

Optimising Human Resources Capacity: Driving Adoption of Latest Technology and Driving Business Innovation amidst the Dynamics of the Digital Era

Masdar Ryketeng^{1*}, Warka Syachbrani², Syamsuri³

^{1,2}Program Studi Akuntansi S1, Fakultas Ekonomi dan Bisnis, Universitas Negeri Makassar, Indonesia

³Program Studi Pendidikan Ekonomi, Fakultas Keguruan dan Ilmu Pendidikan (FKIP), Universitas Tanjungpura, Indonesia

Email: masdar.ryketeng@unm.ac.id¹, warka.syachbrani@unm.ac.id², syamsuri@untan.ac.id³

Abstract. The rapid development of information and communication technology has significantly changed the business landscape, creating new challenges as well as opportunities for companies. In this digital era, companies are not only faced with increasingly fierce global competition but also have to face pressure to continuously adapt to the latest technological developments. Thus, this study aims to investigate the best strategies to optimise HR capacity to drive adoption of the latest technology and trigger business innovation. The method involved a thorough exploration of the literature using qualitative analysis, with a view to gaining a thorough understanding of the topic from 2012 to 2023. The study results show that in the face of the dynamics of the digital era, it is important for companies to continuously adapt and optimise their human resource (HR) capacity in order to meet the challenges of business transformation triggered by technological advancements. HR needs to not only be skilled in mastering technology, but also have high innovation capabilities. Innovation is not just an optional strategy, but an urgent need to maintain relevance and competitiveness in an ever-evolving market. The results show that training and development is key to improving HR capacity, especially through structured training programmes that focus on technology skills. The challenge of change resistance needs to be overcome through effective change management and full support from leadership in shaping a culture of innovation.

Keywords: Human Resources, Technology, Business Innovation, Digital Age

1. Introduction

Rapid developments in the field of information and communication technology have fundamentally changed the business paradigm, creating challenges that are at the same time potentially a golden opportunity for companies [1]. In this ever-evolving digital era, companies are not only faced with increasingly fierce global competition, but also face constant pressure to continuously adapt to the latest technological developments that can provide a competitive advantage [2]. Therefore, it becomes imperative for companies to actively optimise the capacity of their human resources (HR), not only as assets that carry out operational routines, but as key drivers in adopting the latest technologies and stimulating game-changing business innovations in the ever-changing market. By integrating reliable and skilled human resources, companies can build a solid foundation to achieve operational efficiency, creativity and resilient competitiveness in this ever-evolving digital era.

Modern business transformation has undergone a significant shift from the conventional model to one driven by advanced technology. Companies that successfully adopt and integrate the latest technologies, such as the Internet of Things (IoT), artificial intelligence, and blockchain technology, have the potential to achieve remarkable levels of operational efficiency [3]. By leveraging IoT, companies can connect and optimise various elements in their value chain, improve visibility, and generate valuable data for smarter decision-making. Artificial intelligence enables deep data analysis and process automation, opening up opportunities for further innovation and increased productivity. Meanwhile, blockchain technology provides a secure and decentralised foundation for business transactions, increasing security and trust in the enterprise ecosystem [4]. Thus, the integration of the latest technologies not only provides operational efficiency, but also opens the door for further product and service innovation, enabling the company to be at the forefront of evolving market demands.



Human Resources (HR) is not just a user of technology, but also a key catalyst in dealing with the dynamics of continuous change. In the face of this digital transformation era, there is an urgent need to develop new skills that include a deep understanding of data analytics, programming proficiency, and adaptability to rapid change. People who possess these skills are not only able to interact with technology effectively, but are also fundamental pillars in crafting corporate strategies that are responsive to shifting market trends and needs [5]. Therefore, investing in HR skills development is a must for companies that want to remain relevant and competitive amidst the ever-changing business dynamics.

Technology adoption is often hampered by two key factors: resistance to change from individuals and groups within the organisation and a lack of skills required to fully exploit the potential of the technology [6]. To overcome these obstacles, it is necessary to emphasise the importance of effective training and holistic employee development programmes. This training should not only cover the technical aspects related to the use of new tools or platforms, but also bring an in-depth understanding of the impact of such changes on business processes and overall corporate strategy. In addition, inclusive and motivating leadership plays a very important role. Leaders who are able to create a work environment that supports, motivates and rewards change initiatives can help break down resistance, create an organisational culture that is responsive to innovation and encourage HR to embrace change with enthusiasm and the necessary skills [7]. Thus, the combination of effective training and inclusive leadership is the foundation for meeting the challenges of technology adoption in organisations.

Innovation, by its very nature, involves more than just the application of technology; it also includes a transformation in a company's overall approach to its business. An organisation that is able to embrace a culture of innovation as an integral part of its identity not only creates an environment that supports creativity, but also provides incentives for employees to take an active role in contributing new ideas [8]. A strong culture of innovation creates space for collaboration, experimentation and controlled risk-taking, all of which support the discovery of new solutions and revolutionary approaches to business challenges. By incentivising and rewarding innovative contributions, companies not only encourage individual creativity, but also build the foundation for long-term growth and better competitiveness in a changing marketplace. As such, a company's willingness to adopt a culture of innovation is a key element in creating breakthroughs and sustainable competitive advantage.

This research aims to investigate the best strategies for optimising HR capacity to drive adoption of the latest technologies and trigger business innovation. By understanding the barriers that companies may face, this research will also identify practical solutions to overcome these challenges. Furthermore, by focusing on these objectives, this research is expected to provide guidance for companies in developing a competitive advantage through the right combination of skilled human resources and the latest technology.

1.1 Human Resources (HR)

Human Resources (HR) refers to a critical aspect within an organization consisting of the workforce or employees contributing to the execution of various activities and goals of the company [9]. HR encompasses not only the number of employees but also the skills, knowledge, creativity, and commitment possessed by these individuals. In a business context, HR is considered the most valuable asset as it plays a strategic role in achieving the company's success [10]. The success of an organization is not solely determined by the number of employees but also by their ability to adapt to changes, innovate, and contribute to the achievement of corporate goals [11]. Therefore, HR management involves not only administrative aspects but also includes employee development, the formation of a positive organizational culture, and strategic planning to ensure that HR can face the ever-changing business dynamics in the modern era.

1.2 Technology

Technology refers to the application of knowledge, skills, and tools to create, modify, and use products, systems, or services with the aim of improving human life [12]. In the modern era, technology has become a key driver of change in various fields, including business, education, health, and communication. It encompasses everything from hardware such as computers and mobile devices to software, networks, and innovations such as artificial intelligence [13]. Technology also includes production processes such as automation and robotics that enhance efficiency and accuracy [14]. The importance of technology lies in its ability to address complex challenges, increase productivity, and open doors to creative solutions for various problems. With continuous development, technology has not only become a tool but also an integral aspect of daily life, shaping how we work, communicate, and interact with the world around us.

1.3 Business Innovation

Business innovation refers to the process of developing and implementing new ideas, methods, products, or business models aimed at improving efficiency, competitiveness, and added value for a company [15]. It

involves the ability to think creatively, create innovative solutions, and respond quickly to changes in the market. Business innovation goes beyond the development of new products; it also includes changes in how a company develops strategies, interacts with customers, and manages its operations [16]. In other words, business innovation involves a comprehensive transformation in how an organization operates and delivers value to stakeholders. Companies that can innovate in business can create a competitive advantage, explore new opportunities, and respond to the ever-changing demands of the market [17]. Therefore, business innovation is not just a strategic choice but a necessity for companies that want to survive and thrive in a dynamic business environment.

1.4 Digital Era

The digital era refers to a period in which information and communication technology, especially the internet, plays a central role in social, economic, and cultural transformation [18]. In the digital era, information is generated, accessed, and shared rapidly through digital platforms. Significant changes are observed in how businesses operate, how individuals interact, and how information is disseminated [19]. The internet becomes the primary foundation for global connectivity, enabling companies to operate across borders and individuals to connect without geographical constraints. Phenomena such as e-commerce, big data, artificial intelligence, and the Internet of Things (IoT) characterize the digital era, creating new opportunities and transforming traditional business paradigms [20]. Moreover, the digital era has a significant impact on how organizations manage data, communicate, and innovate. The reliance on digital technology has fundamentally changed how we lead our daily lives and provides a foundation for further development in the information technology revolution.

2. Method

In this study, we utilize a qualitative literature review approach to achieve a thorough comprehension of the most effective strategy for enhancing HR capacity to promote the adoption of cutting-edge technology and stimulate business innovation spanning the period from 2012 to 2023. The primary objective of this methodology is to identify, assess, and incorporate relevant scholarly works sourced from diverse academic journals, conference papers, and reputable outlets accessible through Google Scholar. The research process unfolds through distinct stages. Initially, the researcher defines a specific and pertinent research topic, establishing a comprehensive understanding of the background and research objectives. Subsequently, explicit and precise search criteria are formulated to guide the exploration of literature using Google Scholar, covering the time frame from 2012 to 2023. Upon obtaining search results, the researcher engages in a literature selection process, scrutinizing the abstracts and summaries of each identified article or source. Literature lacking relevance or failing to meet the research criteria is excluded from the analysis. The chosen literature undergoes a rigorous examination, focusing on identifying significant discoveries, concepts, theories, and trends inherent in the literature. A qualitative approach is applied to attain a comprehensive understanding of the research subject. The findings from the literature review are then synthesized and elaborated upon by the researcher to construct a comprehensive understanding of the research topic. Furthermore, these findings are organized into a detailed research report with a structured and cohesive format, encompassing key discoveries, analyses, and profound interpretations. The research concludes by formulating concise conclusions summarizing the central findings and implications of the literature review on the research subject. This methodology empowers researchers to acquire an extensive and profound understanding of the research topic without the necessity for primary data collection. By leveraging existing literature, this research has the potential to make substantial contributions to advancing theories, problem-solving, or decision-making across various scientific domains, particularly within the context of the most effective strategy for enhancing HR capacity to drive the adoption of cutting-edge technology and stimulate business innovation.

3. Result and Discussion

Amidst the challenges of the dynamic digital era, companies are not only faced with the demand to continuously adapt, but also to optimise the capacity of their human resources (HR) in line with the changing business ecosystem. Business transformation triggered by recent technological advancements, such as increasingly sophisticated artificial intelligence, in-depth data analytics, and process automation, has significantly changed the company's operational paradigm [21]. In this context, the role of human resources who not only have adequate technical skills but are also able to adapt quickly to ongoing changes is increasingly crucial. The development of resilient, creative and learning-oriented human resources is an absolute must to

ensure companies can optimise the potential of the latest technology, improve operational efficiency and respond to evolving market dynamics [22]. Therefore, investment in HR development is not only a short-term strategy but also the foundation for long-term business continuity in this digital era.

Optimising Human Resources (HR) capacity involves more than just upgrading technological skills; it also includes developing employees' innovation and creativity capabilities as a key element in facing business challenges in the digital age. Business innovation is no longer just seen as a strategic option, but rather an urgent necessity amidst the rapid pace of change [23]. Companies that want to maintain relevance and competitiveness must proactively shape and support a culture of innovation [24]. This involves creating a work environment that encourages collaboration, out-of-the-box thinking, and experimentation that can lead to breakthroughs. Encouraging employees to contribute new ideas not only creates a competitive advantage, but also builds the foundation for sustainable growth. By embracing a culture of innovation, companies create conditions that allow human resources to become not only proficient users of technology but also active and creative agents of change in responding to market changes and leading the company towards an innovation-filled future.

Extensive research and years of practical experience confirm that the role of training and development is crucial in enhancing the capacity of Human Resources (HR). A well-structured training programme, especially one that focuses on mastering the latest technology skills, is not only an investment in improving individual competencies but also key in addressing skills gaps that may exist within the organisation [25]. An in-depth understanding of the latest technologies can equip HR with the necessary tools to respond to evolving business demands and strengthen a company's competitiveness in a competitive market [26]. However, while the benefits are clear, challenges arise. Resistance to change is often an obstacle that needs to be overcome, and effective change management is essential to integrate new knowledge and skills into the organisation's culture. By addressing these challenges, companies can ensure that training and development becomes not only a practical necessity but also a key driver of long-term success.

From a different perspective, it can be recognised that the establishment of a culture of innovation is a step that requires the full support of company leadership. Leadership that is not only visionary but also visibly committed has the potential to shape and stretch a working environment that not only supports, but stimulates creativity and innovation at every level of the organisation [27]. Success in fostering a culture of innovation depends not only on the introduction of innovative values, but also on the ability of leaders to set a positive example, support risky initiatives, and open communication channels that facilitate the progressive exchange of ideas [28]. Within this framework, the importance of implementing an integrated strategy, which not only strengthens human capital development but also fosters technology adoption, becomes even more prominent. This integration opens the door to achieving optimal results, where companies not only build skilled and adaptable human capital, but also create a solid foundation for technological innovation that supports long-term competitive advantage.

Throughout this narrative, it is clear that optimising Human Resources (HR) capacity cannot be considered as a separate entity from the dynamics of change that plague the digital era. The process of adopting the latest technology and encouraging business innovation are not just additional tasks that can be ignored; rather, they are integral elements of an adaptive and sustainable corporate vision amidst constant change. Through the synergy between solid people development and smart technology implementation, companies can not only face, but also overcome the complexities and challenges that arise in this digital era. Positioning oneself as a leader in the digital business map requires a deep alignment between the evolution of HR and the utilisation of technology as a strategic tool. Thus, a holistic integration of HR development and technology not only leads to increased efficiency, but also creates a foundation for sustainable and competitive leadership in this ever-evolving marketplace.

When a company successfully achieves a balanced level of integration between Human Capital development and technology adoption, the positive impact is not only reflected in improved operational efficiency, but also extends to the realm of product and service innovation. The continuity that exists between the development of HR skills and the application of the latest technology creates a positive dynamic that permeates the entire organisational network. Innovation in products and services is no longer just a short-term goal, but an integral part of an adaptive corporate culture [29]. This transformation not only focuses on internal change but also creates an environment that encourages interdepartmental collaboration, opening the door for synergy and creative exchange of ideas across the company. As such, the holistic integration of people development and technology adoption creates a strong foundation for sustainable growth, giving the company an edge in facing challenges and opportunities in an ever-evolving business landscape.

A company's success in optimising its Human Resources (HR) capacity reflects its ability to not only keep up with, but also cope with the dynamics of a rapidly changing market. Human resources that are not only skilled but also adept at dealing with change can be a valuable asset that enables companies to respond to market

challenges more quickly and effectively [30]. They not only function as change responders, but also as change agents who are proactive in understanding and anticipating market needs. Therefore, HRM is no longer just considered the responsibility of the human resources department, but has become a strategic agenda that involves the entire organisation. By integrating the dimensions of HR development into every layer of the company, creating a culture that encourages adaptation and innovation, companies can build a strong foundation to navigate change and maintain competitiveness in an ever-evolving market. Thus, HR is not only an operational support, but also the main pillar in designing a dynamic and successful future [31].

In this highly dynamic context, companies have the opportunity to optimise the effectiveness of their Human Resources (HR) development strategies through the use of sophisticated data and analytics. The process of continuously evaluating key aspects such as technology adoption rates, employee satisfaction, and other business performance indicators can provide invaluable insights [32]. The data derived from these analyses can form the basis for a deep understanding of the impact of HR development strategies on various aspects of the company [33]. For example, data regarding technology adoption rates can provide information on the extent to which employees integrate and utilise technology in their daily work. Meanwhile, an assessment of employee satisfaction levels not only measures well-being and motivation, but can also provide an idea of the extent to which HR development policies create a supportive work environment. Therefore, by basing decisions on rich and detailed data, companies can continuously refine their HR development strategies, ensuring that every step taken is in line with the company's goals of improving performance, strengthening organisational culture, and achieving long-term success.

While the changes that are taking place in optimising human resource (HR) capacity bring significant positive potential, it is important to note that this transformation also opens the door to new challenges, especially related to data security and privacy. While efforts to improve efficiency and competitiveness through HR development can have a positive impact, concerns over data vulnerability and privacy protection are becoming increasingly important in this digital age [34]. Therefore, in embracing the positive potential of HR optimisation, companies are also faced with the responsibility to prioritise information security and ensure compliance with applicable regulations. Strengthening security layers in the process of collecting, storing and processing data is essential, while compliance with privacy standards and regulations is the foundation for mitigating potential risks and building trust with customers and business partners [35]. By looking at these aspects of security and compliance holistically, companies can optimise their HR capacity by considering the risk factors that may arise, creating a safe environment, and maintaining a balance between progress and protection.

Thus, through an in-depth and integrated holistic approach, encompassing Human Capital development, technology adoption, and the establishment of a culture of innovation, companies can not only achieve sustainable competitiveness in this digital age, but also build a solid foundation for long-term success. This approach involves more than just business transformation; it is a journey towards deep cultural change within the organisation. The integration of HR development ensures that employees not only have the necessary technical skills, but also an adaptive attitude towards constant change. Meanwhile, technology adoption opens the door to operational efficiency and innovation that can lead to competitive advantage. A culture of innovation, on the other hand, creates an environment that supports creative thinking, experimentation and the courage to take risks in the quest for excellence. During this journey, companies not only transform the way they do business but also shape their essence, enabling them to shine in the face of the dynamics of change and pave the way to a sustainable and successful future in the ever-evolving digital age.

4. Conclusion

Facing the dynamics of the digital era, this research highlights the urgency for companies to continuously adapt and optimize their human resources (HR) capacity. The business transformation triggered by recent technological advancements necessitates HR with not only proficiency in mastering technology but also high levels of innovation and creativity. Innovation is not merely an optional strategy but an urgent need to sustain relevance and competitiveness in the ever-evolving market. Research findings indicate that training and development are crucial keys to enhancing HR capacity. Structured training programs, particularly those focusing on technological skills, can reduce skill gaps and enhance the company's competitiveness. However, challenges of change resistance need to be addressed through effective change management and full support from leadership in shaping an innovative culture.

To achieve success in this dynamic digital era, companies are advised to develop structured training programs, especially those concentrating on mastering the latest technological skills. A holistic approach in HR development is essential, involving not only technological skills but also incorporating elements of innovation

and creativity. Active engagement from corporate leadership is key to creating a work environment supportive of change and innovation. Continuous evaluation of technology adoption, employee satisfaction, and other business performance indicators can provide insights necessary to refine HR development strategies. Additionally, companies need to pay special attention to data security and privacy, ensuring compliance with regulations, and implementing effective security measures. By implementing these suggestions holistically, companies can build a robust foundation for growth, innovation, and sustainability in navigating the challenges of the digital era.

References

- [1] S. Wahyoedi, S. Suherlan, S. Rijal, H. K. Azzaakiyyah, and A. M. A. Ausat, "Implementation of Information Technology in Human Resource Management," *Al-Buhuts*, vol. 19, no. 1, pp. 300–318, 2023, doi: <https://doi.org/10.30603/ab.v19i1.3407>.
- [2] Y. J. Purnomo, "Digital Marketing Strategy to Increase Sales Conversion on E-commerce Platforms," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 54–62, Aug. 2023, doi: [10.61100/adman.v1i2.23](https://doi.org/10.61100/adman.v1i2.23).
- [3] M. A. K. Harahap, K. Kraugusteeliana, S. A. Pramono, O. Z. Jian, and A. M. A. Ausat, "The Role of Information Technology in Improving Urban Governance," *Jurnal Minfo Polgan*, vol. 12, no. 2, pp. 371–379, 2023, Accessed: May 06, 2023. [Online]. Available: <https://doi.org/10.33395/jmp.v12i2.12405>
- [4] S. Rijal and F. Saranani, "The Role of Blockchain Technology in Increasing Economic Transparency and Public Trust," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 2, pp. 56–67, Oct. 2023, doi: [10.61100/tacit.v1i2.51](https://doi.org/10.61100/tacit.v1i2.51).
- [5] S. Suherlan and M. O. Okombo, "Technological Innovation in Marketing and its Effect on Consumer Behaviour," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 2, pp. 94–103, Oct. 2023, doi: [10.61100/tacit.v1i2.57](https://doi.org/10.61100/tacit.v1i2.57).
- [6] S. Suherlan, "Digital Technology Transformation in Enhancing Public Participation in Democratic Processes," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 1, pp. 10–17, 2023, Accessed: Sep. 01, 2023. [Online]. Available: <https://journal.literasisainsnusantara.com/index.php/tacit/article/view/34>
- [7] O. Karneli, "The Role of Adhocratic Leadership in Facing the Changing Business Environment," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 77–83, Aug. 2023, doi: [10.61100/adman.v1i2.26](https://doi.org/10.61100/adman.v1i2.26).
- [8] A. D. Subagja, A. M. A. Ausat, and Suherlan, "The Role of Social Media Utilization and Innovativeness on SMEs Performance," *Jurnal IPTEK-KOM (Jurnal Ilmu Pengetahuan dan Teknologi Komunikasi)*, vol. 24, no. 2, pp. 85–102, 2022, doi: <https://doi.org/10.17933/iptekkom.24.2.2022.85-102>.
- [9] K. Agustian, A. Pohan, A. Zen, W. Wiwin, and A. J. Malik, "Human Resource Management Strategies in Achieving Competitive Advantage in Business Administration," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 108–117, Oct. 2023, doi: [10.61100/adman.v1i2.53](https://doi.org/10.61100/adman.v1i2.53).
- [10] S. S. Gadzali, A. M. A. Ausat, A. J. Mahardhani, S. Sulton, and S. Sunarto, "Analysis of Human Capital Development Aspects," in *Proceedings of the International Conference on Economic, Management, Business and Accounting, ICEMBA 2022, 17 December 2022, Tanjungpinang, Riau Islands, Indonesia*, Tanjungpinang: EAI, 2023, pp. 1–6. doi: [10.4108/eai.17-12-2022.2333189](https://doi.org/10.4108/eai.17-12-2022.2333189).
- [11] I. Rustiawan, A. M. A. Ausat, S. S. Gadzali, Suherlan, and H. K. Azzaakiyyah, "Determinants of Employee Dedication to the Company as a Whole," *Community Development Journal: Jurnal Pengabdian Masyarakat*, vol. 4, no. 1, pp. 708–712, 2023, doi: [10.31004/cdj.v4i1.12454](https://doi.org/10.31004/cdj.v4i1.12454).
- [12] M. I. Wanof, "Digital Technology Innovation in Improving Financial Access for Low-Income Communities," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 1, pp. 26–34, 2023, Accessed: Sep. 01, 2023. [Online]. Available: <https://journal.literasisainsnusantara.com/index.php/tacit/article/view/35>
- [13] F. Sudirjo, A. M. A. Ausat, S. Rijal, Y. Riady, and S. Suherlan, "ChatGPT: Improving Communication Efficiency and Business Management of MSMEs in the Digital Age," *Innovative: Journal Of Social Science Research*, vol. 3, no. 2, pp. 643–652, 2023, doi: <https://doi.org/10.31004/innovative.v3i2.347>.
- [14] M. A. K. Harahap, A. M. A. Ausat, A. Rachman, Y. Riady, and H. K. Azzaakiyyah, "Overview of ChatGPT Technology and its Potential in Improving Tourism Information Services," *Jurnal Mininfo Polgan*, vol. 12, no. 2, pp. 424–431, 2023, doi: [10.33395/jmp.v12i2.12416](https://doi.org/10.33395/jmp.v12i2.12416).

- [15] S. Sutrisno, A. D. Kuraesin, S. Siminto, I. Irawansyah, and A. M. A. Ausat, "The Role of Information Technology in Driving Innovation and Entrepreneurial Business Growth," *Jurnal Minfo Polgan*, vol. 12, no. 2, pp. 586–597, 2023, doi: <https://doi.org/10.33395/jmp.v12i2.12463>.
- [16] A. M. A. Ausat, R. Velmurugan, M. M. Mazil, M. A. Mazher, and M. O. Okombo, "Utilisation of Natural Resources as a Source of Inspiration and Innovation in SME Development," *Apollo: Journal of Tourism and Business*, vol. 1, no. 3, pp. 122–132, 2023, doi: 10.58905/apollo.v1i3.103.
- [17] W. S. Maitri, S. Suherlan, R. D. Y. Prakosos, A. D. Subagja, and A. M. A. Ausat, "Recent Trends in Social Media Marketing Strategy," *Jurnal Minfo Polgan*, vol. 12, no. 2, pp. 842–850, 2023, doi: <https://doi.org/10.33395/jmp.v12i2.12517>.
- [18] A. M. A. Ausat, H. K. Azzaakiyyah, R. M. Permana, Y. Riady, and S. Suherlan, "The Role of ChatGPT in Enabling MSMEs to Compete in the Digital Age," *Innovative: Journal Of Social Science Research*, vol. 3, no. 2, pp. 622–631, 2023, doi: <https://doi.org/10.31004/innovative.v3i2.346>.
- [19] M. A. K. Harahap, S. Sutrisno, F. Fauzi, I. A. Jusman, and A. M. A. Ausat, "The Impact of Digital Technology on Employee Job Stress: A Business Psychology Review," *Jurnal Pendidikan Tambusai*, vol. 7, no. 1, pp. 3635–3638, 2023, Accessed: Mar. 29, 2023. [Online]. Available: <https://jptam.org/index.php/jptam/article/view/5775>
- [20] F. Sudirjo, "Marketing Strategy in Improving Product Competitiveness in the Global Market," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 63–69, Aug. 2023, doi: 10.61100/adman.v1i2.24.
- [21] F. Sudirjo, K. Diantoro, J. A. Al-Gasawneh, H. K. Azzaakiyyah, and A. M. A. Ausat, "Application of ChatGPT in Improving Customer Sentiment Analysis for Businesses," *Jurnal Teknologi Dan Sistem Informasi Bisnis*, vol. 5, no. 3, pp. 283–288, 2023, doi: <https://doi.org/10.47233/jteksis.v5i3.871>.
- [22] A. A. Davidescu, S.-A. Apostu, A. Paul, and I. Casuneanu, "Work Flexibility, Job Satisfaction, and Job Performance among Romanian Employees—Implications for Sustainable Human Resource Management," *Sustainability*, vol. 12, no. 15, pp. 1–53, Jul. 2020, doi: 10.3390/su12156086.
- [23] E. Dogan, "A strategic approach to innovation," *Pressacademia*, vol. 4, no. 3, pp. 290–300, Sep. 2017, doi: 10.17261/Pressacademia.2017.491.
- [24] W. Zhang, X. Zeng, H. Liang, Y. Xue, and X. Cao, "Understanding How Organizational Culture Affects Innovation Performance: A Management Context Perspective," *Sustainability*, vol. 15, no. 8, p. 6644, Apr. 2023, doi: 10.3390/su15086644.
- [25] E. Salas, S. I. Tannenbaum, K. Kraiger, and K. A. Smith-Jentsch, "The Science of Training and Development in Organizations," *Psychological Science in the Public Interest*, vol. 13, no. 2, pp. 74–101, Jun. 2012, doi: 10.1177/1529100612436661.
- [26] U. Murugesan, P. Subramanian, S. Srivastava, and A. Dwivedi, "A study of Artificial Intelligence impacts on Human Resource Digitalization in Industry 4.0," *Decision Analytics Journal*, vol. 7, p. 100249, Jun. 2023, doi: 10.1016/j.dajour.2023.100249.
- [27] A. Zen, S. Siminto, M. A. K. Harahap, Y. B. Prasetya, and A. M. A. Ausat, "Effective Leadership: A Literature Review of Concepts, Characteristics, and Best Practices," *Innovative: Journal Of Social Science Research*, vol. 3, no. 2, pp. 2209–2219, 2023, doi: <https://doi.org/10.31004/innovative.v3i2.430>.
- [28] A. M. A. Ausat, A. Widayani, I. Rachmawati, N. Latifah, and S. Suherlan, "The Effect of Intellectual Capital and Innovative Work Behavior on Business Performance," *Journal of Economics, Business, & Accountancy Ventura*, vol. 24, no. 3, pp. 363–378, Mar. 2022, doi: 10.14414/jebav.v24i3.2809.
- [29] A. J. Verdu-Jover, L. Alos-Simo, and J.-M. Gomez-Gras, "Adaptive culture and product/service innovation outcomes," *European Management Journal*, vol. 36, no. 3, pp. 330–340, Jun. 2018, doi: 10.1016/j.emj.2017.07.004.
- [30] A. Errida and B. Lotfi, "The determinants of organizational change management success: Literature review and case study," *International Journal of Engineering Business Management*, vol. 13, pp. 1–15, Jan. 2021, doi: 10.1177/18479790211016273.
- [31] R. J. Torraco and H. Lundgren, "What HRD Is Doing—What HRD Should be Doing: The Case for Transforming HRD," *Human Resource Development Review*, vol. 19, no. 1, pp. 39–65, Mar. 2020, doi: 10.1177/1534484319877058.
- [32] M. Ishaq Bhatti, H. M. Awan, and Z. Razaq, "The key performance indicators (KPIs) and their impact on overall organizational performance," *Qual Quant*, vol. 48, no. 6, pp. 3127–3143, Nov. 2014, doi: 10.1007/s11135-013-9945-y.
- [33] H. H. Hamadamin and T. Atan, "The Impact of Strategic Human Resource Management Practices on Competitive Advantage Sustainability: The Mediation of Human Capital Development and Employee Commitment," *Sustainability*, vol. 11, no. 20, p. 5782, Oct. 2019, doi: 10.3390/su11205782.

- [34] J. Zhang and Z. Chen, “Exploring Human Resource Management Digital Transformation in the Digital Age,” *Journal of the Knowledge Economy*, pp. 1–17, Mar. 2023, doi: 10.1007/s13132-023-01214-y.
- [35] H. H. H. Aldboush and M. Ferdous, “Building Trust in Fintech: An Analysis of Ethical and Privacy Considerations in the Intersection of Big Data, AI, and Customer Trust,” *International Journal of Financial Studies*, vol. 11, no. 3, p. 90, Jul. 2023, doi: 10.3390/ijfs11030090.