JAMBURA AGRIBUSINESS JOURNAL

VOLUME 6 ISSUE 1 JULY 2024
E-ISSN: 2685-5771 | **P-ISSN:** 2685-5860
Publisher: Agribusiness Department
Agriculture Faculty State University of Gorontalo
DOI: 10.37046/jaj.v6i1.33056

DRIVING EMPLOYEE PERFORMANCE IN AGRIBUSINESS: THE ROLE OF TECHNOLOGY ADOPTION, EMOTIONAL INTELLIGENCE, AND DIGITAL COMPETENCE

Sri Wiyati Mahrani [*)1)], Tanti Widia Nurdiani [2)], Susatyo Adhi Pramono [3)], Muhammad Reza Aulia [4)], Riesna Apramilda [5)]

[1)] Universitas Halu Oleo, Southeast Sulawesi, Indonesia
[2)] Universitas Islam Raden Rahmat Malang, East Java, Indonesia
[3)] Universitas Wijayakusuma Purwokerto, Central Java, Indonesia
[4)] Universitas Teuku Umar, Aceh, Indonesia
[5)] Universitas Ibnu Sina, Riau Islands, Indonesia
[*)] Corresponding author, Email: sri_wiyati@yahoo.com

(Received: June 28, 2024 | Accepted: August 21, 2024 | Published: September 30, 2024)

ABSTRACT

This research is intended to examine the impact of technology adoption in work processes, emotional intelligence, and digital competence on the performance of the employees in agribusiness companies. Adopting the quantitative strategy with the survey technique, data were obtained from the surveys with the responses of 180 agribusiness employees. Structural Equation Modeling (SEM) with the help of the SmartPLS 4 program has been used as the technique to conduct the analysis. The findings reveal the significant influence of technology adoption in work processes towards employee performance. It also indicates the significant influence of emotional intelligence, which validates the significance of the management of emotions in the face of modern work dynamics. Digital competence is found to be an essential prerequisite in maximizing the efficiency and productivity in work, especially in the application of agricultural information systems and IoT-based technologies. This research offers managerial implications in the form of recommendations to management in the agribusiness to put more emphasis on technology training as well as the soft skill development of employees. The research also enriches the knowledge with the integration of technological as well as psychological orientations existing in the context of agribusiness, which has remained relatively under-theorized empirically.

Keywords: Digital competence; Emotional intelligence; Employee performance; Technology adoption; Work process

INTRODUCTION

Information and communication technology (ICT) has transformed working processes in all fields, including the agribusiness sector, which used to be linked with manual, time-consuming methods. Technologies like the Internet of Things, artificial intelligence, big data analytics, and systems in the cloud have introduced dramatic improvement in production, distribution, as well as supply chain management (Aulia *et al*., 2021). The technologies facilitate real-time tracking, improved predictions about the weather and crop yield, as well as the automation of manual processes. For the agribusiness sector, the use of such technologies is not only technical in nature but is also applicable to work systems as well as human resource management. The employees have to adjust to digital work equipment, application-based reporting mechanisms, as well as even higher-level virtual communication (Renwarin *et al*.,

2022). With the help of technology, decision-making becomes quicker as well as data-driven in nature, which increases operational efficiency as well as the competitiveness of the companies operating in today's globalized marketplace (Aulia, 2023; Tannady & Dewi, 2024).

Digitalisation has pushed agribusiness companies to employ management information systems, enterprise resource planning (ERP) applications, as well as sensor-based technologies and automation technologies to assist in making better decisions (Aulia *et al*., 2024). As such, workers in the agribusiness industry have to face new challenges, i.e., the necessity to learn about carrying out functions with different technologies and applications related to their occupations and duties (Wahyoedi *et al*., 2024). The ability to use digital tools, read technical data, as well as perform operations using information systems is now the critical skill in work quality as well as productivity improvement (Harahap *et al*., 2025). Without the human resource readiness to embrace such technologies, the digitalisation processes carried out by companies will not proceed optimally (Diawati *et al*., 2019).

However, its adoption is not always smooth in practice. Even as companies can invest in the required infrastructure and systems to facilitate digitalization, in practice, many companies encounter barriers to its adoption (Awaludin *et al*., 2016). Resistance to change, either in the form of ignorance or in the form of lack of confidence with regard to new technology, is one such primary challenge. It can delay the process of digital transformation as well as the realization of overall organizational objectives (Hataani & Mahrani, 2013). There exist many individual considerations affecting technology adoption in the workplace. The readiness of employees to utilize technology effectively and efficiently is one such critical consideration. Such readiness involves technical knowledge, computer skills, as well as a willingness to change (Siagian *et al*., 2024). In the absence of such readiness, workers will likely experience difficulties in adjusting to new systems, which in turn has negative impacts on productivity as well as performance. Accordingly, understanding the individual considerations is critical to developing an effective digital transformation strategy (Zamzam *et al*., 2023).

Emotional intelligence is also a critical factor in affecting employees' responses to the impact created through digital transformation. Fast-paced and large-scale changes tend to bring psychological pressure, ambiguity, as well as resistance from people who feel inadequately prepared in their minds (Mahrani & Alwi, 2022). Under these circumstances, emotional intelligence helps individuals to identify, observe, as well as handle one's own as well as other people's feelings, to effectively deal with challenges. People with high emotional intelligence manage to adjust to change with ease, respond to stress better, exhibit empathy, as well as effective communication skills in work groups (Syafitri & Mahrani, 2021). This is particularly critical in the work environment in the digital age where cross-functional work requires the extensive use of technology. Good emotional intelligence helps workers not only sustain stable performance in the face of change but even transform into people who encourage the rest to develop with them (Ade *et al*., 2022).

Moreover, digital competence has turned into an essential need in today's Industry 4.0 era that cannot be overlooked. The competence comprises the capability to utilize different digital applications, comprehend and interpret digital data, as well as critically evaluate technology-based information. In the context of the highly digitalized modern workplace, workers must be able to communicate with automated machines, cloud-based technologies, as well as IoT-based technologies, which are increasingly used in the agribusiness sectors. Highly competent employees with high digital capability do not only perform their work more effectively but also have the capability to develop innovations, streamline work processes, as well as solve work problems independently (Juharsah *et al*., 2024). This has the effect of enhancing overall organizational efficiency. In the agribusiness chain, for example, the utilization of technologies such as drone technologies, weather apps, as well as agricultural

information systems necessitates high digital capability in utilising them in an effective as well as productive manner (Aulia *et al*., 2021).

Employee performance is one of the primary measures of an organization's success, including in the rapidly competitive agribusiness industry. Optimal performance is determined not only by the technical and structural elements of an organization but also by the individual elements such as the capability to adjust to technology, emotional intelligence, and proficiency in digital competence (Renwarin *et al*., 2022). The three areas are said to make the greatest contribution to the role played by employees to adjust to alterations in the digital work environment, as well as increasing the effectiveness and efficiency of daily work. Since the three variables have high significance, an in-depth empirical analysis is required to determine the degree to which technology adoption in work processes, emotional intelligence, and digital competence influence employee performance, especially in the agribusiness business (Tannady & Dewi, 2024). The current research is required to bridge the gap in the existing literature, which has largely examined the technical and organizational views in technology adoption but has greatly neglected the individual elements. As such, the research is likely to yield theoretical as well as practical contributions towards enhancing human resource performance through a technology-based and personal capability-building strategy (Wahyoedi *et al*., 2024).

Previous studies have discussed the relationship between technology and employee performance; however, most have focused primarily on the manufacturing, service, or information technology sectors (Diawati *et al*., 2019; Harahap *et al*., 2025; Siagian *et al*., 2024). These studies generally emphasize the effectiveness of using technology systems and their impact on operational efficiency, often within relatively homogeneous contexts. On the other hand, the agribusiness industry has unique characteristics that include geographical challenges, limited digital infrastructure, and varying levels of technology literacy among workers. This requires a different approach and understanding for digital transformation in the sector compared to others. The research gap lies in the lack of comprehensive studies that integrate psychological factors such as emotional intelligence and digital competence with technology adoption to analyze their impact on employee performance in the agribusiness industry. In fact, the challenges in this sector are not only technical but also involve individual readiness to face changes in work systems.

However, the major concern is that the majority of agribusiness employees still struggle to adapt to new digital frameworks. Restraints such as poor digital literacy, low self-esteem, and resistance to change curb the effectiveness of technology uptake. This is not a technology issue only but also a human resource issue, since employees' willingness to learn, adapt, and operate in an online work environment decides the success of change. If issues are not addressed, the potential benefits of technology uptake in terms of raising productivity and efficiency will not be effectively realized. This makes the issue very crucial to the competitiveness and sustainability of agribusiness firms in the age of digitalization.

The originality of this study lies in its holistic framework that brings technology adoption, emotional intelligence, and digital proficiency together in one analytical model for the agribusiness sector. In contrast to earlier studies, which mostly focus on technical or organizational factors, this study focuses on the intersectionality of technological proficiency and human capabilities in shaping employee performance. This is particularly a suitable approach given the nature of agribusiness as a multidimensional industry where digitalization not only requires infrastructure but also human adaptability.

Therefore, in the current study, it is empirically investigated to what extent technology adoption, emotional intelligence, and digital competence influence employee performance in agribusiness companies. Closing the literature gap, this study contributes theoretically, as it strengthens the human resource readiness debate

regarding digital transformation, and practically, as it provides suggestions for adaptive HR strategy formulation in the agribusiness sector.

METHOD

This study employed a quantitative explanatory research design. The research was conducted in agribusiness companies located in West Java, Indonesia. Data collection took place between January and February 2025 through an online survey distributed to employees in selected companies. The population comprised employees working in agribusiness companies that had adopted digitalized work processes such as management applications, digital reporting systems, and IoT-based technologies. A purposive sampling technique was applied to ensure that respondents met specific criteria: (1) having worked for at least one year in the company, and (2) being actively involved in digitally supported work processes. A total of 180 valid responses were obtained, which exceeded the minimum sample size required for SEM analysis as suggested by Hair *et al*. (2019), namely 10 times the largest number of structural paths pointing to a construct. This sample size was considered sufficient to ensure statistical power in hypothesis testing.

The research model consists of four latent variables (constructs) including: Technology Adoption (TA) (X1) measured by indicators related to the use of digital tools, system integration, and automation in daily tasks; Emotional Intelligence (EI) (X2) measured by indicators such as self-awareness, self-regulation, empathy, and social skills; Digital Competence (DC) (X3) measured by indicators such as ability to operate digital applications, interpret digital data, and evaluate digital information; and Employee Performance (EP) (Y) measured by indicators such as task completion, efficiency, quality of work, and innovation. The model hypothesizes direct influences of TA, EI, and DC on EP, while also recognizing potential indirect influences through interactions among independent variables.

Data were collected using a structured questionnaire with items measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The indicators for each construct were adapted from prior validated studies to ensure content validity. The questionnaire was pilot-tested with 30 respondents to examine reliability and clarity, and the results confirmed that the items were reliable and valid for use in the main study.

Data Analysis Procedure

Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the SmartPLS version 4 software. The choice of SEM-PLS was justified because it is suitable for exploratory research with relatively small to medium sample sizes, does not require multivariate normality, and is capable of analyzing complex models with multiple constructs and indicators.

The analysis was carried out in the following steps:

1. Measurement Model (Outer Model) Evaluation: testing construct validity and reliability using:
   a. Indicator reliability (outer loadings ≥ 0.70)
   b. Internal consistency reliability (Composite Reliability ≥ 0.70)
   c. Convergent validity (Average Variance Extracted, AVE ≥ 0.50)
   d. Discriminant validity (Fornell–Larcker criterion and HTMT ratio).
2. Structural Model (Inner Model) Evaluation: testing relationships between constructs using:
   a. Path coefficients and their significance (t-statistics, p-values) via bootstrapping (5,000 resamples).
   b. Coefficient of determination (R^2) to assess explained variance.
   c. Effect size (f^2) to evaluate the relative impact of each exogenous variable.
   d. Predictive relevance (Q^2) using blindfolding procedure.

3. Hypothesis Testing: hypotheses were accepted if the path coefficient was significant at $p < 0.05$.

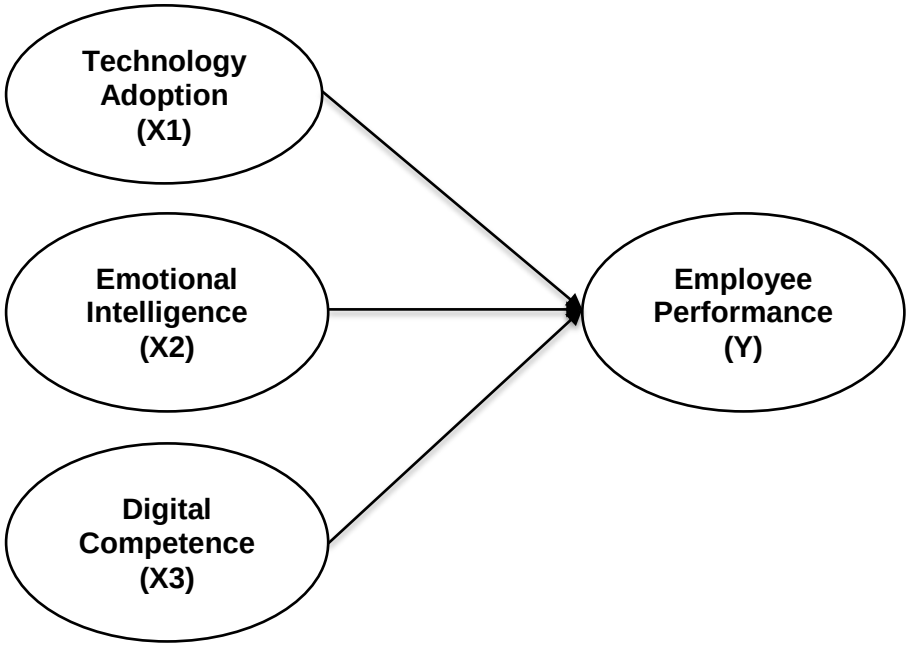

Figure 1. Research Model

RESULT AND DISCUSSION

Characteristics of Respondents

Table 1 shows that the respondents were fairly balanced across gender, with 60% male and 40% female. Most respondents were in the productive age group of 26-35 years (40%) and 36-45 years (30%). Educational background was dominated by bachelor's degree holders (62.2%), which indicates adequate academic preparation to adapt to digital work processes.

Table 1. Characteristics of Respondents

Category	Classification	Frequency (n)	Percentage (%)
Gender	Male	108	60
	Female	72	40
Age	< 25 Years	28	15.6
	26-35 Years	72	40
	36-45 Years	54	30
	> 45 Years	26	14.4
Education	High School/Diploma	38	21.1
	Bachelor	112	62.2
	Postgraduate	30	16.7
Tenure	1-3 Years	64	35.6
	4-5 Years	52	28.9
	>5 Years	64	35.6
Type of Job	Operations/Production	88	48.9
	Supply Chain/Distribution	46	25.6
	Other	46	25.6

Source: Primary data processed, 2025

The tenure distribution shows that both relatively new employees and those with longer work experience are represented. Most respondents worked in production/operations (48.9%), which aligns with the study's focus on digital transformation in agribusiness processes.

Measurement Model of Variables

Table 2 presents the results of the convergent validity and reliability tests. All indicators have factor loadings above 0.70, indicating that each item strongly reflects its construct. Cronbach's Alpha and Composite Reliability values are above 0.70, meeting the internal consistency criteria. The AVE values for all indicators are above 0.50, confirming convergent validity. This means the indicators used are reliable and valid in measuring the latent variables of technology adoption, emotional intelligence, digital competence, and employee performance.

Table 2. Measurement Model Results

Variables	Loading	Cronbach's Alpha	CR	AVE
Technology Adoption (X1)	0.72-0.84	0.84	0.88	0.65
Emotional Intelligence (X2)	0.75-0.86	0.86	0.90	0.68
Digital Competence (X3)	0.78-0.89	0.88	0.92	0.70
Employee Performance (Y)	0.76-0.88	0.87	0.91	0.69

Source: Primary data processed, 2025

Hypothesis Testing

Table 4 presents the results of the structural model testing. All three hypotheses are supported. Technology adoption has a positive effect on employee performance ($\beta = 0.29$, $t = 5.432$, $p < 0.001$). Emotional intelligence also has a significant positive effect ($\beta = 0.25$, $t = 4.019$, $p < 0.01$). Digital competence shows the strongest positive effect ($\beta = 0.41$, $t = 6.103$, $p < 0.001$). The effect size (f^2) indicates that digital competence has the largest contribution (0.18, moderate effect), followed by technology adoption (0.12) and emotional intelligence (0.10).

Table 3. Structural Model Results

Hypothesis		β	T-Value	P-Value	F^2	Description
H1	TA → EP	0.29	5.432	0.000	0.12	Significant
H2	EI → EP	0.25	4.019	0.000	0.10	Significant
H3	DC → EP	0.41	6.103	0.000	0.18	Significant

Source: Primary data processed, 2025

Results from the data analysis show that Technology Adoption in work processes is positively related to employee performance with the value of the t-statistic as 5.432 and $p < 0.001$. The research outcome indicates the higher the relevant technology use position integrated into employees' work processes, the higher the productivity improvement, effectiveness, and work efficiency that can be realized. The technologies in consideration comprise work information systems, automation tools, as well as cloud applications that facilitate faster communication as well as reporting processes. Appropriate technology use can decrease manual work burden, lower error rates, as well as hasten the completion of work. Employees who use technology have the culture to employ data-based decision-making as well as work flexibility. Therefore, the findings highlight the value in the provision of technological infrastructure as well as digital training to employees to ensure the digital transformation processes can have a direct influence in the improvement in the individuals' as well as the overall organization's performance.

Emotional intelligence is also seen to have an important influence on employee performance with the t-statistic value being 4.019 and the p-value <0.01. It is important

to note the significance of individual capability to notice, comprehend, as well as manage emotions efficiently, personal emotions as well as those in the workplace. Employees with higher emotional intelligence can be able to stay emotionally stable, be empathetic, as well as communicate effectively with the team, ultimately leading to enhanced individual as well as group work performance. The working environment in the agriculture business world, which is now being computerized, requires fast adaptation to the new environment, which most likely generates psychological pressure. Under such a scenario, emotional intelligence acts as an emotional buffer allowing employees to stay productive as well as focused despite difficulties. Furthermore, emotional intelligence ensures the creation of a good working climate, minimizing conflict with people, as well as instilling an ethos of cooperation, all which directly lead to the attainment of optimal work performance.

In the meantime, Digital Competence has the most significant positive influence towards employee performance in the current research, with the value of the t-statistic being 6.103 and the value less than 0.001. This finding proves the capability to master digital technology, such as to operate work applications, analyze digital data, as well as to comprehend technological knowledge, to be the critical criterion in defining the degree to which employees can succeed in performing their work. Digital competence allows employees to adjust to system modifications faster, streamline work processes, and enhance precision as well as speed in the fulfillment of obligations. Employees who have high digital competence also can better manage to overcome challenges in the industry 4.0 era, where the adaptation to work management computer software, cloud computing-based information systems, as well as automation technologies is the new standard in the operational process. They are not only work efficiently, but also help to develop innovations as well as technology-based solutions. This finding supports the necessity to implement continuous digital training programs in companies, particularly those in the agribusiness business, which is currently in the process to achieve full digitalization in work processes.

Technology Adoption, Emotional Intelligence, and Digital Competence in Driving Employee Performance

In this study, Technology Adoption, Emotional Intelligence, and Digital Competence were found to have significant positive effects on employee performance in agribusiness companies. This shows that both technical aspects (technology adoption and digital competence) and non-technical aspects (emotional intelligence) are critical determinants of performance improvement in digitalized work environments. These results are in line with Aulia *et al*. (2021) and Tannady & Dewi (2024), who explained that digital transformation not only simplifies procedures and expedites task completion but also requires employees to adapt to new working methods. Appropriate technology adoption facilitates faster decision-making, reduces errors, and increases operational efficiency.

Renwarin *et al*. (2022) emphasized that readiness of human capital is one of the main challenges in digital transformation, particularly when employees lack sufficient training or technological literacy. However, the results of this study indicate that when technology is well-integrated into daily work processes, it significantly increases productivity and performance. This happens because employees who adopt technology tend to apply data-driven decision-making and demonstrate higher work flexibility, which aligns with findings by Harahap *et al*. (2025) who argue that digital competence enhances employees' ability to innovate and adapt in Industry 4.0.

In terms of emotional intelligence, this study shows that it also plays a significant role in enhancing employee performance. This finding is in accordance with Syafitri & Mahrani (2021) and Ade *et al*. (2022), who stated that emotional intelligence helps employees remain emotionally stable, empathetic, and effective in communication. In agribusiness settings, characterized by dynamic field conditions and uncertainties, emotional intelligence becomes even more crucial. Employees face time pressures,

variable natural conditions, and the need to coordinate across functions; therefore, the ability to manage emotions and maintain cooperative relationships directly supports performance. This confirms that non-technical competencies are not only complementary but fundamental in digital work environments.

The strongest effect found in this study was digital competence. This confirms Juharsah *et al*. (2024), who highlight digital competence as an essential skill in today's Industry 4.0 workplace. Employees with higher digital competence can operate digital tools more effectively, analyze data accurately, and adapt quickly to technological changes. In agribusiness, digital competence is particularly important due to the increasing application of drones, IoT devices, and mobile-based agricultural monitoring systems (Aulia *et al*., 2021). The current findings further show that employees with higher digital competence not only work efficiently but also contribute to innovation and problem-solving in the workplace. This suggests that continuous digital training is a strategic necessity for agribusiness companies.

Overall, the findings of this study emphasize the significance of the synergy between technology adoption, emotional intelligence, and digital competence in improving employee performance. Unlike previous research, which often examined these variables separately (Diawati *et al*., 2019; Siagian *et al*., 2024), this study demonstrates that their combination produces a stronger influence on performance. This provides both theoretical and practical contributions: theoretically, it validates the multidimensional nature of performance improvement in digitalized environments; practically, it implies that agribusiness companies must design holistic employee development programs that simultaneously address technological, emotional, and digital capabilities.

The novelty of this research lies in its integrative approach: while prior studies have largely focused on technological or psychological aspects in isolation, this study combines both perspectives into a single model tested in the agribusiness context. This approach not only provides a more comprehensive understanding of employee performance in digital transformation but also offers sector-specific insights, given the unique challenges of agribusiness such as geographical dispersion, uneven digital infrastructure, and varied technology literacy. Therefore, the findings enrich existing literature by highlighting that sustainable performance improvement in agribusiness requires a balanced development of technological readiness and human resource capability.

CONCLUSION

This research concludes that the adoption of work process technology, emotional intelligence, and digital competence has a profound effect on employee work performance in the agribusiness industry sector. These three variables complement one another rather than existing independently in shaping productive, efficient, and responsive work environment to technological advancements. The adoption of technology accelerates the work process while enhancing accuracy, whereas emotional intelligence assists in mitigating pressure as well as developing good working relationships. Digital competence offers the technical base required in leveraging technology to the fullest extent. The interaction of the three variables creates working environments conducive to overall improvement in performance at the individual as well as the organizational level.

Practically, the findings offer strategic insights to the management of agribusiness companies to invest in technological infrastructure as well as human resource development with the same emphasis. Regular training in digital skills should be prioritized to enable employees to keep abreast with technological progress and to effectively work with new systems. On the other hand, enhancing emotional intelligence through soft skills development, stress management training, and effective communication is critical to building adaptive, collaborative, and resilient work groups in

the context of change. These insights are not only relevant for company management but also for government agencies and policymakers in designing workforce development programs that support the digital transformation of the agribusiness sector.

Theoretically, this study contributes by offering an integrative model that combines technological and psychological factors in explaining employee performance within digital transformation. This provides a broader understanding of performance determinants beyond technical readiness, highlighting the importance of emotional and cognitive dimensions in shaping adaptive capabilities. As such, the research enriches the literature on human resource management and organizational performance in Industry 4.0, especially in the agribusiness context.

Nevertheless, this research has several limitations. The data were collected only from agribusiness companies in West Java, Indonesia, using a cross-sectional survey method. Therefore, the results cannot be generalized to all agribusiness sectors or other regional contexts. Future research may expand the scope by including longitudinal designs, larger samples, and additional variables such as digital leadership or organizational culture to provide a more comprehensive understanding of employee performance in the era of digital transformation.

REFERENCES

Ade, A. L., Montundu, Y., Aliddin, L. A., Hajar, I., Mahrani, S. W., & Suleman, N. R. (2022). The influence of work behavior, integrity and organizational climate on police performance of personnel in the medical and health sector. *World Journal of Advanced Research and Reviews*, *16*(2), 101-108. http://dx.doi.org/10.30574/wjarr.2022.16.2.1072

Aulia, M. R., Saragi, C. P., & Simbolon, R. (2021). The Effect of Entrepreneurial Characteristics on Entrepreneurial Competence and Entrepreneurial Competence on Business Performance of Micro and Small-Scale Coffee Shops in Bogor. *BASKARA: Journal of Business and Entrepreneurship*, *4*(1), 37-48. https://doi.org/10.54268/baskara.v4i1.9944

Aulia, M. R. (2023). Digital Competencies And Experience In Partnership Program On Smes Performance. *Journal Research of Social Science, Economics, and Management*, *2*(7), 1416-1425. https://doi.org/10.59141/jrssem.v2i07.385

Aulia, M. R., Junaidi, E., & Hendrayani, R. (2024). The development of the partnership program and business performance: In terms of communication behavior and social networks of MSMEs. *Journal of System and Management Sciences*, *14*(1), 159-174. https://doi.org/10.59141/jrssem.v2i07.385

Awaludin, I., Adam, B. O., & Mahrani, S. W. (2016). The effect of job satisfaction, integrity and motivation on performance. *The International Journal Of Engineering And Science*, *5*(1), 2319-1813. https://www.theijes.com/papers/v5-i1/H0501047052.pdf

Baki, N. U., Rasdi, R. M., Krauss, S. E., & Omar, M. K. (2023). Employee Competencies in the Age of Artificial Intelligence: A Systematic Review from Southeast Asia. *International Journal of Academic Reserach in Economics and Management Sciences, 12*(1), 34-53. http://dx.doi.org/10.6007/IJAREMS/v12-i1/15891

Bogoslov, I. A., Corman, S., & Lungu, A. E. (2024). Perspectives on artificial intelligence adoption for European union elderly in the context of digital skills development. *Sustainability, 16*(11), 4579. https://doi.org/10.3390/su16114579

Diawati, P., Paramarta, V., Pitoyo, D., Fitrio, T., & Mahrani, S. W. (2019). Challenges of implementing an employee management system for improving workplace management effectiveness. *Journal of Environmental Treatment Techniques*, *7*(4), 1200-1203. https://ospanov.university/wkmu/JETT/article-2019.html

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019) When to Use and How to Report the Results of PLS-SEM. European Business Review, 31, 2-24. https://doi.org/10.1108/EBR-11-2018-0203

Harahap, M. A. K., Apramilda, R., Wahyuningratna, R. N., Husaini, H., Ariyanti, R., & Hendratni, T. W. (2025). Peran Kompetensi Sdm, Adopsi Teknologi dan Kolaborasi Dalam Organisasi: Upaya Penguatan UMKM Indonesia: Penelitian. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan*, *3*(4), 5288-5293. https://doi.org/10.31004/jerkin.v3i4.1382

Hataani, L., & Mahrani, S. (2013). Strategic human resource management practices: mediator of total quality management and competitiveness (a study on small and medium enterprises in kendari southeast sulawesi). *International Journal of Business and Management Invention*, *2*(1), 8-20. https://www.ijbmi.org/papers/Vol(2)1/Version_3/B210820.pdf

Juharsah, J., Hadisantoso, E., Putera, A., Mahrani, S. W., Hamid, W., Saguinsin, I. D., ... & Syahrun, D. N. F. (2024). Improving Business Performance Through Creativity, Innovation and Digital Transformation of Micro, Small and Medium Enterprises: Mediated by Competitive Advantage. *International Journal of Management and Education in Human Development*, *4*(02), 1169-1184. https://ijmehd.com/index.php/ijmehd/article/view/277

Mahrani, S. W., & Alwi, S. (2022). The effect of Organizational Citizenship Behavior on Performance mediated by Job Satisfaction. *International Journal of Management and Education in Human Development*, *2*(04), 769-774. https://ijmehd.com/index.php/ijmehd/article/view/116

Renwarin, J. M., Aji, W. W., Weley, A. B., & Tannady, H. (2022). Does Dynamic Capability, Managerial Competency And Organization Capability Still Relevant On Business Sustainability: Study Of Indonesia Freight Forwarding Industry. In *Proceeding of International Conference on Entrepreneurship (IConEnt)* (Vol. 2, pp. 295-300). http://repository.kalbis.ac.id/handle/123456789/454

Siagian, M. V. S. E., Mahrani, S. W., & Sundari, P. (2024). Ethical Considerations in HR: Navigating the Intersection of Technology and Human Capital. *Journal of Economic, Bussines and Accounting (COSTING)*, *7*(4), 9410-9416. https://doi.org/10.31539/costing.v7i4.10979

Syafitri, S., & Mahrani, S. W. (2021). The Effect of Competence on Employee Performance through Organizational Citizenship Behavior as an Intervening Variable at PT. PLN UPDK Kendari. *International Journal of Management and Education in Human Development*, *1*(02), 94-101. Retrieved 15 July 2025, from https://www.academia.edu/download/102762584/13._ii_sulistiani_syafitri_94_101_publikasi_.pdf

Tannady, H., & Dewi, C. S. (2024). Exploring role of technology performance expectancy, application effort expectancy, perceived risk and perceived cost on digital behavioral intention of GoFood users. *Jurnal Informasi Dan Teknologi*, *6*(1), 80-85. https://jidt.org/jidt/article/view/477

Tong, C. V., & Anisah, H. U. (2024). Driving Success in the Digital Age: The Role of Emotional Intelligence, Innovation, and Risk-Taking in Culinary MSMEs in South Banjarmasin District, Indonesia. *Open Access Indonesia Journal of Social Sciences, 7*(6), 1842-1854. https://doi.org/10.37275/oaijss.v7i6.274

Wahyoedi, S., Apramilda, R., Rais, R., Judijanto, L., Amin, S., Syofya, H., & Anshori, M. I. (2024). Pembangunan Sumber Daya Manusia Indonesia Di Era Digital: Pembahasan Pada Seminar Oleh Dosen Lintas Perguruan Tinggi. *Journal Of Human And Education (JAHE)*, *4*(6), 1-5. https://doi.org/10.31004/jh.v4i6.1709

Zamzam, S., Samdin, S., Mahrani, S., Syaifuddin, D. T., Suleman, N. R., Masri, M., & Zaludin, Z. (2023). Human resource management practices and situational leadership on organizational performance; mediated by employee engagement. *World Journal of Advanced Research and Reviews*, *17*(3), 632-643. http://dx.doi.org/10.30574/wjarr.2023.17.3.0410