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**A STUDY ON THE IMPACT OF DIGITALIZATION ON EMPLOYEE WELL-BEING AND
SUSTAINABLE HR PRACTICES: BENEFITS AND CHALLENGES IN THE DIGITAL
ERA**

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ABSTRACT:

Digitalization emerged as an urgent need for organizations during Covid -19 pandemic in remote working conditions which enabled connecting over digital platforms for all kinds of day-today business operations. This adoption of technology as a means of convenience and survival in the business world, also started influencing the employees' work well – being having both positive and negative effects. Digitalization reached its peak in the recent years due to its potential benefits in terms of e-recruitment, automation, data – driven decision making, predictive analytics etc. Its adoption into HR practices led to enhanced employee experience causing increased level of employee engagement through tailored AI – driven HRD interventions. It has been observed that a more engaged employee shows more productivity, due to alignment of goals through a mutual identification with the organization. This enables the development of a greener organizational environment and formation of green attitude where employees work efficiently, utilizing the available resources in a responsible and effective manner producing eco-friendly products and services. In fact, digitalization plays a crucial role in reducing the organization's carbon foot print and attaining organizational sustainability through automation of repetitive tasks saving time, money and energy, digital waste reduction leading to effective production, predictive analytics to understand the future trends and identify the employee needs to provide tailored HRD interventions aimed at enhanced employee well-being. The available literature provides evidence establishing the relationship between employee well-being and sustainable HR practices which is said to be strengthened by leveraging AI adoption in HR. Organizational sustainability relies on how the HR practices are suitable enough to sustain or retain its talented employees depending on enhanced employee well-being. And this further affects organizational sustainability depending on how much an employee feels connected and dedicated to work beyond employee roles and responsibilities to achieve organizational goals. However, this adoption of AI into HR and its integration, is not free from challenges, the most notable one being 'techno stress' caused due to work exhaustion. It arises from techno complexity, techno anxiety and techno insecurity, affecting the employees' work well-being in terms of fear of losing their job as being unable to adapt to the technological advancements or ethical considerations, data privacy concerns or issues of trust and scepticism due to social influence etc. This widens the gap in the adoption and integration of AI into HR and it can further lead to decreased organizational performance as not being able to sustain amidst the challenges in the competitive business world of today. The objective of this study is to analyse the current state of research on the impact of digitalization on employee well-being and sustainable HR practices, to identify the benefits and challenges coming across its way of adoption in HRM and to provide recommendations for organizations to implement AI driven HR practices in a responsible and effective manner to enable enhanced employee well-being thereby leading to organizational sustainability. The study of the available literature has given a clarity about the impact

of digitalization on employee well-being and sustainable HR practices highlighting its potential benefits along with the challenges it faces in the process of its adoption and integration. The findings of the studies emphasize on few possible ways to deal with the challenges, which could be fostering a culture of work based learning, digital leadership, knowledge sharing, knowledge diversity, employee self-efficacy, technological support at the organizational and individual level, maintaining work life balance through IT mindfulness, sustainable HR strategies to enhance employee work life balance by restricting use of technology etc. But the gap identified in the existing research pertains to the lack of investigation and presentation of preventive measures to avoid techno stress thereby aiming to achieve enhanced employee well-being and organizational sustainability. A systematic review approach based on the existing literature has been adopted and PRISMA framework has been used to identify and include literature aiming to establish the relationship between digitalization and its impact on employee well-being and sustainable HR practices and providing valuable insights for industry and HR professionals to understand the challenges hidden behind digitalization. This study provides a strong base for future scope of research on identifying digitalization as a job demand or as a job resource thereby leveraging it's adoption in HRM in a responsible manner providing sustainable strategies to cope with the challenges affecting employees' well-being within an organization.

Keywords: Impact of digitalization on employee well-being, Impact of digitalization on sustainable HR practices, Employee well-being and sustainable HR practices, Benefits of AI integration in HR, Challenges in HR digitalization, Impact of techno stress on employee well-being .

INTRODUCTION & BACKGROUND OF THE STUDY:

Digitalization is said to be one of the most important drivers of civilization, as it affects all spheres like education, science and human resource management.[1] Industry 4.0 has led to the introduction of new technologies into business processes leading to widespread automation and changes which are irreversible that have transformed the entire structure of work today.[2] This digital transformation has both positive and negative impacts on businesses creating both opportunities and threats for organizations.[3] Opportunities can be in the form of the need for innovation to face the competitive business environment, being able to cater to the customer needs and wants, creating a competent workforce to work efficiently etc.[4] Whereas, challenges lie deep into the resistance in adoption of technology, adaption to the changing environment, accepting the changes in the work structure, threats arising due to data privacy concerns.[5] This digitalization came across as a shockwave during the Covid-19 pandemic which forced most organizations to adopt the practice of remote working or teleworking where both organizations and employees were affected by this virtual mode of working caused due to social distancing.[6] It imposed the urgent need to digitise work which further affected employee well-being causing stress, thereby influencing both the physical and mental health of employees. It disrupted the work-life balance and led to decreased job satisfaction and increased unemployment rate during the pandemic.[7] The Covid-19 pandemic acted as a catalyst to accelerate the digitalization of HR practices, thereby forcing organizations to shift from a traditional way of working to adopting and implementing digital tools for core HR functions starting from recruitment to workforce management.[8] As organizations started adapting to these changes, they faced issues with the strategic management of HR functions due to significant threats arising due to trust, scepticism, difficulty in acquiring digital competency within the workforce, thereby leading to a decreased level of employee engagement and a lowered employee morale.[9] The pandemic completely changed the way in which work is done at a workplace, forcing people to stay back at home and work remotely or in a hybrid mode, in cases where the physical presence of the worker at the workplace was mandatory, but that too for limited hours only.[10] Therefore, in this volatile digital environment, there arises a pressing need on organizations to enhance their corporate resilience to cope with these challenges in the competitive business world.[11] 'Corporate resilience' has been defined as the ability of organizations to overcome the challenges and recover from adversity in a quick manner.[12] This corporate resilience can be built only if the organizations are able to align their resources with the demands of the changing environment. This can be achieved through enhancement of digital platform capabilities and an innovative approach towards portfolio technological resource.[13] Digital

platform capability acts as a catalyst to build a strong cross –departmental connection through online communication and collaboration which allows the employees from different departments to stay connected, thereby providing a platform for continuous interaction and feedback amongst them.[14] This not only enhances corporate resilience, but also allows the organization to make in time adjustments in times of crisis remaining flexible enough to respond to the rapid environmental changes, which could strongly affect the survival of the organization in this digital era.[15] Digital platform capability through continuous employee interaction and knowledge sharing not only engages the employees actively, but also provides a platform for informed and data-driven decision making leading to organizational productivity and success. In fact, an innovative approach towards portfolio technological resource which describes the set of technologies adopted and owned by an organization to help in timely response to the adverse environmental conditions through cross-departmental technological knowledge transfer and integration can enhance corporate resilience, thereby enabling organizational sustainability.[16] Thus, we can say that digital transformation can foster organizational sustainability by being able to overcome the environmental challenges and recover from the adverse situations through a strong connectivity within employees in an organization, built through goal alignment aimed to achieve the set organizational goals in an effective manner. This is possible only if the employees have a heightened morale reflecting in highly engaged employees who make optimum utilization of available resources in a responsible manner to provide sustainable products and services in response to the environmental and social aspects. Adoption of digital tools and platforms help organizations remain agile, flexible and adaptable to the rapidly changing external environment, thereby fostering enhanced customer engagement leading to operational excellence. In fact, organizations harnessing the power of digitalization, are the ones which are able to thrive or sustain in this competitive business world of today.[17] Digitalization acts as a linkage between employee well-being and sustainable business practices, making their relationship even stronger. This relationship was strongly affected by remote working conditions during the Covid-19 pandemic, which enabled people to be free from the entangles of time, location and social circumstances, thereby affecting their lives as well as fostering a broader social and environmental change. Being free from these restrictions, they could concentrate more on developing innovative strategies to face the challenges in a rapidly changing scenario, thereby leading to increased employee productivity and organizational sustainability. In fact, organizational sustainability can be derived by practising humanistic management. Humanistic management can be described as a place where people and their natural and social environment are given utmost importance. In the words of Kostera, a Polish promoter of the practice of humanistic management, a humanistically managed organization emphasizes on the creation of a positive impact on individuals, groups and their environment.[18] This concept which focuses on the value of an individual, respect for individual dignity and improvement of quality of life, had started years ago in the 1930s where Elton Mayo’s motivation theory spoke of increasing employee productivity through consideration of certain social and psychological factors. An inference was drawn from Hawthorne experiments conducted by Elton Mayo that employee productivity is significantly affected by these factors. It was surprisingly found that always money and good physical working conditions cannot be the prime motivating factors. In fact, it was observed that there is an increase in the productivity level of employees irrespective of physical working conditions and it happened in case of employees who felt involved, recognised and valued which heightened the employee morale. A sense of being observed and recognized was considered to be more valuable for the employees than other physical conditions which increased employee motivation level influencing employee productivity apparently.[19] So we can say that when an employee understands his/her importance or role in the organization, there is an intrinsic motivation which works towards alignment of individual goals with the organizational goals aiming to achieve organizational success. This leads to a greener environment within the organization, enabling the development of a

green attitude within the employees to walk an extra mile to work efficiently utilizing the available resources in a responsible manner to provide sustainable products and services keeping in mind the environmental and social aspects. These postulates of humanistic management which emphasize on putting people before anything in the organization are consistent with the development and functioning of a sustainable organization.[20] There is where the trend originated of valuing employees and their well-being within an organization. Amongst the various aspects of organizational management, human resource management (HRM) is one such area where the potential benefits of artificial intelligence (AI) are being harnessed the most in the recent years. The convergence of AI with traditional HR practices has provided innovative solutions to cater to the demands of the dynamic work environment which is influenced by a global push towards sustainability. The integration of AI into HR practices has provided tremendous benefits from streamlining recruitment processes using AI algorithms to increasing employee experience using AI powered chat bots and predictive analytics through AI driven employee surveys to enhance employee engagement. These sustainable HR practices have not only helped HR professionals in the digital era to conduct routine tasks efficiently, but also focus on strategic management of core HR functions in a more effective manner.[21] AI integration into HRM is not just an emerging technological trend, but it is aimed at a broader aspect of development of sustainable human – centric approaches which further lead to AI driven sustainable HR practices crucial to the dynamic business environment of today.[22] This increasing interest in the adoption of AI into HR to achieve organizational sustainability is not free from challenges as it significantly affects employee well-being through developing employee anxiety, job ambiguity, job security, remuneration challenges, privacy concerns etc. [23] These further results in ‘techno stress’ which is considered to be the dark side of digitalization affecting employee well-being.[24] This happens because organizations to remain competitive in the new age disruptive, volatile, uncertain, complex and ambiguous (DVUCA) environment, are continuously introducing new information and communication technologies (ICT) which is significantly affecting employee behaviour towards its adoption.[25] The reason behind this is that it is regulated by the factor of self-perceived level of overall ICT competencies.[26] In the race to become competent enough to use ICT to adjust to the rapidly changing business environment, employees have to work for long hours handling heavy workload, thereby affecting the physical and mental health of employees.[27] The feeling of being incapable to use ICT effectively gives rise to potential stress referred to as techno stress.[28] It is defined as a negative psychological and behavioural response humans have due to anxiety, fatigue and exhaustion caused due to technology overload.[29] Techno stress arising due to techno invasion, disruption of work-life balance, techno overload, techno complexity, techno insecurity and techno uncertainty, [30] is influenced by personal, social and cultural factors like age, gender, societal pressure etc.[31] Therefore, certain coping strategies as protective measures for techno stress can be suggested which are as follows: i) being optimistic and energetic about adopting the techno stressors as growth opportunities thereby leading to eustress (good stress), compelling individuals to develop a continuous learning and friendly attitude towards acceptance of technology [32]; ii) psychological detachment and a restriction on the use of technology by a sense of control, could help employees to relieve themselves from stress and also maintain their work-life balance [33]; iii) organizational and social support are also considered as successful coping strategies where effective organizational communication can help reduce techno stress and enhance technical self-efficacy [34]; iv) technical support at the organizational level when required along with the implementation of tailored training and development programs, could help employees cope with the adaptation of new technology and reduce the level of job dissatisfaction arising due to techno stress [35]; v) handling techno invasion in an effective manner by drawing boundary lines between working and non-working hours, thereby fostering a good work-life balance and higher level of job satisfaction [36] ; vi) fostering the development of digital leadership which is described as a combination of innovative leadership

skills and digital competencies thereby enabling digital awareness, digital visioning, digital strategy, digital execution, can further help employees enhance their digital capabilities aiming at achievement of organizational goals and objectives.[37] The mentioned strategies are only a few as suggested in some of the available literature, but there no proper scientifically substantiated evidence of investigation and presentation of protective or preventive measures to avoid techno stress. [38] There is dearth in the current state of research on the coping mechanism of techno stress. There is no comprehensive systematic overview of research regarding the coping strategies or the ways to effectively reduce the level of techno stress yet.[39] Available studies have mostly highlighted the causes and consequences of techno stress and only few specific reviews talk about the prevention strategies.[40] Therefore, techno stress arising from digitalization can be viewed as a job resource or a job demand and since available studies report more on the negative impact of techno stressors and less on their positive impact, there arises the need to highlight the potential benefits of AI integration in HR with respect to enhancement of employee well-being and sustainable HR practices to face the challenges in the rapidly changing dynamic business environment.

Given this set up for the study, the following are the **research objectives**:-

1. To analyse the current state of research on the impact of digitalization on employee well-being.
2. To investigate the impact of digitalization on sustainable HR practices.
3. To establish the relationship between employee well-being and sustainable HR practices affected by AI integration.
4. To identify the potential benefits of digitalization of HR practices for employee well-being and organizational sustainability.
5. To analyse the challenges coming in its way of adoption and integration for employee well-being and sustainable HR practices.
6. To provide recommendations for organizations and HR professionals to implement AI driven HR practices in a responsible and effective manner to enable enhanced employee well-being thereby leading to organizational sustainability.

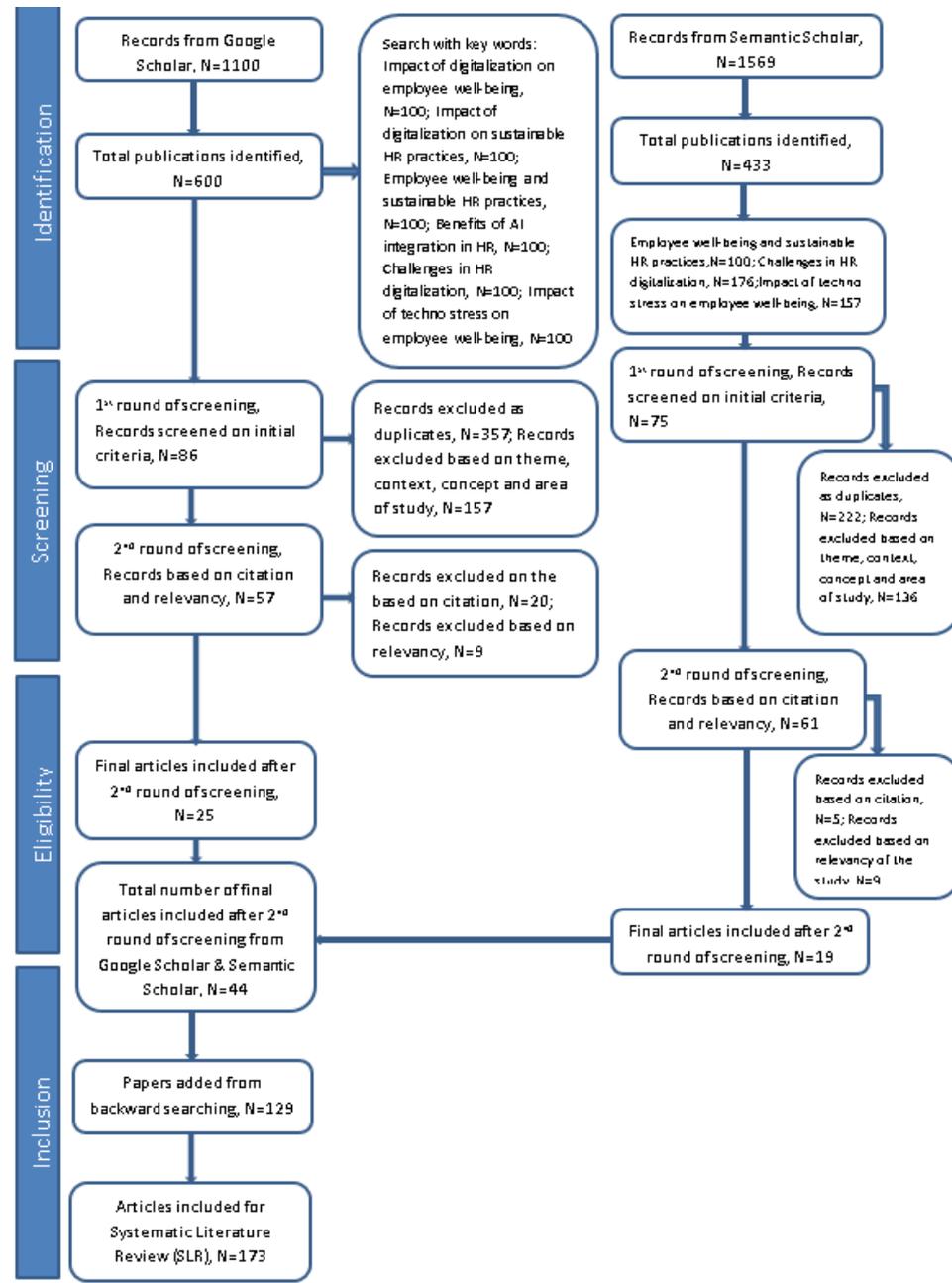
METHODOLOGY:

This study is based on a systematic literature review. A PRISMA framework which stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses has been adopted to provide a clear, well-structured and reliable research design and to improve the quality and transparency of the findings of the study, thereby reducing the bias in the reporting system. The PRISMA framework involves four important steps namely identification, screening, eligibility and inclusion that help the researcher to search and include relevant literature pertaining to the aim of the study.[41] Based on this framework, this study sought to find research articles published mostly between 2020 to 2024 and few between 2016 to 2019 through backward citation searching method to gather all relevant information based on available theories and observation, experience and experimentation in relation to the impact of digitalization on employee well-being and sustainable HR practices, highlighting the benefits derived and the challenges that come its way of adoption and integration in HRM.

Inclusion and exclusion criteria:

Based on the titles and the abstracts of the selected studies, an initial screening was done followed by further analysis wherein these documents were thoroughly investigated to identify the research areas used by authors, available models and theories with respect to AI integration in HR and its impact on employee well-being and sustainable HR practices. The exclusion criteria was based on publications which were not pertinent to the theme, context and realm of the study and also based on

the number of citations received so as to select only those research articles which contain relevant information enabling the researcher to answer the research questions in relation to the research objectives.



FINDINGS & ANALYSIS:

Impact of digitalization on employee well-being:

AI can be described as ‘curse or a blessing’ for employees in the near future based on its adoption, integration, application and management.[42] Its role can be both fascinating or concerning.[43] The beneficial side of digitalization can be seen in terms of automation of tasks, implementation of e-HRM systems, enhanced communication and collaboration, use of HR analytics, development of digital competencies etc.[44] It is believed to be a social trend that can affect all types of businesses at almost all levels, highlighting its uncertainties as well.[45] It is very difficult to predict the future of human jobs with AI automation as it depends on factors like industry, economy and government policies. On one hand, it can improve work efficiency and on the other hand, it can create problems

for employees as machines can replace humans for tasks which required human intervention earlier. Machines can provide better employee experiences like for example, automated chat bots answering frequently asked questions in one go providing real-time experiences.[46] Studies report how AI integration in HR in the form of e-HRM systems like e-recruitment, on boarding and remote working which accelerated during the Covid-19 pandemic has highlighted the importance of digitalization in HRM as it has helped immensely in reducing the burden of HR professionals, thereby enabling them to focus on strategic initiatives.[47] In fact, HRM has gone through an evolution from being a support function to becoming a strategic business partner in order to achieve organizational goals in the digital era.[48] HR analytics has helped in optimizing processes to provide data-driven decision-making and it has gained immense importance in the recent years in providing valuable insights through analysis of current HR data and forecasting future trends and outcomes in the workforce.[49] Though AI is said to revolutionize the global economy, its journey from its adoption to its effective implementation is full of challenges which include technical as well as human-centric barriers, thereby leading to disappointing results or increased chances of non-adoption.[50] There are many organizations that focus primarily on the efficiency and productivity element of AI and less on the human factors.[51] They fail to understand the fact that AI implementation is not always about ethical responsibilities, but it is a strategic initiative from business point of view to retain the talented workforce. And if the human-centric adoption of AI is ignored, it can create immense problems for organizations to retain skilled professionals, thereby affecting organizational performance and productivity. This can further influence the customers leading to a decrease in the willingness to purchase from a company which does not value the human element.[52] The adoption of new age technologies based on AI automation have raised a serious concern amongst employees creating a fear of job loss, decreased human participation, deterioration in job quality, human-machine conflict, job polarization, wage gap etc.[53] These issues which can tremendously affect employee well-being leading to deterioration of physical and mental health of employees, have been reported in a comprehensive report on future of work by five international organizations like International Labour Organization, Organisation for Economic Cooperation and Development, United Nations Industrial Development Organization, United Nations Development Programme, and World Bank, to have caused job losses, social and economic inequality, job uncertainty and insecurity etc.[54] Digitalization is said to have blurred the boundary line between work and professional life leading to the rise of crowd work, potential for deskilling, societal polarization and urbanization of industries which have significantly raised job security concerns further affecting employee well-being.[55] Therefore, we can say that though digitalization can be seen to be truly beneficial in increasing organizational efficiency, performance and productivity, on the other hand it also has adverse effects on employee well-being in terms of anxiety, stress, burnout etc. which cannot simply be ignored.[56]

Impact of digitalization on sustainable HR practices:

Witnessing the potential benefits of AI integration into HR, a question arises that how much are the employees resilient to adapt to the rapid changes taking place in the organizational environment caused due to digitalization of HR practices. The change can only take place if the employees are ready to accept it and up skill and reskill themselves to cater to the challenges arising in the external environment. In fact, employee resilience is an important factor to drive organizational sustainability through the development of sustainable HR practices, thereby affecting employee behaviour.[57] This resilience of employees arises due to a sense of belongingness towards the organization leading to a committed attitude of employees towards achievement of organizational goals. This strong connectivity acts as a catalyst in enhancing the level of employee engagement.[58] The alignment of individual goals with the organizational goals triggered by AI driven sustainable HR practices has a significant effect on employee behaviour, thereby influencing

employee performance and productivity.[59] Studies have shown that a highly engaged employee with a heightened morale is likely to show organizational commitment leading to the development of a green attitude to work an extra mile beyond assigned roles and responsibilities. This further leads to decrease in employee turnover, absenteeism fostering organizational sustainability.[60] Sustainable HRM refers to the commitment towards the triple bottom line which emphasizes on its impact in relation to economic, social and environmental aspects.[61] AI driven sustainable HRM practices enable the fusion of traditional HR practices with the transformative ability of AI contributing immensely in the strategic management of core HR functions. It helps businesses to not only focus on economic returns, but also concentrate on sustainable growth through reduction of their carbon footprints and enhancement of broader social and environmental footprints.[62] The concept of AI driven sustainable HRM practices can be better explained through the Ability-Motivation-Opportunity (AMO) framework which highlights the importance of employee capabilities, incentives and motivation on organizational outcomes.[63] According to this model, employee ability which refers to its capability to achieve organizational goals and objectives, can be enhanced by implementing AI driven employee surveys to scan the employee sentiments and understand the employee needs and wants, thereby enabling organizations to provide tailored training and development programs for employees in need. AI integration into HR can help provide personalized learning experiences and career development programs fostering enhancement of employee skills and competencies which further affects organizational performance and sustainability.[64] Enhancement of employee capability leads to an intrinsic motivation to work efficiently and to perform well. AI integration provides a platform for an effective performance appraisal, thereby providing rewards and incentives to recognize employee achievements in an unbiased and error free manner. It helps to identify the specific improvement areas and provide real-time feedback to employees. This further increases the employee engagement level leading to enhanced job satisfaction and increased retention rate resulting in organizational sustainability.[65] Electronic performance appraisal system is one such digitalized HR practice whose effective implementation can contribute largely to influence employee attitude towards organization through a fair appraisal system and constructive feedback for improvement and heightened employee morale.[66] It is believed that highly motivated, committed and engaged employees lead to increased social sustainability of an organization.[67] Social sustainability refers to the employee ability to work collaboratively as a team in any situation which increases the integration amongst the workforce.[68] In fact, no organization can develop sustainability if there is individualism over powering collectivism within the employees as it doesn't allow alignment of goals required for organization success.[69] AI driven HR practices increase collaboration within employees, help in better decision making through data-driven insights and optimise the processes in which work is done enabling cost reduction by reducing digital waste, [70] thereby creating opportunities for employees to develop, grow and succeed by focusing on creativity and innovation required for strategic management of core HR functions rather than getting stuck with routine tasks and remaining unproductive.[71] Therefore, we can say that digitalization is contributing largely towards organizational sustainability by maintaining the flexibility and agility of HR functions in the digital era. In fact, remaining agile is a crucial factor in achieving sustainability and studies report that it is being widely used in leading organizations like Google, Apple, Facebook, Amazon and Microsoft.[72]

Impact of AI driven sustainable HR practices on employee well-being: leveraging human centric HRM approach for sustainable development:

Studies say that the combination of technological progress and the population change after Covid-19 pandemic has largely affected both organizations and employees. Researchers have identified 'sustainable employability' as a means to empower both employees and employers to align their

goals towards achievement of organizational success through the development of an inclusive and adaptive workforce capable of addressing the challenges lying in the competitive business environment of today. Sustainable employability can be described as an employee's continuous ability to deliver value based performance maintaining a sound mental and physical health condition throughout the entire employee life cycle. With the rapid advancements of technology, it is very important for employees to up skill and reskill themselves to become competent enough to accept, adapt and adjust according to the evolving market conditions.[73] To build a resilient workforce, organizations need to focus on the human element rather than solely concentrating on the economic returns, as people are said to be the real assets of an organization. In fact, it is the competent workforce which drives the organization towards a sustainable future. To bring about this change, organizations should focus on a human centric HRM approach. As per the human centred agenda defining the future of work as stated by the International Labour Organization, this approach aims at placing the people in the centre of the economic and social policy and business practice, thereby strengthening the social contract. It aims at investing in people to up skill and reskill themselves to meet the challenges of the digital workplaces in order to provide them with sustainable employment opportunities. The lack of required digital skills arising due to the digital transformation of workplaces can affect both employees and organizations if not addressed in time. It can lead to job loss for many semi-skilled employees who remaining incapable to adapt to the rapid environmental changes will be left out and this will have an adverse effect on employee well-being. In the organizational context, retention of digitally skilled workers is crucial for a sustainable organizational growth and success in the digital era.[74] In a highly competitive business environment, organizations are under immense pressure to enhance their operational efficiency, to maintain workforce stability and uphold the triple bottom line concept of encompassing the three key factors people, planet and profit for driving organizational productivity and success.[75] The modern approach towards organizational welfare emphasizes on the very element of employee well-being alongside financial growth which further leads to enhanced employee engagement, increased job satisfaction and long term organizational productivity, thereby fostering organizational sustainability amidst the challenges of the evolving digital workplaces.[76] The sustainable development of Industry 4.0 is affected by certain human related barriers like digital skill gaps, socio-economic inequalities, job loss, leadership, organizational culture etc.[77] So we can say that sustainable development of an organization can be possible only if the approach is towards being socially responsible and working in a people centric framework, thereby enhancing employee morale leading to increased employee engagement, productivity and performance.[78] A highly motivated workforce is driven by intrinsic motivation to work beyond assigned roles and responsibilities to achieve organizational goals, thereby leading to the development a greener environment within the organization. If employees feel connected and supported, it will lead to enhanced communication and immense knowledge sharing amongst employees regarding awareness about green process innovation. Therefore, leveraging the internal green social capital is crucial in strengthening the benefits derived from green process innovation towards development of organizational sustainability.[79] Keeping in mind that humans are the most valuable assets of an organization, it becomes all the more important to focus on the mental and physical well-being of employees. Therefore, sustainable HRM practices are aimed to link organizational sustainability with HRM to focus on developing a healthy, resilient and inclusive workforce capable to beat the upcoming environmental challenges and to create a platform for the growth of sustainable practices within the organization.[80] This is further accelerated by sustainable leadership that involves emphasizing on the human element considering their growth, development and well-being, thereby safe guarding the relationship between employees, organizational leaders and sustainability. This approach can lead to a positive developmental process for both employees and organizations acting as a preventive measure to address the challenges arising in the dynamic organizational

environment. Therefore, practices involving the sustainable modification of HRM strategies is crucial to handle such environmental issues and also to effectively manage the negative side of feedback and possible side effects related to it.[81] The importance of sustainable HRM practices and well-being is dependent on attaining the SDG goals, thereby fostering human capital development to create a competitive edge for the organization in the digital era.[82] Employee well-being arising as a significant worrying factor for organizations, the integration of AI into HR practices can do wonders to scan the mental and physical health condition of employees, thereby identifying the factors influencing employee well-being and further enhancement of employee engagement level, productivity and performance. These factors which need to be addressed at the earliest to foster organizational sustainability and productivity, can be measured and evaluated by the implementation of digital tools in an effective and responsible manner. AI enabled automated cameras can be installed at different positions at the workplace to scan the employee activity and specific emotional characteristics during official working hours. These cameras can capture clicks of employees at specific intervals during working hours and then the computerized vision can be used to separate the personal conduct standards data to scan employee feelings like uneasiness, discomfort or other psychologies issues through identification of specific emotional characteristics. It helps in the effective measurement of employee satisfaction factor and how glad the employee feels at work and enables HR managers to address the related issues through frequent counselling sessions and meetings aimed at improving employee satisfaction level which directly affects employee well-being.[83] The implementation of AI sensors can help track employee movements and activities throughout the day, for example recording the amount of time the employee remains seated or remains constant in a certain position for work. The calculation of total working hours can be easily done through this process, enabling the HR administrative officer to track employee productivity crucial for organizational success.[84] This technology can track the employee eye movements to scan the level of distraction or engagement during working hours, thereby enabling HR managers to conduct life skill training programs for employees to help them in enhancing work-life balance. An employee with a sound mental and physical health condition can actively concentrate and work more efficiently showing higher productivity.[85] Therefore, we can say that the use of AI in HR has a tremendous potential to revolutionize the way in which the core HR functions are conducted to enable enhancement of employee well-being further leading to sustainable growth and development of the organization.[86] In fact, the success of core HR functions depends on the factor as to how much an organization is able to derive the potential benefits of digitalization of HR practices, balancing it with the human empathy and judgement applied in these practices.[87]

Benefits of AI integration in HR:

The digitalization of HR practices has led to a tremendous transformation in the way in which traditional core HR functions are conducted, giving rise to a technology enabled system 'people analytics'. It is such an approach that has changed the organizational attitude towards HRM. It is an analytical tool which collects and analyses HR data aimed at improving employee performance and well-being, thereby providing a competitive edge for the organization through data-driven decision making in a bias-free manner with accuracy and precision. The contribution of this technology is much more than just enhancing the traditional HR functions, as it has a multi-dimensional impact on organizations starting from talent management to employee engagement and even predicting the future workforce trends to enable formulation and implementation of effective organizational strategies to achieve organizational sustainability and success. People analytics also known as workforce analytics is described as the science of employee behaviour and productivity which has witnessed a huge shift in the way in which organizational workforces are managed today.[88] The practical applications of people analytics has provided immense benefits through tailored and

personalized learning and development programs focusing on enhancement of employee experience. Implementation of AI chat bots to answer raised questions immediately in an effective manner has led to the enhancement of employee satisfaction level leading to increased engagement, thereby making the employees more productive and involved in their work.[89] AI and machine learning technology have proved to be immensely beneficial in identifying biases and errors in the existing recruitment and performance evaluation procedures. It highlights areas where biases may exist based on analysis of historical HR data, enabling organizations in data driven decision-making which is free from any kind of errors. This further helps organizations to develop an equitable and inclusive workforce, thereby incorporating the principles of diversity and inclusion in the workplace to attain a sustainable organizational growth and development.[90] The strategic application of people analytics enables organizations to leverage the data, insights and tools to support organizational decision –making and process optimization.[91] Digital transformation plays a crucial role as it involves profound changes in the business models, organizational culture and the organization’s value chain, thereby affecting the nature and type of jobs and the people who are going to manage it.[92] Therefore, creating an adaptive and inclusive workforce becomes imperative in response to the rapidly changing business environment. The integration of AI in talent management requires organizations to take strategic initiatives to improve the individual skills of the employees as well as to establish co-ordination between people, processes and technologies.[93] In fact, more than anything else digital transformation needs talent and the combination of the right people, data and processes led by a leader who can drive change, is something which organizations can do to develop a competent workforce to face the challenges arising in the digital era.[94] Therefore, we can say that with an aim to attract, develop and retain talent within the organization, the area of talent management is immensely benefited by digitalization through various technology enabled systems efficient in screening the right talent to identifying the skills gaps, thereby leading to tailored training and development programs fostering the enhancement of employee engagement affecting employee well-being. Improvement of employee well-being leads to increased motivation level and a motivated workforce is more likely to continue working for a longer tenure in an organization, thereby fostering enhancement of employee retention. Retention of talented employees is crucial for organizations to remain competitive in the digital era. Focusing on the value employees have in an organization, taking care of their physical and mental well-being is an extremely important factor affecting organizational sustainability. AI powered systems like cameras and sensors can be used to analyse the employee health data to identify patterns indicating certain health issues and to provide personalized health recommendations or workplace health and safety guidelines, to improve workplace ergonomics by tracking certain musculoskeletal disorders and making necessary ergonomic workstation adjustments to create a safe working environment for employees, thereby preventing potential workplace hazards.[95] These devices can help in improving employee experience by scanning the employee comfort level at work and providing recommendations to adjust the temperature and humidity levels at the workplace, making desk or chair adjustments as employee preferences etc., thereby optimizing the workplace environment for employee comfort. The workplace environment acts as a crucial factor affecting employee performance and productivity as any kind of discomfort at the workplace can become a potential cause for stress. These causes if not identified and addressed in time, can have an adverse effect on employee well-being, thereby affecting organizational sustainability through decreased job satisfaction and engagement level.[96] AI based performance management systems can provide accurate, bias-free, objective evaluations to measure employee productivity. They can improve employee performance level through tailored development programs and a real-time feedback system enabling employees to work immediately on their identified areas of improvement. AI driven employee surveys use Natural Language Processing (NLP) to provide insights into emerging workforce trends. These surveys can extract useful information from a large amount of unstructured

data related to employee feedback and analyse employee sentiments to gain deeper insights into various employee related issues, thereby enabling organizations to develop strategies to enhance employee satisfaction and engagement further affecting employee well-being.[97] These mentioned benefits of AI integration in HR pave the path towards adoption of AI driven HR practices for employee well-being and organizational sustainability.

Challenges in HR digitalization: impact of techno stress on employee well-being:

Before opting for adoption of AI driven HR practices, organizations need to consider the fact that digitalization of HR practices is not free from challenges. As discussed earlier, the rapid changes due to digitalization have affected employee's work well-being in the following manner: fear of job loss due to automation of many manually executed tasks; people unable to adapt to the rapid changes due to lack of digital skills; ethical considerations and data privacy concerns as it involves handling and analysis of huge amount of employee data; issues of trust, scepticism due to social influence etc. These are some possible reasons which have probably widened the gap in the adoption and integration of AI in HR for organizational growth and success. The anxiety and frustration arising out of these challenges leads to 'techno stress' which further affects the physical and mental health of employees. Techno stress arises due to the following reasons: i) techno invasion which arises due to the fact that technology is invasive and it is an integral part of every day's life in this digital era; ii) being connected online always for work hampers the personal space of employees, thereby affecting the work-life balance; iii) techno overload resulting in increase in work load amplified by the huge amount of work-related information that it carries; iv) techno complexity arising due to inability to adapt to the technological advancements, thereby giving a feeling of inadequacy and dissatisfaction; v) techno insecurity arising due to fear of job loss due to incapability to achieve organizational goals and objectives; vi) rapid advancements lead to constant changes compelling the workforce towards continuous learning in order to survive in the digital era.[98] The available literature on techno stress has identified many factors that can influence the stressors affecting employee well-being which can be stated as individual differences, organizational characteristics and perceptions related to technology and its characteristics.[99] In the organizational context, techno stress arises due to security issues and role stress which has an adverse effect on the psychological well-being of employees.[100] This further affects the individuals physiologically resulting in disturbed sleep, increased cardiovascular strain and hormonal changes etc.[101] According to the Transactional Model of Stress (TMS), there are two ways in which people respond to stressful situations which can be characterised as primary appraisal and secondary appraisal. The primary appraisal may be in the form of threat or challenge and the secondary appraisal may be in the form of control. This leads to diverse emotional responses including negative ones like anxiety and discontent and the positive ones being excitement and enjoyment.[102] Studies have tried to position techno stress in the Job Demands-Resources Model (JD-R) to understand the multi-dimensional aspect of it. The model illustrates that employees are affected by two broad categories of factors namely job demands and job resources. Job demands are described as those which require constant physiological and psychological effort caused due to work overload, deadlines, workplace conflicts and fear of job loss. On the other hand, job resources are described as those which are proportionate to the achievement of work related goals which can be characterised as social support, control over one's own self to do the work efficiently and receiving performance feedback which help reduce the physiological and psychological costs associated with it. Therefore, this model shows that high job demands and low job resources can lead to anxiety, burnout, and dissatisfaction having a negative effect on employee well-being. Whereas, high job resources and low job demands lead to higher employee engagement, thereby positively affecting employee well-being resulting in increased productivity and performance. So, we can say that by increasing the job resources and lowering the job demands, can reduce the stress level of employees

and keep them motivated and contented to work towards achievement of organizational goals, thereby leading to organizational sustainability.[103] In fact, organizations can play a crucial role in reducing the job demands and creating job resources to cultivate a supportive and resourceful environment providing timely feedback and tailored training and development programs, thereby enabling employees to up skill and reskill themselves acquiring the required competencies in the form of digital skills to face the challenges of the dynamic business environment.[104] As already discussed, few possible coping strategies as mentioned in a few reviews talk about maintaining self-control on the usage of technology through IT mindfulness. This means to regulate the digital habits pertaining to the usage time of technology by prioritizing the work and keeping it aside and switching off from it when at home or personal work, so as to maintain a good work-life balance. Other strategies could be reframing the situations trying to visualize the positive side of it or being optimistic reinterpreting the situations in a positive manner, thereby compelling employees to feel motivated to work towards its achievement with enthusiasm and a positive mind set. [105]

IMPLICATIONS:

This study explores the factors influencing the gap in the adoption and integration of AI in HRM, highlighting the impact of digitalization on employee well-being and sustainable HR practices. Therefore, there are some implications based on the findings of the study which are as follows:

1. To develop informed organizational strategies for implementing digitalization for employee well-being and sustainable HR practices.
2. To improve employee experience by understanding the impact of digitalization on employee well-being.
3. To implement sustainable HR practices that can balance the organizational needs with employee well-being.
4. To help HR practitioners understand the need and importance of digital literacy for employees, thereby enabling them to develop strategies to support digital skill development.
5. To emphasize the need for an employee-centric approach towards digitalization, prioritizing employee well-being and sustainable HR practices.

CONCLUSION:

The summation of this systematic literature review goes as follows:

To provide a background to the study, the existing literature was carefully screened and included to show how the Covid-19 pandemic had changed the entire work culture of organizations due to the revolutionary change brought about through digitalization of workplaces, thereby influencing the physical and mental well-being of employees further affecting employee motivation. This is regulated by crucial factors like employee engagement, retention, performance and productivity further affecting sustainable organizational growth and success. The study includes research articles searched within six categories addressing the different aspects of the study to explore the impact of digitalization on employee well-being and sustainable HR practices, thereby establishing a relationship between them and highlighting the benefits of HR digitalization and the challenges it is facing in its adoption and integration in HRM. The findings of the study reveal that despite of the potential benefits of HR digitalization as reported in various studies, not all organizations have fully adopted this change till date. Therefore, the review aims at highlighting the impact of digitalization on employee well-being which further affects organizational sustainability. Amongst the challenges in the adoption and integration of AI in HR reported in the studies, the possible reasons encountered were related to individual differences, organizational characteristics and the perception people have towards technology and its characteristics. The most notable challenge in the digital era has been found to be techno stress which affects employee well-being thereby influencing organizational sustainability. The studies have highlighted the causes and consequences of techno stress on

employee well-being very clearly, but less significance has been there in bringing out the coping mechanism necessary to leverage the adoption intention of AI in HRM. Since it is the people who have been highlighted as the main assets of an organization in most of the studies, therefore, through the review it has been proposed to emphasize on an employee-centric approach towards digitalization, prioritizing employee well-being and sustainable HR practices. This is said to be crucial, as it is the competent workforce that can help an organization achieve its goals in an effective manner addressing the challenges of the dynamic business environment in the digital era. The study provides recommendations for HR practitioners and organizations to implement sustainable HR practices that support the up skilling and reskilling of employees to develop an adaptive, inclusive and competent workforce to face the upcoming challenges of digitalization, highlighting the need and importance of digital literacy amongst employees in this digital era. The study aims to bridge the gap between the adoption and integration of AI in HRM by highlighting its impact on employee well-being, thereby affecting organizational sustainability. Based on the review, only few studies have talked about the coping strategies or ways to handle the challenging situations faced by organizations in the digital era. There is no proper scientifically substantiated evidence of investigation and presentation of protective or preventive measures to avoid techno stress in the studies reviewed. There are also some limitations to the study as it is based on research publications included mostly between the time span of last 4 years especially pertaining to the impact of digitalization during the post Covid-19 scenario when it was at its peak. The rest of the studies included are mostly based on previous reviews retrieved through backward citation searching to get into the depth and understanding the different aspects of the study to establish the relationship and impact of digitalization on employee well-being and sustainable HR practices. Though the authors have tried their level best to analyse and report the findings as much as possible within the limited scope of the study, yet researchers can advance with the following future research directions to understand the importance and the need of integration of AI in HRM for a sustainable organizational growth and success:

1. To conduct primary research in order to provide more in-depth insights into the impact of digitalization on employee well-being and sustainable HR practices.
2. To conduct context-specific research in the said area to identify unique challenges and opportunities.
3. To conduct longitudinal research in order to provide insights into the long term impact of digitalization on employee well-being and sustainable HR practices.
4. To incorporate interdisciplinary approaches to provide a more comprehensive understanding of the research topic.

REFERENCES:

- [1] Ergasheva, S.T., Gornostaeva, Z.V., Sozinova, A.A., Borodin, G.V. (2024). Digital HRM as a model of knowledge management in the decade of science and technology in Russia. *PES*, 6, pp. 1087-1096. <https://doi.org/10.24874/PES06.03A.001> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, *SIŁE S I L E S I A N U N I W E R S I T Y O F T E C H N O L O G Y P U B L I S H I N G H O U S E*, <http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [2] Poisat, P., Cullen, M., Calitz, A.P. (2024). Human resource managers' perceptions on the impact of AI on the South African workforce. *SA Journal of Human Resource Management*, 22, 13. <https://doi.org/10.4102/sajhrm.v22i0.2593> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, *SIŁE S*

- IAN UNIVE R S I TY OF T E C HNOLOGY P UB L I S HING HOUS E,
<http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [3] Straková, J., Talíř, M., Váchal, J. (2022). Opportunities and threats of digital transformation of business models in SMEs. *Economics & Sociology*, 15, pp. 159-171. <https://doi.org/10.14254/2071-789X.2022/15-3/9> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCECESES, S I L E S IAN UNIVE R S I TY OF T E C HNOLOGY P UB L I S HING HOUS E,
<http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [4] Ergasheva, S.T., Gornostaeva, Z.V., Sozinova, A.A., Borodin, G.V. (2024). Digital HRM as a model of knowledge management in the decade of science and technology in Russia. *PES*, 6, pp. 1087-1096. <https://doi.org/10.24874/PES06.03A.001> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCECESES, S I L E S IAN UNIVE R S I TY OF T E C HNOLOGY P UB L I S HING HOUS E,
<http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [5] Karwehl, L.J., Kauffeld, S. (2021). Traditional and new ways in competence management: Application of HR analytics in competence management. *Gr. Interakt. Org.*, 52, pp. 7-24. <https://doi.org/10.1007/s11612-021-00548-y> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCECESES, S I L E S IAN UNIVE R S I TY OF T E C HNOLOGY P UB L I S HING HOUS E,
<http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [6] Kniffin, K.M.; Narayanan, J.; Anseel, F.; Antonakis, J.; Ashford, S.P.; Bakker, A.B.; Bamberger, P.; Bapuji, H.; Bhawe, D.P.; Choi, V.K.; et al. COVID-19 and the workplace: Implications, issues, and insights for future research and action. *Am. Psychol.* 2021, 76, 63–77.[CrossRef] as cited in: Juchnowicz, M.; Kinowska,H. Employee Well-Being and Digital Work during the COVID-19 Pandemic. *Information* 2021, 12, 293. <https://doi.org/10.3390/info12080293>
- [7] Bakker, A.B.; vanWingerden, J. Rumination about COVID-19 and employee well-being: The role of playful work design. *Can.Psychol.* 2020, 62, 73–79. [CrossRef] as cited in: Juchnowicz, M.; Kinowska,H. EmployeeWell-Being and Digital Work during the COVID-19 Pandemic. *Information* 2021, 12, 293. <https://doi.org/10.3390/info12080293>
- [8] Vedernikov, M., Bazaliyska, N., Zelena, M., Volianska-Savchuk, L., Boiko, J. (2022). Management of remote staff selection processes by using Smart HR recruiting technology during COVID-19 pandemic. *Polish Journal of Management Studies*, Vol. 26, No. 1. <https://doi.org/10.17512/pjms.2022.26.1.21> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCECESES, S I L E S IAN UNIVE R S I TY OF T E C HNOLOGY P UB L I S HING HOUS E,
<http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [9] Poisat, P., Cullen, M., Calitz, A.P. (2024). Human resource managers' perceptions on the impact of AI on the South African workforce. *SA Journal of Human Resource Management*, 22, 13. <https://doi.org/10.4102/sajhrm.v22i0.2593> & Urbaniec, M., Małkowska, A., Włodarkiewicz-Klimek, H. (2022). The Impact of Technological Developments on Remote Working. *Insights from the Polish Managers' Perspective*, 14(1), 552; <https://doi.org/10.3390/su14010552> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCECESES, S I L E S

- IAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE,
<http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [10] Juchnowicz, M.; Kinowska, H. Employee Well-Being and Digital Work during the COVID-19 Pandemic. *Information* **2021**, *12*, 293. <https://doi.org/10.3390/info12080293>
- [11] Chaoli Tang, Shuyun Dong, Rui Zhou, The impact of digitalization on corporate resilience, *International Review of Economics and Finance* **97** (2025) 103834, <https://doi.org/10.1016/j.iref.2024.103834>
- [12] Hillmann, J., & Guenther, E. (2021). Organizational resilience: A valuable construct for management research? *International Journal of Management Reviews*, *23*(1), 7–44 as cited in: Chaoli Tang, Shuyun Dong, Rui Zhou, The impact of digitalization on corporate resilience, *International Review of Economics and Finance* **97** (2025) 103834, <https://doi.org/10.1016/j.iref.2024.103834>
- [13] Chaoli Tang, Shuyun Dong, Rui Zhou, The impact of digitalization on corporate resilience, *International Review of Economics and Finance* **97** (2025) 103834, <https://doi.org/10.1016/j.iref.2024.103834>
- [14] Lu, Q., Song, L., & Yu, K. (2023). The effects of operational and digitalization capabilities on SMEs' supply chain financing under supply risk. *International Journal of Logistics Research and Applications*, *26*(12), 1642–1662 as cited in: Chaoli Tang, Shuyun Dong, Rui Zhou, The impact of digitalization on corporate resilience, *International Review of Economics and Finance* **97** (2025) 103834, <https://doi.org/10.1016/j.iref.2024.103834>
- [15] Jiang, H., Yang, J., & Gai, J. (2023). How digital platform capability affects the innovation performance of SMEs—evidence from China. *Technology in Society*, *72*, Article 102187; Liu, R., Song, J., & Liu, L. (2023). Seeking the resilience of service firms: A strategic learning process based on digital platform capability. *Journal of Services Marketing*, *37*(3), 371–391 as cited in: Chaoli Tang, Shuyun Dong, Rui Zhou, The impact of digitalization on corporate resilience, *International Review of Economics and Finance* **97** (2025) 103834, <https://doi.org/10.1016/j.iref.2024.103834>
- [16] Srivastava, M. K., & Gnyawali, D. R. (2011). When do relational resources matter? Leveraging portfolio technological resources for breakthrough innovation. *Academy of Management Journal*, *54*(4), 797–810 & Kim, J., Lee, C.-Y., & Cho, Y. (2016). Technological diversification, core-technology competence, and firm growth. *Research Policy*, *45*(1), 113–124 as cited in: Chaoli Tang, Shuyun Dong, Rui Zhou, The impact of digitalization on corporate resilience, *International Review of Economics and Finance* **97** (2025) 103834, <https://doi.org/10.1016/j.iref.2024.103834>
- [17] Alojail, M.; Khan, S.B., Impact of Digital Transformation toward Sustainable Development. *Sustainability* **2023**, *15*, 14697. <https://doi.org/10.3390/su152014697>
- [18] Kostera, M.; Glinka, B. *Nowe Kierunki w Organizacji i Zarządzaniu. Organizacje, Konteksty, Procesy Zarządzania*; Wolters Kluwer:Riverwoods, IL, USA, 2016 as cited in: Kuzior, A.; Kettler, K.; Raćb, Ł. Digitalization of Work and Human Resources Processes as a Way to Create a Sustainable and Ethical Organization. *Energies* **2022**, *15*, 172. <https://doi.org/10.3390/en15010172>
- [19] Koon, V.-Y. Bibliometric analyses on the emergence and present growth of humanistic management. *Int. J. Ethics Syst.* **2021**, *37*, 581–598. [CrossRef] as cited in: Kuzior, A.; Kettler, K.; Raćb, Ł. Digitalization of Work and Human Resources Processes as a Way to Create a Sustainable and Ethical Organization. *Energies* **2022**, *15*, 172. <https://doi.org/10.3390/en15010172>
- [20] Kuzior, A. *Aksjologia Zrównoważonego Rozwoju [Axiology of Sustainable Development]*; Belianum: Banska Bystrica, Slovakia, 2014 as cited in: Kuzior, A.; Kettler, K.; Raćb, Ł.

- Digitalization of Work and Human Resources Processes as a Way to Create a Sustainable and Ethical Organization. *Energies* 2022, 15, 172. <https://doi.org/10.3390/en15010172>
- [21] Mer, A., & Viridi, A. S. (2023). Navigating the paradigm shift in HRM practices through the lens of artificial intelligence: A post-pandemic perspective. *The Adoption and Effect of Artificial Intelligence on Human Resources Management, Part A*, 123–154; Yildirim, N., Pushkarna, M., Goyal, N., Wattenberg, M., & Viégas, F. (2023). Investigating How Practitioners Use Human-AI Guidelines: A Case Study on the People+ AI Guidebook. *CHI '23: Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, Hamburg Germany; Barrett AM, Hendrycks D, Newman J, Nonnecke B. Actionable guidance for high-consequence AI risk management: towards standards addressing AI catastrophic risks. *arXiv Preprint*. 2022. <https://doi.org/10.48550/arXiv.2206.08966> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [22] Qin C, Zhang L, Zha R, Shen D, Zhang Q, Sun Y, Zhu C, Zhu H, Xiong H. A comprehensive survey of artificial intelligence techniques for talent analytics. *arXiv Preprint*. 2023. <https://doi.org/10.48550/arXiv.2307.03195> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [23] Acemoglu, D., & Restrepo, P. (2020). Robots and jobs: Evidence from US labor markets. *Journal of Political Economy*, 128(6), 2188–2244; Arntz, M., Gregory, T., & Zierahn, U. (2016). The risk of automation for jobs in OECD countries: A comparative analysis. *OECD social, employment and migration working papers*. Paris, France: OECD; Brougham, D., & Haar, J. (2020). Technological disruption and employment: The influence on job insecurity and turnover intentions: A multi-country study. *Technological Forecasting and Social Change*, 161, 120276; Makridakis, C. A., & Han, J. H. (2021). Future of work and employee empowerment and satisfaction: Evidence from a decade of technological change. *Technological Forecasting and Social Change*, 173, 121162; Santana, M., & Cobo, M. J. (2020). What is the future of work? A science mapping analysis. *European Management Journal*, 38(6), 846–862; Yu, X., Xu, S., & Ashton, M. (2022). Antecedents and outcomes of artificial intelligence adoption and application in the workplace: The socio-technical system theory perspective. *Information Technology & People*. doi:10.1108/ITP-04-2021-0254; Spencer, D. A. (2018). Fear and hope in an age of mass automation: Debating the future of work. *New Technology, Work and Employment*, 33(1), 1–12 as cited in: Bamel, U., Kumar, S., Lim, W.M., Bamel, N., & Meyer, N. (2022). Managing the dark side of digitalization in the future of work: A fuzzy TISM approach. *Journal of Innovation & Knowledge*, 7(4)100275
- [24] I. Nastjuk, S. Trang, J.V. Grummeck-Braamt, M.T.P. Adam, M. Tarafdar Integrating and synthesising technostress research: A meta-analysis on technostress creators, outcomes, and IS usage contexts *European Journal of Information Systems*, 00 (00) (2024), pp. 1-22, 10.1080/0960085X.2022.2154712 as cited in: Pothuganti Sanjeeva Kumar, TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [25] N. Urukovičová, E. Rošková, M. Schraggeová, J. Smoroň Psychometric properties of the Technostress Creators Inventory among employed Slovak respondents *Computers in Human Behavior Reports*, 12 (2023), 10.1016/j.chbr.2023.100324 as cited in: Pothuganti Sanjeeva Kumar, TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>

- [26] N. Schaufel, I. Schmidt, H. Peiffer, T. Ellwart Self-concept related to information and communication technology: Scale development and validation *Computers in Human Behavior Reports*, 4 (2021), 10.1016/j.chbr.2021.100149 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [27] N. Urukovičová, E. Rošková, M. Schraggeová, J. Smoroň Psychometric properties of the Technostress Creators Inventory among employed Slovak respondents *Computers in Human Behavior Reports*, 12 (2023), 10.1016/j.chbr.2023.100324; M. Pansini, I. Buonomo, C. De Vincenzi, B. Ferrara, P. Benevene Positioning technostress in the JD-R model perspective: A systematic literature review *Healthcare (Switzerland)*, 11 (3) (2023), 10.3390/healthcare11030446 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [28] M. Tarafdar, Q. Tu, B.S. Ragu-Nathan, T.S. Ragu-Nathan The impact of technostress on role stress and productivity *Journal of Management Information Systems*, 24 (1) (2007), pp. 301-328, 10.2753/MIS0742-1222240109 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [29] R.A. Hudiburg, J.R. Necessary Coping with computer-stress *Journal of Educational Computing Research*, 15 (2) (1996), pp. 113-124; M. Salanova, S. Llorens, M. V Technostress: The dark side of technologies, *The Impact of ICT on Quality of Working Life*, 1–230 (2011), 10.1007/978-94-017-8854-0; V.G. Ramakrishna Ayyagari, R. P Technostress: Technological antecedents and implications, *MIS Quarterly*, 35 (4) (2011), pp. 831-858 <https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf> as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [30] Tarafdar, M., and Gordon, S. R. (2007). Understanding the influence of information systems competencies on process innovation: A resource-based view. *J. Strat. Inf. Syst.* 16, 353–392. doi: 10.2753/MIS0742-1222240109 as cited in: Bahamondes-Rosado ME, Cerdá-Suárez LM, Doderó Ortiz de Zevallos GF and Espinosa-Cristia JF (2023) Technostress at work during the COVID-19 lockdown phase (2020–2021): a systematic review of the literature. *Front. Psychol.* 14:1173425. doi: 10.3389/fpsyg.2023.1173425
- [31] Braunheim, L.; Otten, D.; Kasinger, C.; Brähler, E.; Beutel, M.E. Individual and Work-Related Predictors of Exhaustion in East and West Germany. *Int. J. Environ. Res. Public Health* 2022, 19, 11533. [Google Scholar] [CrossRef] [PubMed] as cited in: Martina Pansini, Iliaria Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, (Special Issue Promotion and Protection of Health and Psychophysical Wellbeing in the Workplace), *Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>
- [32] Ninaus, K.; Diehl, S.; Terlutter, R.; Chan, K.; Huang, A. Benefits and Stressors—Perceived Effects of ICT Use on Employee Health and Work Stress: An Exploratory Study from Austria and Hong Kong. *Int. J. Qual. Stud. Health Well-Being* 2015, 10, 28838. [Google Scholar] [CrossRef] as cited in: Martina Pansini, Iliaria Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, Special Issue Promotion and Protection of Health and Psychophysical

- Wellbeing in the Workplace, *Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>
- [33] Barber, L.K.; Conlin, A.L.; Santuzzi, A.M. Workplace Telepressure and Work–Life Balance Outcomes: The Role of Work Recovery Experiences. *Stress Health* 2019, 35, 350–362. [Google Scholar] [CrossRef] [PubMed] as cited in: Martina Pansini, Iliaria Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, Special Issue Promotion and Protection of Health and Psychophysical Wellbeing in the Workplace, *Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>
- [34] Tarafdar, M.; Tu, Q.; Ragu-Nathan, T.S. Impact of Technostress on End-User Satisfaction and Performance. *J. Manag. Inf. Syst.* 2010, 27, 303–334. [Google Scholar] [CrossRef]; Salanova, M.; Llorens, S.; Cifre, E. The Dark Side of Technologies: Technostress among Users of Information and Communication Technologies. *Int. J. Psychol.* 2013, 48, 422–436. [Google Scholar] [CrossRef] [PubMed]; Yun, H.; Kettinger, W.J.; Lee, C.C. A New Open Door: The Smartphone’s Impact on Work-to-Life Conflict, Stress, and Resistance. *Int. J. Electron. Commer.* 2012, 16, 121–152. [Google Scholar] [CrossRef]; Mäkineniemi, J.-P.; Ahola, S.; Joensuu, J. A Novel Construct To Measure Employees’ Technology-Related Experiences of Well-Being: Empirical Validation of the Techno-Work Engagement Scale (TechnoWES). *Scand. J. Work Organ. Psychol.* 2020, 5, 4. [Google Scholar] [CrossRef]; Li, L.Z.; Wang, S. Do Work-Family Initiatives Improve Employee Mental Health? Longitudinal Evidence from a Nationally Representative Cohort. *J. Affect. Disord.* 2022, 297, 407–414. [Google Scholar] [CrossRef] as cited in: Martina Pansini, Iliaria Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, Special Issue Promotion and Protection of Health and Psychophysical Wellbeing in the Workplace, *Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>
- [35] Van Zoonen, W.; Sivunen, A.; Blomqvist, K.; Olsson, T.; Ropponen, A.; Henttonen, K.; Vartiainen, M. Understanding Stressor–Strain Relationships during the COVID-19 Pandemic: The Role of Social Support, Adjustment to Remote Work, and Work–Life Conflict. *J. Manag. Organ.* 2021, 27, 1038–1059. [Google Scholar] [CrossRef] as cited in: Martina Pansini, Iliaria Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, Special Issue Promotion and Protection of Health and Psychophysical Wellbeing in the Workplace, *Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>
- [36] Harris, K.J.; Harris, R.B.; Valle, M.; Carlson, J.; Carlson, D.S.; Zivnuska, S.; Wiley, B. Technostress and the Entitled Employee: Impacts on Work and Family. *Inf. Technol. People* 2021, 35, 1073–1095. [Google Scholar] [CrossRef] as cited in: Martina Pansini, Iliaria Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, Special Issue Promotion and Protection of Health and Psychophysical Wellbeing in the Workplace, *Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>
- [37] Roberts, P.W. Product innovation, product-market competition and persistent profitability in the U.S. pharmaceutical industry. *Strateg. Manag. J.* 1999, 20, 655–670. [CrossRef]; Rudito, P.; Sinaga, M. Digital Mastery: Membangun Kepemimpinan Digital Untuk Memenangkan Era Disrupsi; PT Gramedia Pustaka Utama: Jakarta, Indonesia, 2017; Sultan, Y.H.; Suhail, K.S. The impact of significant factors of digital leadership on gamification marketing strategy. *Int. J. Adv. Res. Dev.* 2019, 4, 29–33 as cited in: Niu, S.; Park, B.I.; Jung, J.S. The Effects of Digital Leadersh <https://doi.org/10.3390/su142315639>

- [38] Weinert, C. Coping with Discrepant Information Technology Events: A Literature Review. Available online: https://aisel.aisnet.org/ecis2018_rp/137 (accessed on 13 July 2021); Brivio, E.; Gaudio, F.; Vergine, I.; Mirizzi, C.R.; Reina, C.; Stellari, A.; Galimberti, C. Preventing Technostress Through Positive Technology. *Front. Psychol.* 2018, 9, 2569. [Google Scholar] [CrossRef] [PubMed] as cited in: Elisabeth Rohwer, Joelle-Cathrin Flöther, Volker Harth and Stefanie Mache, Overcoming the “Dark Side” of Technology—A Scoping Review on Preventing and Coping with Work-Related Technostress, Special Issue Digitalization of Knowledge Work and Its Influence on Occupational Health, *Int. J. Environ. Res. Public Health* 2022, 19(6), 3625; <https://doi.org/10.3390/ijerph19063625>
- [39] Aromataris, E.; Fernandez, R.S.; Godfrey, C.; Holly, C.; Khalil, H.; Tungpunkom, P. Chapter 10: Umbrella Reviews. In *JBIManual for Evidence Synthesis*; Aromataris, E., Munn, Z., Eds.; JBI: Adelaide, Australia, 2020; Available online: <https://synthesismanual.jbi.global> (accessed on 8 October 2021) as cited in: Elisabeth Rohwer, Joelle-Cathrin Flöther, Volker Harth and Stefanie Mache, Overcoming the “Dark Side” of Technology—A Scoping Review on Preventing and Coping with Work-Related Technostress, Special Issue Digitalization of Knowledge Work and Its Influence on Occupational Health, *Int. J. Environ. Res. Public Health* 2022, 19(6), 3625; <https://doi.org/10.3390/ijerph19063625>
- [40] Lucena, J.C.-R.; Carvalho, C.; Santos-Costa, P.; Mónico, L.; Parreira, P. Nurses’ Strategies to Prevent and/or Decrease Work-Related Technostress: A Scoping Review. *Comput. Inform. Nurs.* 2021, 39, 916–920. [Google Scholar] [CrossRef] [PubMed] as cited in: Elisabeth Rohwer, Joelle-Cathrin Flöther, Volker Harth and Stefanie Mache, Overcoming the “Dark Side” of Technology—A Scoping Review on Preventing and Coping with Work-Related Technostress, Special Issue Digitalization of Knowledge Work and Its Influence on Occupational Health, *Int. J. Environ. Res. Public Health* 2022, 19(6), 3625; <https://doi.org/10.3390/ijerph19063625>
- [41] Moher, A. Liberati, J. Tetzlaff, D.G. Altman, Prisma Group Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement, *International Journal of Surgery*, 8 (5) (2010), pp. 336-341 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [42] Aly, H. Digital Transformation, Development and Productivity in Developing Countries: Is Artificial Intelligence a Curse or a Blessing? *Rev. Econ. Polit. Sci.* 2020, 7, 238–256. [CrossRef] as cited in: García-Madurga, M.-Á.; Gil-Lacruz, A.-I.; Saz-Gil, I.; Gil-Lacruz, M. The Role of Artificial Intelligence in Improving Workplace Well-Being: A Systematic Review. *Businesses* 2024, 4, 389–410. <https://doi.org/10.3390/businesses4030024>
- [43] D’Cruz, P.; Du, S.; Noronha, E.; Parboteeah, K.P.; Trittin-Ulbrich, H.; Whelan, G. Technology, Megatrends and Work: Thoughts on the Future of Business Ethics. *J. Bus. Ethics* 2022, 180, 879–902. [CrossRef] [PubMed] as cited in: García-Madurga, M.-Á.; Gil-Lacruz, A.-I.; Saz-Gil, I.; Gil-Lacruz, M. The Role of Artificial Intelligence in Improving Workplace Well-Being: A Systematic Review. *Businesses* 2024, 4, 389–410. <https://doi.org/10.3390/businesses4030024>
- [44] Nematollahi, H.R., Mohammadi, H., Gholipour, A., Mohammad Esmaeili, N. (2024). Strengthening human resource management system with digital practices, transformation, and task interdependence. *International Journal of Human Capital in Urban Management*, 9, pp. 579-600. <https://doi.org/10.22034/IJHCUM.2024.04.03>; Malik, A., Khan, N.A., Khan, A.A. (2023). Human resource analytics: a novel approach to bridge the gap between human resource functions and organizational performance. *IJHCUM*. <https://doi.org/10.22034/IJHCUM.2024.02.06>; Boiko, J., Vedernikov, M., Zelena, M.,

- Volianska-Savchuk, L., Bazaliyska, N. (2023). Formation of Innovative Model of Personnel Management on the Basis of Digitalization in the COVID-19 Pandemic. *Management and Production Engineering Review*, 14, pp. 49-60. <https://doi.org/10.24425/mper.2023.146022> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, S I L E S I A N U N I V E R S I T Y O F T E C H N O L O G Y P U B L I S H I N G H O U S E, <http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [45] Ruiz, L., Benitez, J., Castillo, A., Braojos, J. (2024). Digital human resource strategy: Conceptualization, theoretical development, and an empirical examination of its impact on firm performance. *Information & Management*, 61, 103966. <https://doi.org/10.1016/j.im.2024.103966>; Demir, M., Yaşar, E., Demir, Ş.Ş. (2022). Digital transformation and human resources planning: the mediating role of innovation. *Journal of Hospitality and Tourism Technology* 14, pp. 21-36. <https://doi.org/10.1108/JHTT-04-2021-0105> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, S I L E S I A N U N I V E R S I T Y O F T E C H N O L O G Y P U B L I S H I N G H O U S E, <http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [46] Luitse, D.; Denkena, W. The Great Transformer: Examining the Role of Large Language Models in the Political Economy of AI. *Big Data Soc.* 2021, 8, 20539517211047734. [CrossRef] as cited in: García-Madurga, M.-Á.; Gil-Lacruz, A.-I.; Saz-Gil, I.; Gil-Lacruz, M. The Role of Artificial Intelligence in Improving Workplace Well-Being: A Systematic Review. *Businesses* 2024, 4, 389–410. <https://doi.org/10.3390/businesses4030024>
- [47] Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, S I L E S I A N U N I V E R S I T Y O F T E C H N O L O G Y P U B L I S H I N G H O U S E, <http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [48] Karwehl, L.J., Kauffeld, S. (2021). Traditional and new ways in competence management: Application of HR analytics in competence management. *Gr. Interakt. Org.*, 52, pp. 7-24. <https://doi.org/10.1007/s11612-021-00548-y> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, S I L E S I A N U N I V E R S I T Y O F T E C H N O L O G Y P U B L I S H I N G H O U S E, <http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [49] Mazhar, O., Al-Shawabkeh, K. (2022). Digital Transformation and Its Impact on Strategic Supremacy Mediating Role of Digital HRM: an Evidence From Palestine. *WSEAS Transactions on Business and Economics*, 19, pp. 197-221. <https://doi.org/10.37394/23207.2022.19.20> as cited in: Marta GAJOWIAK, Hanna WŁODARKIEWICZ-KLIMEK, A BIBLIOMETRIC ANALYSIS OF THE THEORY OF DIGITALIZATION OF HUMAN RESOURCE MANAGEMENT PROCESSES, S I L E S I A N U N I V E R S I T Y O F T E C H N O L O G Y P U B L I S H I N G H O U S E, <http://dx.doi.org/10.29119/1641-3466.2025.218.9>
- [50] Ali Fenwick, Gabor Molnar, Piper Frangos, The critical role of HRM in AI driven digital transformation: a paradigm shift to enable firms to move from AI implementation to human centric adoption, *Discover Artificial Intelligence* (2024) 4:34 | <https://doi.org/10.1007/s44163-024-00125-4>
- [51] Jarrahi MH. Artificial intelligence and the future of work: human-AI symbiosis in organizational decision making. *Bus Horiz.*2018;61(4):577–86 as cited in: Ali Fenwick, Gabor Molnar, Piper Frangos, The critical role of HRM in AI driven digital transformation: a

- paradigm shift to enable firms to move from AI implementation to human centric adoption, *Discover Artificial Intelligence* (2024) 4:34 | <https://doi.org/10.1007/s44163-024-00125-4>
- [52] Ali Fenwick, Gabor Molnar, Piper Frangos, The critical role of HRM in AI driven digital transformation: a paradigm shift to enable firms to move from AI implementation to human centric adoption, *Discover Artificial Intelligence* (2024) 4:34 | <https://doi.org/10.1007/s44163-024-00125-4>
- [53] Connelly, C. E., Fieseler, C., Cerne, M., Giessner, S. R., & Wong, S. I. (2021). Working in the digitized economy: HRM theory & practice. *Human Resource Management Review*, 31,(1) 100762; Bhattacharyya, S. S., & Nair, S. (2019). Explicating the future of work: Perspectives from India. *Journal of Management Development*, 38, 175–194; Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons*, 61(4), 577–586; Santana, M., & Cobo, M. J. (2020). What is the future of work? A science mapping analysis. *European Management Journal*, 38(6), 846–862 as cited in: Umesh Bamel, Satish Kumar, Weng Marc Lim, Nisha Bamel, Natanya Meyer, Managing the dark side of digitalization in the future of work: A fuzzy TISM approach, *Journal of Innovation & Knowledge*, <https://doi.org/10.1016/j.jik.2022.100275>, 2444-569X/© 2022 The Author(s). Published by Elsevier España, S.L.U. on behalf of Journal of Innovation & Knowledge.
- [54] Grimshaw, D. (2020). International organisations and the future of work: How new technologies and inequality shaped the narratives in 2019. *Journal of Industrial Relations*, 62(3), 477–507 as cited in: Umesh Bamel, Satish Kumar, Weng Marc Lim, Nisha Bamel, Natanya Meyer, Managing the dark side of digitalization in the future of work: A fuzzy TISM approach, *Journal of Innovation & Knowledge*, <https://doi.org/10.1016/j.jik.2022.100275>, 2444-569X/© 2022 The Author(s). Published by Elsevier España, S.L.U. on behalf of Journal of Innovation & Knowledge.
- [55] Meda, D. (2019). Three scenarios for the future of work. *International Labour Review*, 158(4), 627–652 as cited in: Umesh Bamel, Satish Kumar, Weng Marc Lim, Nisha Bamel, Natanya Meyer, Managing the dark side of digitalization in the future of work: A fuzzy TISM approach, *Journal of Innovation & Knowledge*, <https://doi.org/10.1016/j.jik.2022.100275>, 2444-569X/© 2022 The Author(s). Published by Elsevier España, S.L.U. on behalf of Journal of Innovation & Knowledge.
- [56] Jain, A., & Ranjan, S. (2020). Implications of emerging technologies on the future of work. *IIMB Management Review*, 32(4), 448–454 as cited in: Umesh Bamel, Satish Kumar, Weng Marc Lim, Nisha Bamel, Natanya Meyer, Managing the dark side of digitalization in the future of work: A fuzzy TISM approach, *Journal of Innovation & Knowledge*, <https://doi.org/10.1016/j.jik.2022.100275>, 2444-569X/© 2022 The Author(s). Published by Elsevier España, S.L.U. on behalf of Journal of Innovation & Knowledge.
- [57] Lu Y, Zhang MM, Yang MM, Wang Y. Sustainable human resource management practices, employee resilience, and employee outcomes: toward common good values. *Human Resource Management*. 2022;62(3):331–53. <https://doi.org/10.1002/hrm.22153> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [58] Schaufeli WB, Salanova M, González-romá V, Bakker AB. The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *J Happiness Stud*. 2002;3(1):71–92 as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>

- [59] Ababneh OMA. How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *J Environ Plan Manage.* 2021;64(7):1204–26. <https://doi.org/10.1080/09640568.2020.1814708> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [60] Macey WH, Schneider B. The meaning of employee engagement. *Ind Organ Psychol.* 2008;1(1):3–30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>; Ababneh OMA. How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *J Environ Plan Manage.* 2021;64(7):1204–26. <https://doi.org/10.1080/09640568.2020.1814708> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [61] Elkington J. Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *Calif Manage Rev.* 1994;36(2):90–100; Purvis B, Mao Y, Robinson D. Three pillars of sustainability: in search of conceptual origins. *Sustain Sci.* 2019;14:681–95 as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [62] Ehnert I, Parsa S, Roper I, Wagner M, Muller-Camen M. Reporting on sustainability and HRM: a comparative study of sustainability reporting practices by the world's largest companies. *Int J Human Resour Manag.* 2016;27(1):88–108 as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [63] Ho H, Kuvaas B. Human resource management systems, employee well-being, and firm performance from the mutual gains and critical perspectives: the well-being paradox. *Hum Resour Manage.* 2020;59(3):235–53 as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [64] Böhmer N, Schinnenburg H. Critical exploration of AI-driven HRM to build up organizational capabilities. *Empl Relat.* 2023;45(5):1057–82. <https://doi.org/10.1108/er-04-2022-0202> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [65] Lu Y. Artificial intelligence: a survey on evolution, models, applications and future trends. *J Manag Anal.* 2019;6(1):1–29. <https://doi.org/10.1080/23270012.2019.1570365> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [66] Kuvaas, B. Performance appraisal satisfaction and employee outcomes: Mediating and moderating roles of work motivation. *Int. J. Hum. Resour. Manag.* 2006, 17, 504–522. [CrossRef] as cited in: Ullah, Z.; Álvarez-Otero, S.; Sulaiman, M.A.B.A.; Sial, M.S.; Ahmad, N.; Scholz, M.; Omhand, K. Achieving Organizational Social Sustainability through Electronic Performance Appraisal Systems: The Moderating Influence of Transformational Leadership. *Sustainability* 2021, 13, 5611. <https://doi.org/10.3390/su13105611>
- [67] Ullah, Z.; Álvarez-Otero, S.; Sulaiman, M.A.B.A.; Sial, M.S.; Ahmad, N.; Scholz, M.; Omhand, K. Achieving Organizational Social Sustainability through Electronic Performance

- Appraisal Systems:The Moderating Influence of Transformational Leadership. *Sustainability* 2021, 13, 5611. <https://doi.org/10.3390/su13105611>
- [68] Lee, C.M.J.; Che-Ha, N.; Alwi, S.F.S. Service customer orientation and social sustainability: The case of small medium enterprises. *J. Bus. Res.* 2021, 122, 751–760. [CrossRef] as cited in: Ullah, Z.; Álvarez-Otero, S.; Sulaiman, M.A.B.A.; Sial, M.S.; Ahmad, N.; Scholz, M.; Omhand, K. Achieving Organizational Social Sustainability through Electronic Performance Appraisal Systems:The Moderating Influence of Transformational Leadership. *Sustainability* 2021, 13, 5611. <https://doi.org/10.3390/su13105611>
- [69] Sajjad, A.; Shahbaz, W. Mindfulness and social sustainability: An integrative review. *Soc. Indic. Res.* 2020, 150, 73–94. [CrossRef] as cited in: Ullah, Z.; Álvarez-Otero, S.; Sulaiman, M.A.B.A.; Sial, M.S.; Ahmad, N.; Scholz, M.; Omhand, K. Achieving Organizational Social Sustainability through Electronic Performance Appraisal Systems:The Moderating Influence of Transformational Leadership. *Sustainability* 2021, 13, 5611. <https://doi.org/10.3390/su13105611>
- [70] Alieva, J. and Haartman, R. (2020), “Digital Muda - the new form of waste by industry 4.0”, *Operations and Supply Chain Management: An International Journal*, Vol. 13 No. 3, pp. 269-278; Powell, D., Romero, D., Gaiardelli, P., Cimini, C. and Cavalieri, S. (2018), “Towards digital lean cyberphysical production systems: industry 4.0 technologies as enablers of leaner production”, in Moon, I., Lee, G., Park, J., Kiritsis, D. and von Cieminski, G. (Eds) *Advances in Production Management Systems. Smart Manufacturing for Industry 4.0, APMS 2018, IFIP Advances in Information and Communication Technology*, Vol. 536, Springer as cited in: Jamila Alieva, Daryl John Powell, The significance of employee behaviours and soft management practices to avoid digital waste during a digital transformation, *International Journal of Lean Six Sigma* Vol. 14 No. 1, 2023 pp. 1-32, Emerald Publishing Limited 2040-4166, DOI 10.1108/IJLSS-07-2021-0127
- [71] Lu Y. Artificial intelligence: a survey on evolution, models, applications and future trends. *J Manag Anal.* 2019;6(1):1–29. <https://doi.org/10.1080/23270012.2019.1570365> as cited in: Xiao Jia, Yanghong Hou, Architecting the future: exploring the synergy of AI-driven sustainable HRM, conscientiousness, and employee engagement, *Discover Sustainability* (2024) | <https://doi.org/10.1007/s43621-024-00214-5>
- [72] C. Seal, *The Agile HR Function: Redesigning HR as A Strategic Business Partner*, Kogan Page Publishers, 2019; Y. Qamar, R.K. Agrawal, T.A. Samad, C.J.C. Jabbour, When technology meets people: the interplay of artificial intelligence and human resource management, *J. Enterprise Inform. Manag.* 34 (5) (2021) 1339–1370 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, *Decision Analytics Journal* 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc. <https://doi.org/10.1016/j.dajour.2023.100249>
- [73] Bhoir, A., & Sinha, A. (2024). Examining the link between strategic HR practices and employee retention: A mixed-methods approach, *International Journal of Human Resource Management*, 35(1), 5578. <https://doi.org/10.1080/09585192.2023.2256893> as cited in: Umar Zaman Khan, Dr. Shahid Ali Durrani, Ismail Afzal, Fareeha Akhtar Malghani & Sajid Khan, Sustainable Employability: Enhancing Long-Term Employee Well-Being and Organizational Performance through Strategic HR Practices, *Journal for Social Science Archives Online* ISSN: 3006-3310 Print ISSN: 3006-3302 Volume 3, Number 1, 2025, Pages 997 – 1013
- [74] Fang Lee Cooke, Michael Dickmann & Emma Parry (2022) Building sustainable societies through human-centred human resource management: emerging issues and research

- opportunities, *The International Journal of Human Resource Management*, 33:1,1-15, DOI: 10.1080/09585192.2021.2021732
- [75] Ampong, I. (2024). Assessing the effect of employee welfare and compensation on organizational performance: a case of Sahel Sahara Bank Ghana limited. *Cogent Business & Management*, 11(1), 2315690. <https://doi.org/10.1080/23311975.2024.2315690> as cited in: Ria Andriany R.A, Hardy, Asrul, Maslim, Megawaty, Evaluation of the Sustainability of Organizational Welfare and Human Resources to Improving Long-Term Performance, *Paradoks: Jurnal Ilmu Ekonomi* 8(2) (2025), e-ISSN : 2622-6383
- [76] Ria Andriany R.A, Hardy, Asrul, Maslim, Megawaty, Evaluation of the Sustainability of Organizational Welfare and Human Resources to Improving Long-Term Performance, *Paradoks: Jurnal Ilmu Ekonomi* 8(2) (2025), e-ISSN : 2622-6383
- [77] Sumona Mukhuty, Arvind Upadhyay, Holly Rothwell, Strategic sustainable development of Industry 4.0 through the lens of social responsibility: The role of human resource practices, © 2022 The Authors. *Business Strategy and The Environment* published by ERP Environment and John Wiley & Sons Ltd., DOI: 10.1002/bse.3008
- [78] Shen, J., & Zhang, H. (2019). Socially responsible human resource management and employee support for external CSR: Roles of organizational CSR climate and perceived CSR directed toward employees. *Journal of Business Ethics*, 156(3), 875–888. <https://doi.org/10.1007/s10551-017-3544-0>; Shen, J., & Zhu, C. J. (2011). Effects of socially responsible human resource management on employee organizational commitment. *The International Journal of Human Resource Management*, 22(15), 3020–3035. <https://doi.org/10.1080/09585192.2011.599951>; Zhao, H., Zhou, Q., He, P., & Jiang, C. (2021). How and when does socially responsible HRM affect employees' organizational citizenship behaviors toward the environment? *Journal of Business Ethics*, 169(2), 371–385. <https://doi.org/10.1007/s10551-019-04285-7> as cited in: Sumona Mukhuty, Arvind Upadhyay, Holly Rothwell, Strategic sustainable development of Industry 4.0 through the lens of social responsibility: The role of human resource practices, © 2022 The Authors. *Business Strategy and The Environment* published by ERP Environment and John Wiley & Sons Ltd., DOI: 10.1002/bse.3008
- [79] Xie, X., Hoang, T. T., and Zhu, Q. (2022). Green process innovation and financial performance: the role of green social capital and customers' tacit green needs. *J. Innov. Knowl.* 7:100165. doi: 10.1016/j.jik.2022.100165 as cited in: Yen-Ku Kuo, Tariq Iqbal Khan, Shuja Ul Islam, Fakhrol Zaman Abdullah, Mahir Pradana and Rudsada Kaewsang-on, Impact of Green HRM Practices on Environmental Performance: The Mediating Role of Green Innovation, *Frontiers in Psychology*, June 2022 | Volume 13 | Article 916723
- [80] Madero-Gómez, S.M.; Rubio Leal, Y.L.; Olivas-Luján, M.; Yusliza, M.Y. Companies Could Benefit When They Focus on Employee Wellbeing and the Environment: A Systematic Review of Sustainable Human Resource Management. *Sustainability* 2023, 15,5435. <https://doi.org/10.3390/su15065435>
- [81] Di Fabio, A.; Peiró, J.M. Human Capital Sustainability Leadership to promote sustainable development and healthy organizations: A new scale. *Sustainability* 2018, 10, 2413. [CrossRef] as cited in: Madero-Gómez, S.M.; Rubio Leal, Y.L.; Olivas-Luján, M.; Yusliza, M.Y. Companies Could Benefit When They Focus on Employee Wellbeing and the Environment: A Systematic Review of Sustainable Human Resource Management. *Sustainability* 2023, 15,5435. <https://doi.org/10.3390/su15065435>
- [82] App, S.; Merk, J.; Büttgen, M. Employer branding: Sustainable HRM as a competitive advantage in the market for high-quality employees. *Manag. Rev.* 2012, 23, 262–278. [CrossRef] as cited in: Madero-Gómez, S.M.; Rubio Leal, Y.L.; Olivas-Luján, M.; Yusliza, M.Y. Companies Could Benefit When They Focus on Employee Wellbeing and

- theEnvironment: A Systematic Review of Sustainable Human Resource Management. Sustainability 2023, 15,5435. <https://doi.org/10.3390/su15065435>
- [83] SAP, Internet of Things Will Change HR Forever, 2016, <https://blogs.sap.com/2016/04/08/internet-of-things-will-change-hr-forever/>; Pooja, Role of artificial intelligence in human resource management, Global J. Manag. Bus. Res. C Finance 21 (1) (2021) 10–18 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, Decision Analytics Journal 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [84] A. Barman, K. Das, Internet of Things (IoT) as the Future Smart Solution to HRM-How would wearable IoT bring organisational efficiency, in: International Conference Dec, 2018 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, Decision Analytics Journal 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [85] S. Mohanty, P.C. Mishra, Framework for understanding Internet of Things in human resource management, Rev. ESPACIOS 41 (12) (2020); A. Barman, K. Das, Internet of Things (IoT) as the Future Smart Solution to HRM-How would wearable IoT bring organisational efficiency, in: International Conference Dec, 2018; D.E. Yawson, M.L. Yawson, J. Akotia, Organisational agility: A review of the literature, J. Manag. Strat. 10 (2) (2019) 33–44 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, Decision Analytics Journal 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [86] P. Gupta, S.F. Fernandes, M. Jain, Automation in recruitment: a new frontier, J.Inf. Technol. Teach. Cases 8 (2) (2018) 118–125 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, Decision Analytics Journal 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [87] C. Goyal, M. Patwardhan, Strengthening work engagement through high performance human resource practices, Int. J. Product. Perform. Manag. 70 (8)(2021) 2052–2069; M. Bakeel, I.M. Al-Jabri, S.A. Al-Tamimi, The impact of artificial intelligence on human resources management, J. Manag. Res. 12 (3) (2020) 159–174 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, Decision Analytics Journal 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [88] Aiysha Rehman, Unveiling People Analytics and Organizations: A critical literature review, Journal of Policy Research, 9(4), 284-294 <https://jprpk.com> <https://doi.org/10.61506/02.00151>
- [89] Malik, A., Budhwar, P., Mohan, H., & NR, S. (2023). Employee experience—the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. Human Resource Management, 62(1), 97-115 as cited in: Aiysha Rehman, Unveiling People Analytics and Organizations: A critical literature review, Journal of Policy Research, 9(4), 284-294 <https://jprpk.com> <https://doi.org/10.61506/02.00151>
- [90] Houser, K. A. (2019). Can AI solve the diversity problem in the tech industry: Mitigating noise and bias in employment decision-making. Stan. Tech. L. Rev., 22, 290 as cited in: Aiysha Rehman, Unveiling People Analytics and Organizations: A critical literature review, Journal of Policy Research, 9(4), 284-294 <https://jprpk.com> <https://doi.org/10.61506/02.00151>

- [91] Devi, P. S. (2023). Emerging Trends in Organizational Behavior. *International Journal of Research in Business Studies* as cited in: Aiysha Rehman, Unveiling People Analytics and Organizations: A critical literature review, *Journal of Policy Research*, 9(4), 284-294 <https://jprpk.com> <https://doi.org/10.61506/02.00151>
- [92] Kiron, D., Spindel, B., 2019. Rebooting work for a digital era: how IBM reimagined talent and performance management. *MIT Sloan Manag. Rev.* 3, 1–12; Soule, D., Puram, A., Westerman, G., Bonnet, D., 2016. *Becoming a Digital Organization: The Journey to Digital Dexterity*. MIT Center for Digital Business, Cambridge as cited in: Jos´e Manuel Montero Guerra, Ignacio Danvila-del-Valle, Mariano M´endez-Su´arez, The impact of digital transformation on talent management, *Technological Forecasting & Social Change* 188 (2023) 122291, 0040-1625/© 2022 The Authors. Published by Elsevier Inc., <https://doi.org/10.1016/j.techfore.2022.122291>
- [93] Desmet, D., Duncan, E., Scanlan, J., Singer, M., 2015. *Six Building Blocks for Creating a High-performing Digital Enterprise*. McKinsey & Company, New York; D’orner, K., Meffert, J., 2015. *Nine Questions to Help You Get Your Digital Transformation Right*. McKinsey & Company, New York as cited in: Jos´e Manuel Montero Guerra, Ignacio Danvila-del-Valle, Mariano M´endez-Su´arez, The impact of digital transformation on talent management, *Technological Forecasting & Social Change* 188 (2023) 122291, 0040-1625/© 2022 The Authors. Published by Elsevier Inc., <https://doi.org/10.1016/j.techfore.2022.122291>
- [94] Davenport, T., Redman, T., 2020. Digital transformation comes down to talent in 4 key areas. *Harv. Bus. Rev.* 88 (10), 53–58 as cited in: Jos´e Manuel Montero Guerra, Ignacio Danvila-del-Valle, Mariano M´endez-Su´arez, The impact of digital transformation on talent management, *Technological Forecasting & Social Change* 188 (2023) 122291, 0040-1625/© 2022 The Authors. Published by Elsevier Inc., <https://doi.org/10.1016/j.techfore.2022.122291>
- [95] L. Wang, Y. Li, J. Du, X. Huang, An Artificial Intelligence-enabled health and safety management system for industry 4.0, *Safety Sci.* 124 (2020) 104618; E.W.T. Ngai, T.K.H. Chan, K.K.L. Moon, Artificial intelligence applications in healthcare: A thematic analysis, *J. Health Manag.* 22 (2) (2020) 220–234; E. Arias, Chatbots: The future of HR and employee benefits communication, *Benef. Quart.* 37 (1) (2021) 7–12; A. Subramaniam, T.L. Smith-Jackson, R.E. Heidel, Artificial intelligence in workplace ergonomics: A review of current trends and future research directions, *J. Occup. Health Psychol.* 26 (2) (2021) 135–146; as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, *Decision Analytics Journal* 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [96] Q. Zhang, B. Zhou, Z. He, Y. Xu, S. Liu, Intelligent workplace comfort management based on Internet of Things and Artificial Intelligence, *IEEE Access* 9 (2021) 143659–143666; X. Yu, J.Y. Lee, An intelligent chair system for personalized sitting comfort management, *Sensors* 20 (16) (2020) 4478; C.C. Ugwu, M. Abdelrahman, Stress detection in the workplace using artificial intelligence and Internet of Things technologies, *J. Amb. Intell. Humanized Comput.* 11 (1) (2020) 89–98 as cited in: Umasankar Murugesan, Padmavathy Subramanian, Shefali Srivastava, Ashish Dwivedi, A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0, *Decision Analytics Journal* 7 (2023) 100249, 2772-6622/© 2023 The Author(s). Published by Elsevier Inc., <https://doi.org/10.1016/j.dajour.2023.100249>
- [97] Nimit J Ganatra, Jainisha D Pandya, The transformative impact of artificial intelligence on hr practices and employee experience: A review; *Journal of Management Research and Analysis* 2023;10(2):106–111, <https://doi.org/10.18231/j.jmra.2023.018,2394-2762/>© 2023 Innovative Publication, All rights reserved.

- [98] Tarafdar, M., and Gordon, S. R. (2007). Understanding the influence of information systems competencies on process innovation: A resource-based view. *J. Strat. Inf. Syst.* 16, 353–392. doi: 10.2753/MIS0742-1222240109 as cited in: Bahamondes-Rosado ME, Cerdá-Suárez LM, Dodero Ortiz de Zevallos GF and Espinosa-Cristia JF (2023) Technostress at work during the COVID-19 lockdown phase (2020–2021): a systematic review of the literature. *Front. Psychol.* 14:1173425. doi: 10.3389/fpsyg.2023.1173425
- [99] La Torre, G., De Leonardis, V., and Chiappetta, M. (2020). Technostress: How does it affect the productivity and life of an individual? Results of an observational study. *Public Health* 189, 60–65. doi: 10.1016/j.puhe.2020.09.013; Hutton, B., Salanti, G., Caldwell, D. M., Chaimani, A., Schmid, C. H., Cameron, C., et al. (2015). The PRISMA extension statement for reporting of systematic reviews incorporating network meta-analyses of health care interventions: Checklist and explanations. *Ann. Internal Med.* 162, 777–784. doi: 10.7326/M14-2385; Lockwood, C., Porrit, K., Munn, Z., Rittenmeyer, L., Salmond, S., Bjerrum, M., et al. (2017). “Systematic reviews of qualitative evidence,” in *JBI manual for evidence synthesis*, eds E. Aromataris and Z. Munn (Adelaide, SA: The Joanna Briggs Institute), doi: 10.46658/JBIMES-20-03; Abbas, A., Eliyana, A., Ekowati, D., Saud, M., Raza, A., and Wardani, R. (2020). Data set on coping strategies in the digital age: The role of psychological well-being and social capital among university students in Java Timor, Surabaya, Indonesia. *Data Brief* 30:105583. doi: 10.1016/j.dib.2020.105583; Carillo, K., Cachat-Rosset, G., Marsan, J., Saba, T., and Klarsfeld, A. (2021). Adjusting to epidemic-induced telework: Empirical insights from teleworkers in France. *Eur. J. Inf. Syst.* 30, 69–88. doi: 10.1080/0960085X.2020.1829512 as cited in: Bahamondes-Rosado ME, Cerdá-Suárez LM, Dodero Ortiz de Zevallos GF and Espinosa-Cristia JF (2023) Technostress at work during the COVID-19 lockdown phase (2020–2021): a systematic review of the literature. *Front. Psychol.* 14:1173425. doi: 10.3389/fpsyg.2023.1173425
- [100] R. Andrulli, R. Gerards, How new ways of working during COVID-19 affect employee well-being via technostress, need for recovery, and work engagement, *Computers in Human Behavior* (October 2022) (2023), p. 139, 10.1016/j.chb.2022.107560 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [101] F. Saleem, M.I. Malik, S.S. Qureshi, M.F. Farid, S. Qamar, Technostress and employee performance nexus during COVID-19: Training and creative self-efficacy as moderators, *Frontiers in Psychology*, 12 (October) (2021), pp. 1-16, 10.3389/fpsyg.2021.595119 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [102] J. Sarabadani, D. Compeau, M. Carter, An investigation of IT users' emotional responses to technostress creators, *Proceedings of the annual Hawaii international conference on system sciences*, 2020-janua (2020), 10.24251/hicss.2020.748 as cited in: Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies*, *Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [103] Demerouti, E.; Bakker, A.B.; Nachreiner, F.; Schaufeli, W.B. The Job Demands-Resources Model of Burnout. *J. Appl. Psychol.* 2001, 86, 499. [Google Scholar] [CrossRef] [PubMed]; Schaufeli, W.B. Applying the Job Demands-Resources Model. *Organ. Dyn.* 2017, 46, 120–132. [Google Scholar] [CrossRef]; Xanthopoulou, D.; Bakker, A.B.; Demerouti, E.; Schaufeli, W.B. The Role of Personal Resources in the Job Demands-Resources Model. *Int. J. Stress Manag.* 2007, 14, 121–141. [Google Scholar] [CrossRef] as cited in: Martina Pansini, Ilaria

Buonomo, Clara De Vincenzi, Bruna Ferrara and Paula Benevene, Positioning Technostress in the JD-R Model Perspective: A Systematic Literature Review, *Special Issue Promotion and Protection of Health and Psychophysical Wellbeing in the Workplace, Healthcare* 2023, 11(3), 446; <https://doi.org/10.3390/healthcare11030446>

- [104] Pothuganti Sanjeeva Kumar, *TECHNOSTRESS: A comprehensive literature review on dimensions, impacts, and management strategies, Computers in Human Behavior Reports*, Volume 16, December 2024, 100475, <https://doi.org/10.1016/j.chbr.2024.100475>
- [105] Gimpel, H.; Lanzl, J.; Regal, C.; Urbach, N.; Wischniewski, S.; Tegtmeier, P.; Kreilos, M.; Kühlmann, T.; Becker, J.; Eimecke, J.; et al. *Gesund digital arbeiten?! Eine Studie zu digitalem Stress in Deutschland; Projektgruppe Wirtschaftsinformatik des Fraunhofer FIT: Augsburg, Germany, 2019.* [Google Scholar]; Tarafdar, M.; Pirkkalainen, H.; Salo, M.; Makkonen, M. Taking on the “Dark Side”—Coping With Technostress. *IT Prof.* 2020, 22, 82–89. [Google Scholar] [CrossRef]; Pirkkalainen, H.; Salo, M.; Tarafdar, M.; Makkonen, M. Deliberate or Instinctive? Proactive and Reactive Coping for Technostress. *J. Manag. Inf. Syst.* 2019, 36, 1179–1212. [Google Scholar] [CrossRef] as cited in: Elisabeth Rohwer, Joelle-Cathrin Flöther, Volker Harth and Stefanie Mache, Overcoming the “Dark Side” of Technology—A Scoping Review on Preventing and Coping with Work-Related Technostress, *Special Issue Digitalization of Knowledge Work and Its Influence on Occupational Health, Int. J. Environ. Res. Public Health* 2022, 19(6), 3625; <https://doi.org/10.3390/ijerph19063625>