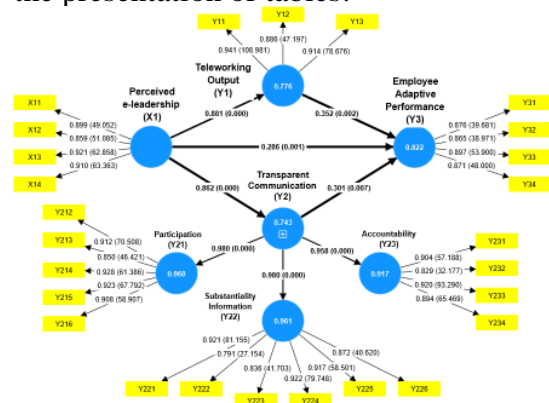


Figure 1. Competed Structural Model

An Average Variance Extracted (AVE) value of more than 0.5 also indicates a valid instrument. Cronbach's alpha value of more than 0.6, and composite reliability of more than 0.8 indicates a reliable instrument. Table 3 describes the validity and reliability of this research instrument, where the AVE value for each variable was more than 0.5, Cronbach's alpha was more than 0.6, and a composite reliability value of 0.8.

Table 3. Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Perceived_e-leadership_(X1)	,919	0,920	0,943	0,805
Teleworking_Output_(Y1)	,901	0,905	0,938	0,836
Transparent_Communication_(Y2)	0,978	0,979	0,980	0,756

Participation_(Y21)	0,944	0,945	0,957	0,818
Substantiality_Information_(Y22)	0,940	0,943	0,953	0,771
Accountability_(Y23)	0,910	0,914	0,937	0,788
Employee_Adaptive_Performance_(Y3)	0,900	0,901	0,930	0,770

The inner model tests considered in this study are R-square (R²) Determination Tests. As seen in Figure 1., the R-Square value for Teleworking Output (Y1) is 0.776, which indicates that about 77.6% of Teleworking Output is explained by Perceived e-Leadership. Meanwhile, the R-Square value for Transparent Communication (Y2) is 0.743, which indicates that 74.3% of Transparent Communication is explained by perceived e-leadership. The R-Square value for Employee Adaptive Performance (Y3) is 0.822, which shows that approximately 82.2% of employees' adaptive performance is explained by perceived e-Leadership, Teleworking Output, and Transparent Communication. This shows a strong influence of the Chin criteria in Hair et al. (2014), which states that the independent variables have a strong influence on the dependent variable if the R-square value is at least 0.67. The results of the t-test show that the direct effect of perceived e-leadership on Employee Adaptive Performance is significantly positive, with a path coefficient of 0.286 (positive), where the t-statistic value is 3.281 > 1.96, and the p-value is 0.001 < 0.005 (significant). This supports the first hypothesis of this study (H1). The results of the t-test also show that the direct effect of perceived e-leadership on Teleworking Output is significantly positive, with a path coefficient of 0.881 (positive), where the t-statistic value is 3.281 > 1.96, and the p-value is 0.001 < 0.005 (significant). This proves hypothesis of the study (H2).

The results of the t-test also show that the direct effect of perceived e-leadership on Transparent Communication is significantly positive, with a path coefficient of 0.862 (positive), where the t-statistic value is 14.396 > 1.96, and the p-value is 0.000 < 0.005 (significant). This proves hypothesis of the study (H3).

The results of the t-test also show that the direct effect of Transparent Communication on Employee Adaptive Performance is significantly positive, with a path coefficient of 0.301 (positive), where the t-statistic value is 2.719 > 1.96 and the p-value is 0.007 < 0.005 (significant). This supports the fourth hypothesis (H4).

The results of the t-test also show that the direct effect of Teleworking Output on Employee Adaptive Performance is significantly positive, with a path coefficient of 0.352 (positive), where the t-statistic value is 3.085 > 1.96, and the p-value is 0.002 < 0.005 (significant). This proves hypothesis of the study (H5). Investigation of indirect effects was carried out through the results of the t-test in the Specific Indirect Effect section. It is known that the indirect effect of perceived e-Leadership on Employee Adaptive Performance through Teleworking Output as an intervening variable is positive (path coefficient of 0.310 in the positive direction) and significant (t-statistic value of 2.994 > 1.96 and p-value of 0.003 < 0.05), indicating that Teleworking Output is able to mediate the effect of perceived e-Leadership on Employee Adaptive Performance. This proves the sixth research hypothesis (H6). Because both

the direct and indirect effects of perceived e-Leadership on Employee Adaptive Performance through Teleworking Output are significant, Teleworking Output acts as a partial mediator.

It is known that the indirect effect of perceived e-Leadership on Employee Adaptive Performance through Transparent Communication as an intervening variable is positive (path coefficient of 0.259 in the positive direction) and significant (t-statistic value of $2.663 > 1.96$ and p-value of $0.008 < 0.05$), indicating that Transparent Communication can mediate the effect of perceived e-Leadership on Employee Adaptive Performance. This proves the seventh hypothesis of the study (H7). As the direct and indirect effects of perceived e-Leadership on Employee Adaptive Performance through Transparent Communication are equally significant, Transparent Communication acts as a partial mediator.

Meanwhile, if viewed at the dimension level, Sustainability Information is the dimension that most reflects Transparency Communication, Accountability is the dimension that most strongly reflects Communication Transparency when influenced by perceived e-Leadership.

DISCUSSIONS AND CONCLUSIONS

Adaptive performance is known to have positive outcomes, including enhanced performance capacity and a thriving career. Extensive research has delved into the influence of e-leadership and remote work on adaptive performance, aiming to unravel the factors that contribute to successful adaptive performance. Additionally, studies have explored the correlations between e-leadership, remote work, adaptive performance, communication, employee resilience, and adaptive performance. However, there are still gaps in the

literature regarding the relationship between communication facilitated through electronic media and employee resilience to adaptive performance, particularly in the context of remote work. This study sought to address these gaps by examining how remote work intersects with communication and employee resilience, ultimately impacting adaptive performance. The results of the t-test indicate significant positive direct effects in the study. Firstly, the relationship between perceived e-leadership and Transparent Communication yielded a path coefficient of 0.862, with a t-statistic value of 14.396 (>1.96) and a p-value of 0.000 (<0.005). Secondly, the association between Transparent Communication and Employee Adaptive Performance showed a path coefficient of 0.301, with a t-statistic value of 2.719 (>1.96) and a p-value of 0.007 (<0.005). Finally, the direct effect of Teleworking Output on Employee Adaptive Performance exhibited a path coefficient of 0.352, with a t-statistic value of 3.085 (>1.96) and a p-value of 0.002 (<0.005). These statistically significant findings demonstrate the positive impact of perceived e-leadership on Transparent Communication, the influence of Transparent Communication on Employee Adaptive Performance, and the effect of Teleworking Output on Employee Adaptive Performance.

The findings of this study have practical implications for decision-making processes in startup companies in Indonesia and can contribute to the development of effective strategies and practices in the industry. The study underscores the significance of e-leadership and transparent communication in fostering adaptive performance among employees, particularly in the context of remote work. The results suggest that organizations should prioritize the development of e-leadership skills among managers and supervisors, as well as

promote transparent communication practices to enhance employee adaptive performance. Furthermore, the study highlights the importance of providing adequate support and resources to employees engaged in remote work, such as technology access and training programs, to facilitate their adaptive performance. By shedding light on the factors that influence adaptive performance, this study contributes to the existing literature in the field and offers valuable insights for both researchers and practitioners.

Several suggestions for future research in this domain can be considered. Firstly, further investigation is needed to explore the impact of additional factors, such as organizational culture, job autonomy, and work-life balance, on employee adaptive performance within the context of remote work. Secondly, it would be valuable to examine the role of different communication technologies, such as video conferencing, instant messaging, and email, in facilitating transparent communication and enhancing employee adaptive performance. Comparative studies across various industries and countries would also be beneficial to assess the generalizability of the findings and identify contextual factors that may influence the relationships among the research variables. Additionally, exploring the potential moderating effects of individual differences, such as personality traits and cognitive abilities, on the relationships among e-leadership, transparent communication, and adaptive performance is warranted. Lastly, investigating the long-term effects of e-leadership and transparent communication on employee adaptive performance and other organizational outcomes, including job satisfaction, turnover, and innovation, would provide a more comprehensive understanding of the dynamics involved.

LIMITATIONS

It is important to note that this study focused solely on examining the relationships between e-leadership, remote work, communication, and adaptive performance, without considering other potential factors that could potentially influence adaptive performance. Factors such as individual differences, including personality traits and cognitive abilities, were not taken into account. Additionally, the study did not explore the potential impact of external factors, such as economic or political conditions, on adaptive performance. Furthermore, the study lacked a detailed explanation of the methodology employed for sample selection, which may limit the transparency and replicability of the study. As a result, future research should consider incorporating a broader range of variables and employing a more comprehensive methodology to provide a more holistic understanding of adaptive performance in the context of startup companies in Indonesia.

REFERENCE

- Aledo-Ruiz, M. D., Martínez-Caro, E., & Santos-Jaén, J. M. (2022). The influence of corporate social responsibility on students' emotional appeal in the HEIs: The mediating effect of reputation and corporate image. *Corporate Social Responsibility and Environmental Management*, 29(3), 578–592. <https://doi.org/10.1002/csr.2221>
- Al-Jabri, I. M., & Roztocki, N. (2015). Adoption of ERP systems: Does information transparency matter? *Telematics and Informatics*, 32(2), 300–310. <https://doi.org/10.1016/j.tele.2014.09.005>
- 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. <https://doi.org/10.1177/1529100615593273>
- Arkedis, J., Creighton, J., Dixit, A., Fung, A., Kosack, S., Levy, D., & Tolmie, C. (2021). Can transparency and accountability programs improve health? Experimental evidence from Indonesia and Tanzania. *World Development*, 142, 105369. <https://doi.org/10.1016/j.worlddev.2020.105369>
- Avolio, B. J., Sosik, J. J., Kahai, S. S., & Baker, B. (2014). E-leadership: Re-examining transformations in leadership source and transmission. *The Leadership Quarterly*, 25(1), 105–131. <https://doi.org/10.1016/j.leaqua.2013.11.003>
- Basit, A., & Siddiqui, D. A. (2020). Authentic Leadership and Openness to Change in Pakistani Service Industry: The Mediating Role of Trust and Transparent Communication. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3757483>
- Britt, T. W., Shen, W., Sinclair, R. R., Grossman, M. R., & Klieger, D. M. (2016). How Much Do We Really Know About Employee Resilience? *Industrial and Organizational Psychology*, 9(2), 378–404. <https://doi.org/10.1017/iop.2015.107>
- Bryant, W., & Merritt, S. M. (2021). Unethical Pro-organizational Behavior and Positive Leader–Employee Relationships. *Journal of Business Ethics*, 168(4), 777–793. <https://doi.org/10.1007/s10551-019-04211-x>
- Butali, P., & Njoroge, D. (2018). Effect of Employee Participation on Organizational Performance with Organizational Commitment as a Moderator. *International Journal of Scientific Research and Management*, 6(06), 2018–2478. <https://doi.org/10.18535/ijstrm/v6i6.el015>
- Camacho, S., & Barrios, A. (2022). Teleworking and technostress: Early consequences of a COVID-19 lockdown. *Cognition, Technology & Work*, 24(3), 441–457. <https://doi.org/10.1007/s10111-022-00693-4>
- Chaturvedi, S., Zyphur, M. J., Arvey, R. D., Avolio, B. J., & Larsson, G. (2012). The heritability of emergent leadership: Age and gender as moderating factors. *The Leadership Quarterly*, 23(2), 219–232. <https://doi.org/10.1016/j.leaqua.2011.08.004>
- Chin, W. W., & Dibbern, J. (2009). An introduction to a permutation based procedure for multi-group PLS analysis: Results of tests of differences on simulated data and a cross cultural analysis of the sourcing of information system services between Germany and the USA. In *Handbook of partial least squares: Concepts, methods and applications* (pp. 171–193). Springer.
- Chiu, W., & Cho, H. (2019). E-commerce brand: The effect of perceived brand leadership on consumers' satisfaction and repurchase intention on e-commerce websites. *Asia Pacific Journal of Marketing and Logistics*, 33(6), 1339–1362. <https://doi.org/10.1108/APJML-10-2018-0403>
- Darics, E. (2020). E-Leadership or “How to Be Boss in Instant Messaging?”

- The Role of Nonverbal Communication. *International Journal of Business Communication*, 57(1), 3–29. <https://doi.org/10.1177/2329488416685068>
- Davis, J. P., & Aggarwal, V. A. (2020). Knowledge mobilization in the face of imitation: Microfoundations of knowledge aggregation and firm-level innovation. *Strategic Management Journal*, 41(11), 1983–2014. <https://doi.org/10.1002/smj.3187>
- Deng, Y., Sun, W., Chen, M., & Yang, Y. (2019). Knowledge management and e-learning in virtual learning community based on social network analysis. *Library Hi Tech*, 37(4), 906–917. <https://doi.org/10.1108/LHT-11-2018-0170>
- Elshaer, I. A., & Saad, S. K. (2022). Learning from Failure: Building Resilience in Small- and Medium-Sized Tourism Enterprises, the Role of Servant Leadership and Transparent Communication. *Sustainability*, 14(22), 15199. <https://doi.org/10.3390/su142215199>
- Elyousfi, F., Anand, A., & Dalmasso, A. (2021). Impact of e-leadership and team dynamics on virtual team performance in a public organization. *International Journal of Public Sector Management*, 34(5), 508–528. <https://doi.org/10.1108/IJPSM-08-2020-0218>
- Fotiadis, A. K., & Stylos, N. (2017). The effects of online social networking on retail consumer dynamics in the attractions industry: The case of ‘E-da’ theme park, Taiwan. *Technological Forecasting and Social Change*, 124, 283–294. <https://doi.org/10.1016/j.techfore.2016.06.033>
- Goraya, M. A. S., Jing, Z., Shareef, M. A., Imran, M., Malik, A., & Akram, M. S. (2021). An investigation of the drivers of social commerce and e-word-of-mouth intentions: Elucidating the role of social commerce in E-business. *Electronic Markets*, 31(1), 181–195. <https://doi.org/10.1007/s12525-019-00347-w>
- Green, C. J., Fortin, P., Maclure, M., Macgregor, A., & Robinson, S. (2006). Information system support as a critical success factor for chronic disease management: Necessary but not sufficient. *International Journal of Medical Informatics*, 75(12), 818–828. <https://doi.org/10.1016/j.ijmedinf.2006.05.042>
- Groen, B. A. C., van Triest, S. P., Coers, M., & Wtenweerde, N. (2018). Managing flexible work arrangements: Teleworking and output controls. *European Management Journal*, 36(6), 727–735. <https://doi.org/10.1016/j.emj.2018.01.007>
- Gross, J. J. (1998). Antecedent-and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, 74(1), 224.
- Gurr *, D. (2004). ICT, Leadership in Education and E-leadership. *Discourse: Studies in the Cultural Politics of Education*, 25(1), 113–124. <https://doi.org/10.1080/0159630042000178518>
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis.

- Journal of Business Research*, 109, 101–110.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hameed, F. (2016). *Impact of Personality on Adaptive Performance with Mediating Role of Emotional Labor. Testing a Mediated Moderated Model among Front-line Female Hospitality Industry Employees in Pakistan*. <https://www.semanticscholar.org/paper/465f0d16587a606f52335aef1283fbbc48af76e>
- Henseler, J. (2018). Partial least squares path modeling: Quo vadis? *Quality & Quantity*, 52(1), 1–8.
- Indraswari, I. T., & Martono, S. (2020). Increased Productivity through Adaptive Behavior, Work Environment, and Training. *Management Analysis Journal*, 9(3), Article 3. <https://doi.org/10.15294/maj.v9i3.34732>
- Iriqat, R. A. M., & Khalaf, D. M. S. (2017). Using E-Leadership as a Strategic Tool in Enhancing Organizational Commitment of Virtual Teams in Foreign Commercial Banks in North West Bank -Palestine. *International Journal of Business Administration*, 8(7), 25. <https://doi.org/10.5430/ijba.v8n7p25>
- Kang, M., & Sung, M. (2017). How symmetrical employee communication leads to employee engagement and positive employee communication behaviors: The mediation of employee-organization relationships. *Journal of Communication Management*, 21(1), 82–102. <https://doi.org/10.1108/JCOM-04-2016-0026>
- Kulshreshtha, K., & Sharma, G. (2021). Understanding e-leadership: Please mind the gap. *Technological Forecasting and Social Change*, 168, 120750. <https://doi.org/10.1016/j.techfore.2021.120750>
- Laulita, N. B., & Setyawan, A. (2021). How Organizational Culture Moderate the Effect of Total Productive Maintenance Practice on Organization's Operational Performance? Evidences from Indonesian Mining Industry. *Jurnal Optimasi Sistem Industri*, 20(2), 93-103.
- Li, W., Liu, K., Belitski, M., Ghobadian, A., & O'Regan, N. (2016). E-Leadership through Strategic Alignment: An Empirical Study of Small- and Medium-sized Enterprises in the Digital Age. *Journal of Information Technology*, 31(2), 185–206. <https://doi.org/10.1057/jit.2016.10>
- Li, Y., Zhang, W., & Wang, P. (2021). Working online or offline: Which is more effective? *Research in International Business and Finance*, 58, 101456. <https://doi.org/10.1016/j.ribaf.2021.101456>
- Luo, N., Wang, Y., Zhang, M., Niu, T., & Tu, J. (2020). Integrating community and e-commerce to build a trusted online second-hand platform: Based on the perspective of social capital. *Technological Forecasting and Social Change*, 153, 119913. <https://doi.org/10.1016/j.techfore.2020.119913>
- Marques-Quinteiro, P., Vargas, R., Eifler, N., & Cural, L. (2019). Employee adaptive performance and job satisfaction during organizational crisis: The role of self-leadership.

- European Journal of Work and Organizational Psychology*, 28(1), 85–100.
<https://doi.org/10.1080/1359432X.2018.1551882>
- McCann, L. (2014). Disconnected Amid the Networks and Chains: Employee Detachment from Company and Union after Offshoring. *British Journal of Industrial Relations*, 52(2), 237–260.
<https://doi.org/10.1111/bjir.12014>
- Navaridas-Nalda, F., Clavel-San Emeterio, M., Fernández-Ortiz, R., & Arias-Oliva, M. (2020). The strategic influence of school principal leadership in the digital transformation of schools. *Computers in Human Behavior*, 112, 106481.
<https://doi.org/10.1016/j.chb.2020.106481>
- Niebuhr, F., Borle, P., Börner-Zobel, F., & Voelter-Mahlknecht, S. (2022). Healthy and Happy Working from Home? Effects of Working from Home on Employee Health and Job Satisfaction. *International Journal of Environmental Research and Public Health*, 19(3), Article 3.
<https://doi.org/10.3390/ijerph19031122>
- Norman, S. M., Avolio, B. J., & Luthans, F. (2010). The impact of positivity and transparency on trust in leaders and their perceived effectiveness. *The Leadership Quarterly*, 21(3), 350–364.
<https://doi.org/10.1016/j.leaqua.2010.03.002>
- Peters, P., & Batenburg, R. (2015). Telework adoption and formalisation in organisations from a knowledge transfer perspective. *International Journal of Work Innovation*, 1(3), 251–270.
<https://doi.org/10.1504/IJWI.2015.074169>
- Prodanova, J., & Kocarev, L. (2021). Is job performance conditioned by work-from-home demands and resources? *Technology in Society*, 66, 101672.
<https://doi.org/10.1016/j.techsoc.2021.101672>
- Qiao, P., Fung, A., Fung, H.-G., & Ma, X. (2022). Resilient leadership and outward foreign direct investment: A conceptual and empirical analysis. *Journal of Business Research*, 144, 729–739.
<https://doi.org/10.1016/j.jbusres.2022.02.053>
- Ramos-Maçães, M.-A., & Román-Portas, M. (2022). The effects of organizational communication, leadership, and employee commitment in organizational change in the hospitality sector. *Communication & Society*, 89–106.
<https://doi.org/10.15581/003.35.2.89-106>
- Richter, N. F., Cepeda-Carrion, G., Roldán Salgueiro, J. L., & Ringle, C. M. (2016). European management research using partial least squares structural equation modeling (PLS-SEM). *European Management Journal*, 34 (6), 589–597.
- Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS. Bido, D., Da Silva, D., & Ringle, C.(2014). *Structural Equation Modeling with the Smartpls. Brazilian Journal Of Marketing*, 13(2).
- Setyawan, A. (2021). The Role of Organizational Culture in the Influence of HR Practices, Knowledge Management, and Talent Management on Organizational Performance. *JDM*

- (*Jurnal Dinamika Manajemen*), 12(2), 275-284.
- Smith, S. A., Patmos, A., & Pitts, M. J. (2018). Communication and Teleworking: A Study of Communication Channel Satisfaction, Personality, and Job Satisfaction for Teleworking Employees. *International Journal of Business Communication*, 55(1), 44–68. <https://doi.org/10.1177/2329488415589101>
- Soelton, M. (2018). How Culture, Training Standard and Discipline on the Employee Performance Affect Hotel Management. *EUROPEAN RESEARCH STUDIES JOURNAL*, XXI(Issue 4), 378–385. <https://doi.org/10.35808/ersj/1128>
- Spencer, J., Daybell, P. J., Eschenfelder, V., Khalaf, R., Pike, J. M., & Woods-Petitti, M. (1998). Contrasting Perspectives on Work: An Exploratory Qualitative Study Based on the Concept of Adaptation. *The American Journal of Occupational Therapy*, 52(6), 474–484. <https://doi.org/10.5014/ajot.52.6.474>
- Stoian, C.-A., Caraiani, C., Anica-Popa, I. F., Dascălu, C., & Lungu, C. I. (2022). Telework Systematic Model Design for the Future of Work. *Sustainability*, 14(12), 7146. <https://doi.org/10.3390/su14127146>
- Tan, R., & Antonio, F. (2022). New insights on employee adaptive performance during the COVID-19 pandemic: Empirical evidence from Indonesia. *Journal of Entrepreneurship, Management and Innovation*, 18(2), 175–206. <https://doi.org/10.7341/20221826>
- Van Wart, M., Roman, A., Wang, X., & Liu, C. (2017). Integrating ICT adoption issues into (e-)leadership theory. *Telematics and Informatics*, 34(5), 527–537. <https://doi.org/10.1016/j.tele.2016.11.003>
- Vătămănescu, E.-M., Dinu, E., Stratone, M.-E., Stăneiu, R.-M., & Vintilă, F. (2022). Adding Knowledge to Virtual Teams in the New Normal: From Leader-Team Communication towards the Satisfaction with Teamwork. *Sustainability*, 14(11), 6424. <https://doi.org/10.3390/su14116424>
- Wynne-Jones, G., Buck, R., Porteous, C., Cooper, L., Button, L. A., Main, C. J., & Phillips, C. J. (2011). What Happens to Work if you're Unwell? Beliefs and Attitudes of Managers and Employees With Musculoskeletal Pain in a Public Sector Setting. *Journal of Occupational Rehabilitation*, 21(1), 31–42. <https://doi.org/10.1007/s10926-010-9251-7>