

Human Resource Management Strategies to Enhance Information Technology Adoption in MSMEs: A Review from the Organizational Innovation Perspective

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Abstract. Micro, Small, and Medium Enterprises (MSMEs) play a significant role in a country's economy. Information technology (IT) can enhance the efficiency and competitiveness of MSMEs. However, many MSMEs still face challenges in adopting this technology. This research aims to examine human resource management (HRM) strategies to enhance IT adoption in MSMEs from an organizational innovation perspective. The research method employed is a literature review with a qualitative approach utilizing descriptive analysis. The steps taken in this research involve rigorous selection of relevant articles published between 2012-2024 on Google Scholar. The study results indicate that effective HRM is key to success in adopting information technology. This involves competency mapping, fostering an organizational culture supportive of innovation, integrating HRM development into technology adoption strategies, visionary leadership, and ongoing evaluation.

Keywords: Human Resource Management, Information Technology, MSMEs, Organizational Innovation

1. Introduction

The participation and contribution of Micro, Small, and Medium Enterprises (MSMEs) are undeniably relevant in the context of a country's economy [1]. Most countries recognize MSMEs as a fundamental pillar in the economic structure, not only as significant job providers but also as catalysts for economic growth. By playing a significant role in supporting various industrial sectors, MSMEs contribute to diversifying the economic base, enhancing competitiveness, and promoting economic inclusion. In many cases, MSMEs also serve as agents driving innovation and the development of new products and services, which in turn can strengthen a country's competitive position in the global economic landscape [2]. Therefore, the importance of MSMEs in supporting economic stability and growth has been a topic of interest for economists and practitioners alike over the past few decades.

Although Information Technology (IT) has proven to be vital in enhancing operational efficiency and competitiveness, there are still several MSMEs facing challenges in implementing this technology [3]. Various factors, ranging from limited financial resources to limited technical skills and a lack of understanding of the potential of IT and awareness of its benefits, can be the main challenges faced by MSMEs in adopting and utilizing information technology effectively [4]. Additionally, factors such as organizational cultural resistance to change and concerns about costs and risks associated with IT implementation can hinder the technology adoption process.

Optimizing human resource management has proven to be a crucial element in achieving organizational success, including for Micro, Small, and Medium Enterprises (MSMEs). The competence of human resources in facing market dynamics, the ability to continuously learn and adapt to new innovations significantly influences the organization's capability to accept and implement information technology (IT) to the maximum extent [5]. Moreover, effective human resource management also considers specific aspects such as inclusive leadership, skill development, and fostering an organizational culture that encourages collaboration and creativity [6]. Emphasizing the development and empowerment of human resources is essential in MSMEs' growth-oriented development strategies, considering high-quality human resources as invaluable assets in facing challenges and opportunities in the digital economic era.



From an organizational innovation perspective, innovation is seen as a process involving various elements within the organizational structure, including aspects such as the organizational structure itself, the culture created within it, and the human resources integral to the overall organizational dynamics [7]. In the study of Micro, Small, and Medium Enterprises (MSMEs), a deep understanding of how innovation in the organizational context can act as a facilitator in the adoption and utilization of Information Technology (IT) becomes crucial. This is because MSMEs are often confronted with complex challenges, including resource limitations and accessibility to technology.

Micro, Small, and Medium Enterprises (MSMEs) exhibit distinctive and unique characteristics in the business landscape, including small operational scale, limited financial and human resources, simple organizational structures, and rapidly changing business dynamics [8]. These conditions create particular challenges in human resource management and IT implementation for MSMEs [9]. It is important to design strategies tailored to this specific context, where factors such as flexibility, adaptability, and efficiency are key. Emphasizing the development of human resources responsive to change, targeted use of IT, and integrating technology into simple organizational structures are crucial steps in strengthening the competitiveness and resilience of MSMEs in facing challenges and opportunities in an increasingly dynamic global market.

In the context of the ongoing global digital transformation, Micro, Small, and Medium Enterprises (MSMEs) are presented with significant opportunities to expand their market reach and enhance competitiveness through the adoption of Information Technology [10]. However, this also brings significant implications for MSMEs, including increased competition and pressure to innovate continuously as a way to maintain their relevance and competitiveness in this evolving market. In an era where innovation and adaptability are key, MSMEs must be able to quickly adapt to technological changes and market dynamics to fully harness the potential of IT and expand their market share. Therefore, this research aims to examine human resource management (HRM) strategies to enhance IT adoption in MSMEs from an organizational innovation perspective.

1.1 Human Resources (HR)

Human Resources (HR) refers to all aspects related to the workforce or employees within an organization [11], [12], [13], [14], [15], [16]. HR encompasses the processes of recruitment, development, management, and empowerment of individuals working within an organizational entity [17]. In the context of HR management, attention is given to aspects such as skills development, motivation, communication, job satisfaction, and employee well-being [18]. The importance of HR management is not only limited to fulfilling the organization's needs in achieving its business objectives but also in ensuring the welfare and development of individuals who are part of the organization [19], [20], [21]. Effective HR management not only involves operational aspects such as scheduling and administration but also focuses on building an inclusive, collaborative, and growth-oriented organizational culture [22]. Thus, HR management plays a crucial role in shaping a productive, competitive, and goal-oriented work environment.

1.2 Information Technology (IT)

Information Technology (IT) refers to the use of various types of technology to collect, store, process, and disseminate information in various forms, including text, images, sound, and video [23]. IT encompasses various hardware such as computers, servers, communication networks, as well as software such as business applications, database management systems, and development platforms [24]. Additionally, IT also includes infrastructure and services such as the internet, cloud computing, and information security [25]. The development of information technology has transformed the way we work, communicate, and conduct business by providing tools that enable quick and easy access to information, improving operational efficiency, and creating new opportunities for innovation and growth [26], [27], [28], [29]. With the right adoption of information technology, organizations can enhance productivity, optimize business processes, expand market reach, and achieve competitive advantage in an increasingly digital and connected business environment.

1.3 Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small, and Medium Enterprises (MSMEs) refer to the business segment consisting of units with relatively small-scale operations, limited number of employees, and limited assets [30], [31], [32], [33], [34], [35]. MSMEs are often the economic backbone in many countries, contributing significantly to economic growth, job creation, and income distribution [36], [37], [38]. Although the definition of MSMEs varies depending on parameters such as the number of employees, annual turnover, or asset value, generally, MSMEs tend to have simpler and more flexible structures compared to large companies [39], [40]. MSME categories include various types of businesses, ranging from small eateries, small shops, workshops, to small-scale

manufacturing companies [41], [42], [43]. MSMEs often face unique challenges, including limited capital, restricted access to markets and resources, and the need to compete in a rapidly changing business environment. Nevertheless, MSMEs also have great potential for innovation and growth, especially in the ongoing digital transformation context.

1.4 Organizational Innovation

Organizational innovation refers to the process of change or creation aimed at improving the performance and success of an organization through the development or application of new ideas, methods, products, services, or business processes [44]. The concept of organizational innovation emphasizes the importance of continuously adapting and evolving in response to dynamic environmental demands and fierce competition [45]. Organizational innovation encompasses not only technological aspects but also involves changes in organizational culture, structure, and management practices [46]. By introducing innovation, organizations can enhance efficiency, flexibility, competitiveness, and the ability to respond to market and technological changes. The importance of organizational innovation is increasing in this digital era, where technological changes and market dynamics occur rapidly [47]. Organizations that can adopt innovative approaches in their culture and practices tend to be more resilient and thrive in a constantly changing business environment.

2. Method

The research method employed in this study is a literature review with a qualitative approach using descriptive analysis. The steps involved in this research include a strict selection stage of relevant articles published between 2012-2024 on Google Scholar. Initially, data were obtained from 70 articles identified in literature search. After undergoing a rigorous selection process based on inclusion and exclusion criteria, including topic relevance, methodological quality, and information accuracy, the number of articles used for analysis was narrowed down to 53 articles. The next stage involves an in-depth review of each selected article to identify key findings, ideas, and trends related to HR management strategies to enhance the adoption of information technology in MSMEs from the perspective of organizational innovation. Data from these articles were then analyzed descriptively to describe the characteristics, patterns, and main findings emerging from this literature review. Descriptive analysis is used to provide a deep understanding of relevant issues and provide a strong foundation to support the argumentation and conclusions in this research. By using this method, the research aims to provide meaningful insights and significant contributions to understanding HR management strategies and IT adoption in MSMEs from the perspective of organizational innovation.

3. Result and Discussion

In the current digital era, information technology has become a crucial aspect for the growth and sustainability of Micro, Small, and Medium Enterprises (MSMEs). However, the adoption of information technology among MSMEs often falls short of expectations, presenting its own challenges for stakeholders striving to advance this sector. One key to overcoming these challenges is an effective human resource management (HRM) strategy, which can significantly influence the attitudes, knowledge, and skills of individuals within the organization regarding the adoption of information technology. From an organizational innovation perspective, efforts to enhance the adoption of information technology in MSMEs are not only about introducing new technology but also involve changes in organizational culture, structure, and value systems that support innovation and transformation.

It is important to recognize that the implementation of information technology in Micro, Small, and Medium Enterprises (MSMEs) is not solely about selecting the latest or most expensive technology but rather about the effective integration of that technology into existing business processes [48]. Therefore, an adequate human resource management (HRM) strategy must take into account various factors, ranging from understanding business needs to individuals' readiness to face the changes brought about by the implementation of new technology.

The first step in the human resource management (HRM) strategy to enhance the adoption of information technology in MSMEs is competency mapping. This process involves identifying and recognizing the skills required for the implementation and management of information technology, from basic to advanced levels of expertise [49]. Through this mapping, it is possible to accurately identify skill gaps and establish specific training needs, which in turn will form a solid foundation for human resource development efforts in dealing with the evolving dynamics of technology.

Furthermore, it is crucial to emphasize the significant influence of organizational culture. A culture that fosters innovation and experimentation is essential in creating an environment where employees feel comfortable adopting new technology. The importance lies in viewing innovation as an opportunity to improve efficiency and productivity rather than as a risk [50]. Especially in the context of MSMEs, which often face resource constraints, a culture that reinforces collaboration, flexibility, and shared responsibility will be a key factor in addressing and responding to technological changes. Therefore, efforts to build a progressive and adaptive organizational culture will provide a strong foundation for the successful adoption of information technology in MSMEs.

In this context, it is not only important to consider organizational culture aspects that support the adoption of information technology but also to integrate human resource development (HRD) into the strategy holistically. Continuous training and learning should be placed as an integral part of the organizational culture structure. This can be realized through various mechanisms, from internally organized training programs held periodically to strategic partnerships with educational institutions or external training providers. Additionally, the formation of cross-functional teams that encourage knowledge and experience exchange is also crucial [51]. Thus, a comprehensive integration of HRD into the information technology adoption strategy will provide a strong foundation for MSMEs to succeed in facing challenges and opportunities in this digital era.

Undeniably, visionary leadership also plays a crucial role in driving this transformation. A leader's ability to articulate a vision, motivate, and provide support to employees in facing change will be decisive factors in the success of information technology adoption in the MSME environment [52]. Moreover, they are also required to lead by example in utilizing technology, thereby inspiring and boosting confidence among team members and all stakeholders. With strong and visionary leadership, MSMEs will be able to confidently move forward in responding to and optimizing the benefits of technological advancements.

Lastly, it is imperative to conduct regular evaluations and feedback to ensure that the HRD strategy aligns with the established plans. This evaluation includes reviewing the effectiveness of the steps taken and the extent to which they meet the set goals. In this context, it is important to ensure that the strategy can adapt to the dynamics of technological changes and evolving business needs. Ongoing evaluation will provide a deep understanding of the latest developments in information technology and enable necessary improvements and adjustments to the HRD strategy. Thus, a regular cycle of evaluation and feedback will form the foundation for MSMEs to maintain their relevance and competitiveness in facing challenges and opportunities in this digital era [53].

By implementing a holistic and sustainable approach to HRD, Micro, Small, and Medium Enterprises (MSMEs) can strengthen their ability to adopt information technology, ultimately leading to positive impacts on competitiveness, efficiency, and innovation levels in the sector. This not only benefits the MSMEs themselves but also has the potential to make a positive contribution to the overall economy. With increased efficiency and productivity in MSMEs, it will drive broader economic growth, create new opportunities, and stimulate the creation of more jobs. Thus, a comprehensive approach to HRD not only provides internal benefits to MSMEs but also impacts the progress and economic welfare overall.

4. Conclusion

From an examination of human resource management (HRM) strategies to enhance the adoption of information technology in Micro, Small, and Medium Enterprises (MSMEs) from an organizational innovation perspective, it can be concluded that effective HRM is key to success in adopting information technology. This involves competency mapping, fostering an organizational culture supportive of innovation, integrating HRM development into technology adoption strategies, visionary leadership, and ongoing evaluation. Therefore, recommendations arising from this research include:

1. Relevant stakeholders, including the government, educational institutions, and non-profit organizations, need to collaborate to provide specialized training and mentoring programs for MSMEs in adopting information technology. This may include technical training, leadership coaching, and organizational capacity building.
2. MSMEs need to prioritize the establishment of an organizational culture that promotes innovation, collaboration, and continuous learning. This can be achieved through rewarding new ideas, facilitating discussion forums and knowledge exchange, and creating a work environment open to experimentation and failure.
3. MSME leaders need to take an active role in leading change and setting an example in adopting information technology. They should strengthen vision communication, motivate employees, and provide the necessary support and resources to succeed in digital transformation.

4. Regular evaluation of HRM and information technology adoption strategies is necessary to assess progress, identify barriers, and adjust necessary steps. This ensures that the implemented strategies remain relevant and effective in addressing business dynamics and technological advancements.

By implementing these recommendations, it is hoped that MSMEs can optimize the potential of information technology to enhance their productivity, efficiency, and competitiveness in an increasingly competitive and digital market.

References

- [1] 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.
- [2] 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.
- [3] A. M. A. Ausat and T. Peirisal, "Determinants of E-commerce Adoption on Business Performance : A Study of MSMEs in Malang City , Indonesia," *Journal On Optimizations Of Systems At Industries*, vol. 20, no. 2, pp. 104–114, 2021, doi: 10.25077/josi.v20.n2.p104-114.2021.
- [4] A. M. A. Ausat and S. Suherlan, "Obstacles and Solutions of MSMEs in Electronic Commerce during Covid-19 Pandemic: Evidence from Indonesia," *BASKARA: Journal of Business and Entrepreneurship*, vol. 4, no. 1, pp. 11–19, Oct. 2021, doi: 10.54268/BASKARA.4.1.11-19.
- [5] K. Alqarni, M. F. Agina, H. A. Khairy, B. S. Al-Romeedy, D. A. Farrag, and R. M. Abdallah, "The Effect of Electronic Human Resource Management Systems on Sustainable Competitive Advantages: The Roles of Sustainable Innovation and Organizational Agility," *Sustainability*, vol. 15, no. 23, p. 16382, Nov. 2023, doi: 10.3390/su152316382.
- [6] P. Diawati, A. M. A. Ausat, and J. Augustin, "Creativity: How to Develop an Entrepreneurial Attitude of Creativity," *Journal on Education*, vol. 5, no. 4, pp. 11116–11122, 2023, Accessed: Mar. 02, 2023. [Online]. Available: <https://jonedu.org/index.php/joe/article/view/2036>
- [7] A. T. Dedahanov, C. Rhee, and J. Yoon, "Organizational structure and innovation performance," *Career Development International*, vol. 22, no. 4, pp. 334–350, Aug. 2017, doi: 10.1108/CDI-12-2016-0234.
- [8] B. Bradač Hojnik and I. Hudek, "Small and Medium-Sized Enterprises in the Digital Age: Understanding Characteristics and Essential Demands," *Information*, vol. 14, no. 11, p. 606, Nov. 2023, doi: 10.3390/info14110606.
- [9] O. Ridić, S. Bušatlić, and E. Knezović, "Strategic human resource management in small and medium enterprises," *International Journal of Human Resources Development and Management*, vol. 20, no. 2, p. 114, 2020, doi: 10.1504/IJHRDM.2020.10027546.
- [10] A. Andika, J. Jennifer, J. C. Huang, and J. C. Sebastian, "Analysis of Digital Marketing Adoption in Indonesian Micro, Small, and Medium Enterprises," *Jurnal Manajemen Bisnis*, vol. 18, no. 3, pp. 308–328, Jul. 2021, doi: 10.38043/jmb.v18i3.3173.
- [11] 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.
- [12] I. Rustiawan, J. D. S. Amory, and D. Kristanti, "The Importance of Creativity in Human Resource Management to Achieve Effective Administration," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 144–149, Nov. 2023, doi: 10.61100/adman.v1i3.63.
- [13] N. Susantinah, I. Krishernawan, and Murthada, "Human Resource Management (HRM) Strategy in Improving Organisational Innovation," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 201–207, Nov. 2023, doi: 10.61100/adman.v1i3.80.
- [14] I. Sugiarto, "Human Resource Development Strategies to Achieve Digital Transformation in Businesses," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 156–162, Nov. 2023, doi: 10.61100/adman.v1i3.66.
- [15] M. Ryketeng, W. Syachbrani, and Syamsuri, "Optimising Human Resources Capacity: Driving Adoption of Latest Technology and Driving Business Innovation amidst the Dynamics of the Digital Era," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 229–236, Nov. 2023, doi: 10.61100/adman.v1i3.86.
- [16] R. Wikansari, A. S. Wiyono, and Subekti, "Psychological Capital Analysis in Assessing the Career Feasibility of Vocational Graduates as Human Resource Suppliers in the Electronics Industry," *Journal*

- of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 222–228, Nov. 2023, doi: 10.61100/adman.v1i3.85.
- [17] S. S. Gadzali, J. Gazalin, S. Sutrisno, Y. B. Prasetya, and A. M. A. Ausat, “Human Resource Management Strategy in Organisational Digital Transformation,” *Jurnal Minfo Polgan*, vol. 12, no. 2, pp. 760–770, 2023, doi: <https://doi.org/10.33395/jmp.v12i2.12508>.
- [18] R. Wikansari, A. M. A. Ausat, S. S. Gadzali, Suherlan, and H. K. Azzaakiyyah, “Understanding the Meaning of Well-Being in the Perspective of Psychological Science: A Literature Review,” *Community Development Journal: Jurnal Pengabdian Masyarakat*, vol. 4, no. 1, pp. 702–707, 2023, doi: 10.31004/cdj.v4i1.12455.
- [19] Tusriyanto, Moh. M. Sulaeman, and L. Nurcholidah, “Optimising Organisational Performance Through Human Resource Management Strategy and Technology Integration to Enhance Innovation,” *Technology and Society Perspectives (TACIT)*, vol. 1, no. 3, pp. 139–147, 2023, doi: <https://doi.org/10.61100/tacit.v1i3.81>.
- [20] Manda HM and A. Z. Abidin, “The Role of Leadership in Managing Information Technology Change and its Impact on Organisational Human Resources,” *Technology and Society Perspectives (TACIT)*, vol. 1, no. 3, pp. 112–121, 2023, doi: <https://doi.org/10.61100/tacit.v1i3.59>.
- [21] K. Kraugusteeliana, “A Study on Gender Roles in the Information Technology Profession and its Impact on Human Resources,” *Technology and Society Perspectives (TACIT)*, vol. 1, no. 3, pp. 104–111, 2023, doi: <https://doi.org/10.61100/tacit.v1i3.58>.
- [22] I. Rustiawan, S. S. Gadzali, Y. Suharyat, U. Iswadi, and A. M. A. Ausat, “The Strategic Role of Human Resource Management in Achieving Organisational Goals,” *Innovative: Journal Of Social Science Research*, vol. 3, no. 2, pp. 632–642, 2023, doi: <https://doi.org/10.31004/innovative.v3i2.345>.
- [23] E. W. Prastyaningtyas, A. M. A. Ausat, L. F. Muhamad, M. I. Wanof, and S. Suherlan, “The Role of Information Technology in Improving Human Resources Career Development,” *Jurnal Teknologi Dan Sistem Informasi Bisnis*, vol. 5, no. 3, pp. 266–275, 2023, doi: <https://doi.org/10.47233/jteksis.v5i3.870>.
- [24] 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>.
- [25] 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>
- [26] A. Arjang, S. Sutrisno, R. M. Permana, R. Kusumastuti, and A. M. A. Ausat, “Strategies for Improving the Competitiveness of MSMEs through the Utilisation of Information and Communication Technology,” *Al-Buhuts*, vol. 19, no. 1, pp. 462–478, 2023.
- [27] D. Touriano, S. Sutrisno, A. D. Kuraesin, S. Santosa, and A. M. A. Ausat, “The Role of Information Technology in Improving the Efficiency and Effectiveness of Talent Management Processes,” *Jurnal Minfo Polgan*, vol. 12, no. 2, pp. 539–548, 2023, doi: <https://doi.org/10.33395/jmp.v12i2.12454>.
- [28] Kraugusteeliana, E. Surjati, A. M. A. Ausat, S. A. Pramono, and H. K. Prabu, “A Literature Review on the Application of Technology During Covid-19 and Its Relationship to Performance,” *International Journal Of Artificial Intelligence Research*, vol. 6, no. 1.2, p. 1, 2022, doi: <https://doi.org/10.29099/ijair.v6i1.2.765>.
- [29] P. Diawati, S. S. Gadzali, M. K. N. Abd Aziz, A. M. A. Ausat, and S. Suherlan, “The Role of Information Technology in Improving the Efficiency and Productivity of Human Resources in the Workplace,” *Jurnal Teknologi Dan Sistem Informasi Bisnis*, vol. 5, no. 3, pp. 296–302, 2023, doi: <https://doi.org/10.47233/jteksis.v5i3.872>.
- [30] A. Yani, D. O. Suparwata, and Hamka, “Product and Service Innovation Strategies to Expand MSME Markets,” *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 163–169, Nov. 2023, doi: 10.61100/adman.v1i3.67.
- [31] S. Sutrisno, R. M. Permana, and A. Junaidi, “Education and Training as a Means of Developing MSME Expertise,” *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 137–143, Nov. 2023, doi: 10.61100/adman.v1i3.62.
- [32] B. Sunarso, Tusriyanto, and F. Mustafa, “Analysing the Role of Visual Content in Increasing Attraction and Conversion in MSME Digital Marketing,” *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 193–200, Nov. 2023, doi: 10.61100/adman.v1i3.79.

- [33] B. Sunarso, Tusriyanto, and F. Mustafa, "Analysing the Role of Visual Content in Increasing Attraction and Conversion in MSME Digital Marketing," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 3, no. 1, pp. 193–200, 2023, doi: <https://doi.org/10.61100/adman.v1i3.79>.
- [34] A. Risdwiyanto, Moh. M. Sulaeman, and A. Rachman, "Sustainable Digital Marketing Strategy for Long-Term Growth of MSMEs," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 3, pp. 180–186, Nov. 2023, doi: [10.61100/adman.v1i3.70](https://doi.org/10.61100/adman.v1i3.70).
- [35] M. R. Ohara, D. O. Suparwata, and S. Rijal, "Revolutionary Marketing Strategy: Optimising Social Media Utilisation as an Effective Tool for MSMEs in the Digital Age," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 2, no. 1, pp. 313–318, 2024, doi: <https://doi.org/10.61100/adman.v2i1.125>.
- [36] K. Agustian, R. Hidayat, A. Zen, R. A. Sekarini, and A. J. Malik, "The Influence of Influencer Marketing in Increasing Brand Awareness and Sales for SMEs," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 2, pp. 68–78, Oct. 2023, doi: [10.61100/tacit.v1i2.54](https://doi.org/10.61100/tacit.v1i2.54).
- [37] K. Agustian, R. Hidayat, A. Zen, R. A. Sekarini, and A. J. Malik, "The Influence of Influencer Marketing in Increasing Brand Awareness and Sales for SMEs," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 2, pp. 68–78, Oct. 2023, doi: [10.61100/tacit.v1i2.54](https://doi.org/10.61100/tacit.v1i2.54).
- [38] S. Sutrisno, "The Role of Partnerships and Business Networks in the Growth of MSMEs in the Digital Age," *Technology and Society Perspectives (TACIT)*, vol. 1, no. 3, pp. 122–131, 2023, doi: <https://doi.org/10.61100/tacit.v1i3.61>.
- [39] D. Metris, K. Kraugusteeliana, J. D. S. Amory, F. Mustafa, and A. Risdwiyanto, "The Influence of Community Support on the Sustainability of MSMEs in the Digital Era," *Jurnal Terobosan Peduli Masyarakat (TIRAKAT)*, vol. 1, no. 1, pp. 21–29, Jan. 2024, doi: [10.61100/j.tirakat.v1i1.102](https://doi.org/10.61100/j.tirakat.v1i1.102).
- [40] D. Metris, K. Kraugusteeliana, J. D. S. Amory, F. Mustafa, and A. Risdwiyanto, "The Influence of Community Support on the Sustainability of MSMEs in the Digital Era," *Jurnal Terobosan Peduli Masyarakat (TIRAKAT)*, vol. 1, no. 1, pp. 21–29, Jan. 2024, doi: [10.61100/j.tirakat.v1i1.102](https://doi.org/10.61100/j.tirakat.v1i1.102).
- [41] S. Rijal, A. M. A. Ausat, R. Kurniawati, and S. Suherlan, "Opportunities and Challenges for MSMEs in Indonesia in the Face of Ramadan," *Community Development Journal: Jurnal Pengabdian Masyarakat*, vol. 4, no. 2, pp. 2035–2039, 2023, doi: [10.31004/cdj.v4i2.13936](https://doi.org/10.31004/cdj.v4i2.13936).
- [42] A. D. Subagja, A. M. A. Ausat, A. R. Sari, M. I. Wanof, and S. Suherlan, "Improving Customer Service Quality in MSMEs through the Use of ChatGPT," *Jurnal Minfo Polgan*, vol. 12, no. 2, pp. 380–386, 2023, doi: <https://doi.org/10.33395/jmp.v12i2.12407>.
- [43] M. A. K. Harahap, S. Sutrisno, I. B. Raharjo, R. Novianti, and A. M. A. Ausat, "The Role of MSMEs in Improving the Economy in Ramadan," *Community Development Journal: Jurnal Pengabdian Masyarakat*, vol. 4, no. 2, pp. 1907–1911, 2023, doi: [10.31004/cdj.v4i2.13794](https://doi.org/10.31004/cdj.v4i2.13794).
- [44] P. Diawati, S. S. Gadzali, A. J. Mahardhani, B. Irawan, and A. M. A. Ausat, "Analysing the Dynamics of Human Innovation in Administration," *Jurnal Ekonomi*, vol. 12, no. 02, pp. 537–540, 2023, Accessed: Apr. 04, 2023. [Online]. Available: <https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/1652>
- [45] A. Saputra, D. Ilmi, W. Angelina, S. S. Gadzali, and A. M. A. Ausat, "PT Pos Indonesia Public Service Innovation in Maintaining Existence and Competitiveness in the Industrial Era 4.0 (Case Study of PT Pos Indonesia KC Subang)," *Journal on Education*, vol. 5, no. 3, pp. 10302–10311, 2023, Accessed: Feb. 22, 2023. [Online]. Available: <https://jonedu.org/index.php/joe/article/view/1926>
- [46] Sutrisno, A. M. A. Ausat, B. Permana, and M. A. K. Harahap, "Do Information Technology and Human Resources Create Business Performance: A Review," *International Journal of Professional Business Review*, vol. 8, no. 8, p. e02206, Aug. 2023, doi: [10.26668/businessreview/2023.v8i8.2206](https://doi.org/10.26668/businessreview/2023.v8i8.2206).
- [47] H. K. Azzaakiyyah, A. M. A. Ausat, S. S. Gadzali, P. Diawati, and Suhartono, "Analisis Faktor Pembentuk Budaya Inovatif dalam Konteks Bisnis: Kunci Kesuksesan untuk Inovasi Organisasi," *JRB-Jurnal Riset Bisnis*, vol. 7, no. 1, pp. 41–52, 2023, doi: <https://doi.org/10.35814/jrb.v7i1.4668>.
- [48] I. N. Nurcaya, I. K. Rahyuda, G. A. K. Giantari, and N. W. Ekawati, "The Effect of Information Technology on The Performance of MSMEs During the Covid-19 Pandemic," *International Journal of Social Science and Business*, vol. 6, no. 2, pp. 262–267, Apr. 2022, doi: [10.23887/ijssb.v6i2.44260](https://doi.org/10.23887/ijssb.v6i2.44260).
- [49] M. Keil, H. K. Lee, and T. Deng, "Understanding the most critical skills for managing IT projects: A Delphi study of IT project managers," *Information & Management*, vol. 50, no. 7, pp. 398–414, Nov. 2013, doi: [10.1016/j.im.2013.05.005](https://doi.org/10.1016/j.im.2013.05.005).
- [50] R. P. J. Rajapathirana and Y. Hui, "Relationship between innovation capability, innovation type, and firm performance," *Journal of Innovation & Knowledge*, vol. 3, no. 1, pp. 44–55, Jan. 2018, doi: [10.1016/j.jik.2017.06.002](https://doi.org/10.1016/j.jik.2017.06.002).

- [51] S. Ghobadi and J. D'Ambra, "Knowledge sharing in cross-functional teams: a cooperative model," *Journal of Knowledge Management*, vol. 16, no. 2, pp. 285–301, Mar. 2012, doi: 10.1108/13673271211218889.
- [52] A. M. A. Ausat, S. Suherlan, T. Peirisal, and Z. Hirawan, "The Effect of Transformational Leadership on Organizational Commitment and Work Performance," *Journal of Leadership in Organizations*, vol. 4, no. 4, pp. 61–82, Mar. 2022, doi: 10.22146/jlo.71846.
- [53] L. Anatan and Nur, "Micro, Small, and Medium Enterprises' Readiness for Digital Transformation in Indonesia," *Economies*, vol. 11, no. 6, p. 156, May 2023, doi: 10.3390/economies11060156.