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The Influence of Information Technology and Human Resource Capability on Tenant Performance through Competitiveness at Soekarno-Hatta International Airport

Anhar Aktari Simatupang[1], Edi Abdurachman[2], Salahuddin Rafi[3]
[1]Institute of Transportation and Logistics Trisakti, Jakarta, Indonesia, tupang.anhar@gmail.com
[2]Institute of Transportation and Logistics Trisakti, Jakarta, Indonesia, edia@itltrisakti.ac.id
[3]Institute of Transportation and Logistics Trisakti, Jakarta, Indonesia, kang.rafi@gmail.com

Corresponding Author: tupang.anhar@gmail.com[1]

Abstract: This study examines the effect of information technology and human resource capability on tenant performance at Soekarno-Hatta International Airport, with competitiveness as a mediating variable. The purpose of this study is to understand how the use of information technology and human resource capability can improve competitiveness and tenant performance in the competitive airport environment. The sample consisted of 150 tenant store managers, selected by stratified random sampling from a population of 675 tenants. A quantitative approach using structural equation modeling with partial least squares (SEM-PLS) was applied, with data collected through a five-point likert scale questionnaire. The results show that both information technology and human resource capability have significant effects on competitiveness. Information technology also has a direct effect on tenant performance, while human resource capability does not show a direct effect. Competitiveness plays a significant mediating role in strengthening the indirect relationship between information technology and human resource capability with tenant performance.

Keywords: Information Technology, Human Resource Capability, Competitiveness, Tenant Performance, Airport Retail, SEM-PLS.

INTRODUCTION

According to Subagio et al. (2022), airports serve as strategic nodes within the air transportation network, where passenger movement, cargo handling, and a range of auxiliary activities are systematically conducted. In addition to their core function in aviation operations, airports have progressively transformed into significant centers of regional and global economic activity.

According to ICAO (2013) airport revenue sources are divided into two main categories, aeronautical revenues and non-aeronautical revenues. Aeronautical revenues include all income directly related to air traffic operations, such as landing fees, passenger service charges, and aircraft handling. Non-aeronautical revenues encompass income derived from commercial and business activities that are not directly associated with flight operations, including retail, food and beverage, parking, advertising, property leasing, and other.

Table 1 presents the percentage distribution of aeronautical and non-aeronautical revenues at PT Angkasa Pura Indonesia for 2019–2024:

Table 1. Percentage Distribution of Aeronautical and Non-Aeronautical Revenue

Year	Aeronautical Revenue	Non-Aeronautical Revenue
2019	52%	48%
2020	37%	63%
2021	34%	66%
2022	49%	51%
2023	53%	47%
2024	64%	36%

Source: Annual Report PT Angkaspura Indonesia

The following data present the percentage distribution of aeronautical and non-aeronautical revenues at PT Angkasa Pura Indonesia from 2019 to 2024. Airport operators commonly target non-aeronautical revenue at approximately 51% to diversify income and reduce reliance on regulated aeronautical charges. Since 2019, this revenue stream has been volatile due to pandemic-related disruptions and shifts in passenger traffic. By 2024, non-aeronautical revenue remained slightly below aeronautical income, reflecting continued recovery and progress toward pre-crisis commercial performance rather than a decline in the company's overall operational strength.

One of the largest contributors to non-aeronautical revenue at PT Angkasa Pura Indonesia is concession-based income. concessions denote the transfer of business-operating rights from the airport operator to partner entities, allowing those partners to provide commercial or service activities within areas managed by PT Angkasa Pura Indonesia (Persero). These partners include government agencies, private enterprises, and individuals that operate within the airport's designated operational areas (DLKr) as well as in adjacent non-DLKr zones. Typical concessionaires comprise retail tenants, airline service providers, immigration and quarantine service contractors, and other stakeholders that deliver commercial or operational services on airport premises.

One of the key partners engaged in concession-based operations at airports is tenants. Tenants are primary concession partners at airports, operating commercial activities within areas managed by PT Angkasa Pura Indonesia (Persero). They play a central role in shaping passenger experience and constitute a major component of the airport's non-aeronautical revenue. Consequently, tenant performance is a key determinant of corporate revenue in retail-oriented settings such as airports. High-performing tenants typically achieve higher productivity, deliver superior service quality, and build durable customer relationships, all of which enhance commercial outcomes and support sustainable revenue growth.

One of the airports managed by PT Angkasa Pura Indonesia established through the merger of PT Angkasa Pura I and PT Angkasa Pura II and now operating under the InJourney Airports Group is Soekarno–Hatta International Airport. As one of the busiest airports in Southeast Asia, Soekarno–Hatta handles large volumes of passenger movements and occupies an extensive operational area with multiple terminals. These characteristics provide substantial potential for generating non-aeronautical revenue through commercial development.

Based on the preceding discussion, this study examines the roles of information technology and human resources capability in supporting tenant operations at Soekarno–Hatta International Airport, and analyzes how these organizational resources affect tenant competitiveness and performance within the airport's tenant and commercial environment. The findings are expected to provide strategic guidance to PT Angkasa Pura Indonesia (InJourney Airports Group) for designing policies and managerial initiatives that strengthen tenant performance and optimize non-aeronautical revenue.

Conceptual Framework

The conceptual framework of this study proposes that information technology and human resource capability positively influence tenant performance, both directly and indirectly through competitiveness. Based on the theoretical foundation and prior empirical evidence, the research conseptual framework is illustrated as follows:

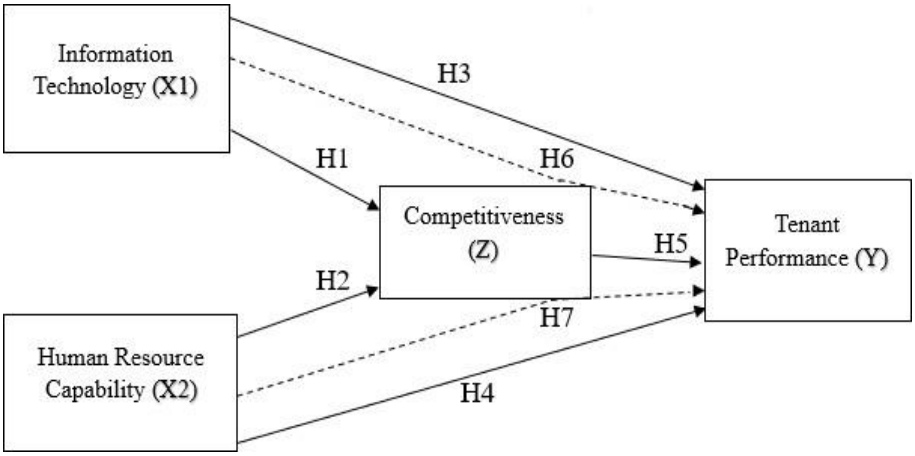

Figure 1. Copceptual Framework

Performance refers to the effectiveness with which tasks are completed relative to predefined standards (Kasmir 2016). Strong retail performance improves sales and customer loyalty, supporting long-term sustainability in competitive airport settings (Han et al. 2021). Information technology encompasses tools and systems that convert data into actionable information to support organizational decision making (Kadir and Triwahyuni 2013). Empirical studies indicate that IT capability enhances firm performance by improving efficiency and IT resource use (Agyapong et al. 2024), supports long-term retail sustainability through digital support mechanisms (Wang and Foo 2023) and contributes to competitive advantage by fostering innovation (Kartiraharjo and Isfianadewi 2022).

Human resource capability is organization's distinctive set of skills, knowledge, and abilities offers strategic value due to its rarity and inimitability, thereby underpinning sustained competitive advantage (Wright et al. 1994)**.** Studies demonstrate that investments in human resource development significantly improve employee performance and organizational effectiveness (Kareem and Hussein 2019). Moreover, human resource capability is critical for the effective stewardship of other organizational assets and the formulation of corporate policy (Pattarani 2022). Competitiveness is realized when firms craft and execute strategies that generate superior customer value and maintain this advantage through cost efficiency, superior product quality, continuous innovation, differentiation, and outstanding service (Kotler et al. 2015). Human capital on one side directly affects the competitive advantage in addition to giving an effect to the competitive advantage (Jumhur and Prabawati 2019). The competitiveness enhances marketing performance by influencing consumer purchase decisions and strengthening financial metrics, It does so through effective resource allocation and continuous product innovation, thereby underpinning long-term, sustainable business growth (Irawan and Sudarmiatin 2024).

METHOD

This study used a quantitative explanatory design to examine causal relationships among the proposed constructs. The population comprised 675 tenant store managers at Soekarno–Hatta International Airport. A proportionate stratified random sampling technique was applied to ensure representativeness across tenant categories. The minimum sample size was calculated using Slovin's formula with a 10% margin of error, yielding a required minimum of 88

respondents, to enhance statistical robustness, data were collected from 150 respondents. Primary data were obtained via a structured questionnaire administered both online (Google Forms) and in hard copy.

This study examines information technology and human resource capability as independent variables, competitiveness as a mediating variable, and tenant performance as the dependent variable. All measurement items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. Structural Equation Modeling–Partial Least Squares (SEM-PLS) is a multivariate statistical technique used to analyze data and evaluate complex theoretical relationships among latent constructs and their indicators (Hair and Alamer 2022). The evaluation followed a two-stage approach encompassing the measurement model and the structural model.

The measurement model was assessed for reliability and validity, including outer loadings, cronbach's alpha, and composite reliability, with threshold values exceeding 0.70. cronbach's alpha assesses internal consistency reliability, with values above 0.70 indicating good indicator reliability within a construct (Hair and Alamer 2022). Loading factor reflects the correlation between indicators and their latent constructs, with values above 0.70 indicating strong indicator representation. Composite reliability measures the internal consistency of indicators forming a latent construct, with values above 0.70 indicating adequate measurement consistency. Convergent validity was confirmed using the average variance extracted (AVE), requiring values above 0.50**.**

Hypotheses testing was performed using a bootstrapping to estimate path coefficients, t-values, and p-values. The model's explanatory power was assessed using R-square (R^2). The coefficient of determination (R^2) indicates the proportion of variance in the dependent variable explained by independent variables, reflecting the predictive power of the structural model (Chin 1998)**.** Significant PLS-Predict results indicate that the model has predictive capability, with Q^2_predict values above 0 demonstrating predictive relevance and values exceeding 0.50 indicating high predictive power (Shmueli et al. 2019).

RESULTS AND DISCUSSION

Table 2. Respondent Profile

Category	Subcategory	Percentage (%)
Gender	Male	**60**
	Female	**40**
Age	20–30 years	**68**
	31–40 years	**21**
	Above 40 years	**11**
Length of Service	6–10 years	**85**
	11–20 years	**10**
	Above 20 years	**5**
Education Level	Senior High School	**75**
	Diploma	**12**
	Bachelor's Degree	**12**
	Master's Degree	**1**
Tenant Category	Food & Beverage	**53**
	Retail	**37**
	Service	**7**
	Others	**3**

Source: Data Processed by the Authors (2025)

Based on the results presented in Table 2, the demographic profile of the 150 respondents. The sample was predominantly male (60%) and relatively young, with 68% aged 20-30 years. Most respondents had 6-10 years of work experience (85%), indicating substantial operational exposure within the airport retail environment. Educational attainment was concentrated at the senior high school level (75%), while the remainder held diploma, bachelor's, or master's degrees. By tenant type, Food and Beverage tenants constituted the largest group (53%), followed by retail tenants (37%), service providers (7%), and other categories (3%). These characteristics provide important contextual grounding for interpreting the study's empirical findings by reflecting the structural composition of airport tenants and the operational realities faced by frontline managers store, The demographic configuration also suggests a workforce potentially receptive to technological adoption and service innovation.

Table 3. Descriptive Analysis of Variables

Variable		Indicator	Mean	Category
Information Technology	**X1.1**	Reliable hardware	4.27	Very High
	X1.2	User-friendly software	4.25	Very High
	X1.3	Database utilization	4.25	Very High
	X1.4	High-speed internet access	3.94	High
	X1.5	IT staff availability	4.17	High
		Average	**4.18**	**High**
Human Resource Capability	**X2.1**	Employee competence	4.37	Very High
	X2.2	Regular training	4.20	High
	X2.3	High commitment	4.27	Very High
	X2.4	Innovation capability	4.16	High
	X2.5	Adaptability	4.25	Very High
		Average	**4.25**	**Very High**
Tenant Performance	**Y.1**	Increase in customer volume	3.82	High
	Y.2	Increase in sales volume	3.74	High
	Y.3	Positive feedback	4.16	High
	Y.4	Repeat purchases	4.12	High
	Y.5	Achievement of targets	3.94	High
	Y.6	**Average**	**3.96**	**High**
Competitiveness	**Z.1**	Strategic location	4.06	High
	Z.2	visual merchandising	4.21	Very High
	Z.3	Competitive pricing	4.36	Very High
	Z.4	Use of social media	4.09	High
	Z.5	Product promotion	4.18	High
		Average	**4.18**	**High**

Source: Data Processed by the Authors (2025)

Based on the results presented in table 3, all variables were assessed using a five-point Likert scale, with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Descriptive analysis was applied to examine respondents' evaluations based on the mean scores of each indicator. The results indicate that the mean scores of the indicators generally fall within the high to very high range, reflecting favorable perceptions across all variables examined. The detailed results of the descriptive statistical analysis for each indicator and variable are presented in the following table. Overall, the results indicate that respondents perceive the level of information technology implementation within airport tenants to be high, with strong emphasis on reliable hardware, user-friendly software, and effective database utilization, suggesting adequate technological support for operational activities. Competitiveness also demonstrates a high mean score, particularly in terms of competitive pricing and attractive

visual merchandising, indicating that tenants are able to position themselves effectively within the airport tenant environment. Human resource capability exhibits the highest average mean among all variables, indicating that employee competence, commitment, adaptability, and continuous training are perceived as key strengths supporting tenant performance operations.

Table 4. Loading Factor and Average Variance Extracted (AVE)

Variabel	Indicator	Loading Factor	Average variance extracted (AVE)	Description
Information Technology	**X1.1**	0.858	0.710	Valid
	X1.2	0.877		Valid
	X1.3	0.815		Valid
	X1.4	0.789		Valid
	X1.5	0.870		Valid
Human Resource Capability	**X2.1**	0.914	0.824	Valid
	X2.2	0.890		Valid
	X2.3	0.919		Valid
	X2.4	0.915		Valid
	X2.5	0.900		Valid
Competitiveness	**Y.1**	0.770	0.748	Valid
	Y.2	0.922		Valid
	Y.3	0.887		Valid
	Y.4	0.846		Valid
	Y.5	0.893		Valid
Tenant Performance	**Z.1**	0.826	0.728	Valid
	Z.2	0.853		Valid
	Z.3	0.828		Valid
	Z.4	0.876		Valid
	Z.5	0.881		Valid

Source: SmartPLS 4 (2025)

Based on the results table table 4, the convergent validity, all indicators across both independent and dependent variables demonstrate satisfactory validity. The loading factor values for all indicators exceed the recommended threshold of 0.70, indicating strong correlations between the indicators and their respective constructs. In addition, the Average Variance Extracted (AVE) values for information technology (0.710), human resource capability (0.824), competitiveness (0.748), and tenant performance (0.728) are all above the minimum criterion of 0.50. These results confirm that each construct exhibits adequate convergent validity, suggesting that the indicators reliably represent the underlying latent variables.

Table 5. Cronbach's Alpha and Composite Reliability

Variabel	Cronbach's alpha	Composite reliability	Description
Information Technology	0.898	0.924	Reliable
Human Resource Capability	0.947	0.959	Reliable
Competitiveness	0.915	0.937	Reliable
Tenant Performance	0.907	0.930	Reliable

Source: SmartPLS 4 (2025)

Based on the results presented in Table 5, the reliability assessment confirms that each research construct demonstrates adequate internal consistency. Information technology shows strong reliability, as indicated by a cronbach's alpha value of 0.898 and a composite reliability value of 0.924, both exceeding the recommended thresholds. human resource capability exhibits very high reliability, with a cronbach's alpha of 0.947 and a composite reliability of 0.959, reflecting excellent consistency among its indicators. Competitiveness also demonstrates strong internal consistency, supported by a cronbach's alpha value of 0.915 and a composite reliability value of 0.937. Likewise, tenant performance is found to be reliable, with a cronbach's alpha of 0.907 and a composite reliability of 0.930. Overall, these results indicate that all constructs meet the reliability criteria and are suitable for further structural model analysis.

Table 6. R-square and R-square adjusted

	R-square	R-square adjusted
Competitiveness	0.724	0.720
Tenant Performance	0.708	0.702

Source: SmartPLS 4 (2025)

Based on the results presented in table 6, the R-squared value for the competitiveness variable is 0.724, with an adjusted R-squared of 0.720. This indicates that approximately 72.4% of the variance in competitiveness is explained by the independent variables included in the model, namely information technology and human resource capability. The remaining 27.6% of the variance is attributed to other factors not captured in the research model.

Table 7. Q^2predict

	Q^2predict	RMSE	MAE
Competitiveness	**0.713**	**0.548**	**0.368**
Tenant Performance	**0.533**	**0.697**	**0.558**

Source: SmartPLS 4 (2025)

Based on the results presented in table 7, The PLS-Predict results indicate that the model demonstrates strong predictive capability. The Q^2_predict value for competitive advantage (0.713) exceeds the threshold of 0.50, indicating high predictive relevance, while Tenant Performance also shows substantial predictive power with a Q^2_predict value of 0.533.

Results of Hypothesis Testing

1) Information Technology has a positive and significant effect on Competitiveness among airport's tenants, with a p-value of 0.000, which is below 0.05 ($p < 0.05$).
2) Human Resource Capability has a positive and significant effect on Competitiveness among airport's tenants, with a p-value of 0.000, which is below 0.05 ($p < 0.05$).
3) Information Technology has a positive and significant effect on Tenant Performance among airport's tenants, with a p-value of 0.024, which is below 0.05 ($p < 0.05$).
4) Human Resource Capability does not have a significant effect on Tenant Performance among airport's tenants, with a p-value of 0.235, which is above 0.05 ($p > 0.05$).
5) Competitiveness has a positive and significant effect on Tenant Performance among airport's tenants, with a p-value of 0.000, which is below 0.05 ($p < 0.05$).
6) Information Technology, through Competitiveness, has a positive and significant indirect effect on Tenant Performance among airport's tenants, with a p-value of 0.000, which is below 0.05 ($p < 0.05$).

7) Human Resource Capability, through Competitiveness, has a positive and significant indirect effect on Tenant Performance among airport's tenants, with a p-value of 0.000, which is below 0.05 ($p < 0.05$).

H1: The Effect of Information Technology on Competitiveness

The data analysis indicates that a reliable information technology infrastructure in airport tenant operations significantly contributes to enhancing competitiveness. The availability of efficient hardware and software, responsive IT support, and the effective use of databases and high-speed internet access enable tenants to introduce service innovations and respond to customer needs quickly and accurately. These findings are consistent with the study by Wang and Foo (2023)**,** which demonstrates that the utilization of information technology strengthens the competitive position of retail tenants through improved operational efficiency and service personalization. Furthermore, digital information systems facilitate data-driven decision-making, thereby reinforcing competitive advantage within the highly dynamic and competitive airport retail environment Chen et al. (2012).

H2: The Effect of Human Resource Capability on Competitiveness

Human resource capability characterized by high competence, regular training, commitment, innovative and adaptability attitudes functions as a strategic asset in enhancing organizational competitiveness. Airport's tenants strengthened by superior human resource capability, as manifested in strong technical skills, high work commitment, and continuous innovation motivation, are better able to respond to market dynamics and technological advancements. This finding is consistent with prior studies by Numan and Hilman (2017) and Suhanto et al. (2024), report that superior human resource capability generates competitively valuable resources that are difficult for competitors to imitate, thereby forming the foundation of sustained competitive advantage.

H3: The Effect of Information Technology on Tenant Performance

The utilization of information technology with reliable hardware and software, responsive IT support, the effective use of databases and high-speed internet access in tenants' business activities has been shown to enhance operational efficiency, data accuracy, and service speed, thereby contributing positively to organizational performance. Well-designed information systems support effective decision-making and resource management processes. This finding is consistent with the study by Syed et al. (2021), This demonstrates that the implementation of information technology, when considering aspects like technology readiness, perceived usefulness, and technological adaptability, significantly impacts retail store performance, Moreover, the quality of information systems, information outputs and IT services significantly affects organizational effectiveness Gorla et al. (2010), thereby reinforcing the operational sustainability of tenants.

H4: The Effect of Human Resource Capability on Tenant Performance

Although the statistical results indicate a non significant direct effect, human resource capability remains a critical factor in determining tenant performance. Employees with high levels of competence and adaptability are generally expected to enhance process efficiency, service quality, and the achievement of organizational targets. However, this finding is consistent with previous studies by Abdurokhim (2020) which reported that human resource competence did not exert a significant influence on employee performance. Such outcomes may be attributed to contextual workplace factors, including misalignment between assigned responsibilities and individual competencies, which can reduce the effectiveness of performance outcomes. Similarly, Sari and Sijabat (2022), found that human resource competence did not significantly affect the performance of SME employees when examined

partially. This may stem from several organizational constraints, such as inappropriate task allocation, limited managerial understanding of competency management, and structural barriers that hinder the optimal deployment of employee skills.

H5: The Effect of Competitiveness on Tenant Performance

High levels of competitiveness enable tenants to survive and grow within the highly competitive airport's tenant environment. Factors such as competitive pricing, strategic location, attractive visual merchandising, and the effective use of social media and digital promotional strategies enhance customer loyalty and sales volume. These findings are consistent with studies by Creed et al. (2021) and Han et al. (2021), which indicate that competitiveness, particularly through superior customer experiences, positively affects customer satisfaction and repurchase intentions. Moreover, prior research by Lee et al. (2022) and Grewal et al. (2017), supports the argument that visual elements, price differentiation, and integrated promotional strategies constitute critical determinants of tenant success in airport. Recent evidence from Irawan and Sudarmiatin (2024), confirms that competitive advantage significantly influences business marketing performance.

H6: The Indirect Effect of Information Technology on Tenant Performance through Competitiveness

The implementation of information technology exerts an indirect effect on enhancing tenant performance through the strengthening of competitiveness. Such technology enables faster and more accurate service delivery, cost efficiency, and improvements in customer experience. These findings are consistent with prior studies by Wang and Foo (2023) which explain that information technology reinforces competitive advantage through process optimization and increased customer satisfaction. Competitiveness thus functions as a strategic mediator linking technological utilization to tenant performance, as articulated by Luo (2024), who argues that technology yields significant performance outcomes only when combined with adaptive and responsive competitive strategies.

H7: The Indirect Effect of Human Resource Capability on Tenant Performance through Competitiveness

Human resource capability not only influences performance directly but also strengthens competitiveness as an intermediary mechanism for achieving optimal organizational outcomes. This finding is consistent with studies by Dwi Cahyaningtias et al. (2023) as well as Acih et al. (2023) which demonstrate that adaptive, innovative, and technologically proficient human resources reinforce tenants' competitive advantage (Pattarani 2022), further emphasizes that organizational learning and training constitute critical elements in strengthening competitiveness, which ultimately enhance tenant performance in both operational and financial terms.

CONCLUSION

This study of airport tenants examines how information technology and human resource capability influence competitiveness and tenant performance. The findings show that comprehensive information technology adoption, including quality hardware and software, databases utilization and IT staff support, reliable connectivity, significantly strengthens tenants' competitive position, which in turn leads to improved performance, increased sales, customer counts, and customer satisfaction. human resource capability, characterized by continuous training, strong employee commitment, adaptive, innovation, and organizational flexibility, also significantly enhances competitiveness but does not have a direct effect on performance, its impact is realized predominantly through competitiveness as a mediating mechanism. Competitiveness emerges as a key mediator and direct determinant of performance,

with competitive pricing, attractive visual merchandising, using sosial media and promotional effectiveness identified as principal drivers. The study demonstrates that investments in information technology and human resource capability are associated with improved tenant performance when those resources are deliberately aligned with competitive strategy. Therefore, management should implement integrated information technology deployment and human resource capability development programs explicitly aimed at building and sustaining competitive advantage.

REFERENSI

Abdurokhim, Abdurokhim. 2020. "Pengaruh Gaya Kepemimpinan Dan Kompensasi Terhadap Kinerja Pegawai." *Inkubis : Jurnal Ekonomi dan Bisnis* 2(1): 1–17.

Acih, Acih, A Harits Nu'man, and H Dadang Kusnadi. 2023. "The Effect Of Leadership Human Resources Capabilities And Job Satisfaction On Employee Performance." *Asian Journal of Engineering, Social and Health* 2(2): 107–17.

Agyapong, Ahmed, Desmond Ayentimi, and Joshua Sandow. 2024. "The Impact of IT Capability on the Performance of SMEs in Ghana: The Mediating Role of Business Process Agility." *Technology Analysis & Strategic Management* 38: 1–16.

Chen, Hsinchun, Roger H L Chiang, and Veda C Storey. 2012. "Business Intelligence and Analytics: From Big Data to Big Impact." *MIS Quarterly* 36(4): 1165–88. https://misq.org/misq/downloads/download/editorial/567/.

Chin, Wynne W. 1998. "The Partial Least Squares Approach to Structural Equation Modeling." In *Modern Methods for Business Research*, ed. George A Marcoulides. Mahwah, NJ: Lawrence Erlbaum Associates, 295–336.

Creed, Bernard, K Ning Shen, Nicholas J Ashill, and Tingting Wu. 2021. "Retail Shopping at Airports: Making Travellers Buy Again." *Journal of Business Research* 137: 293–307. https://doi.org/10.1016/j.jbusres.2021.08.038.

Dwi Cahyaningtias, S, R Ratih Hesty Utami P, and R Rita Meiriyanti. 2023. "Kemampuan Sumber Daya Manusia Untuk Meningkatkan Kinerja Karyawan Dalam Operasional Perusahaan." *Journal of Business and Management* 19(3): 185–98.

Gorla, Narasimhaiah, Toni M Somers, and Betty Wong. 2010. "Organizational Impact of System Quality, Information Quality, and Service Quality." *Journal of Strategic Information Systems* 19(3): 207–28.

Grewal, D, A L Roggeveen, R Sisodia, and J Nordfält. 2017. "Enhancing Customer Engagement through Consciousness." *Journal of Retailing* 93(1): 55–64.

Hair, Joseph F, and Abdulrahman Alamer. 2022. "Partial Least Squares Structural Equation Modeling (PLS-SEM) Guidelines for Reflective, Formative, and Multi-Item Constructs." *Middle East Journal of Management* 9(4): 409–26.
https://doi.org/10.1504/MEJM.2022.10051745.

Han, Heesup et al. 2021. "Performance of Retail Stores at Airports and Their Role in Boosting Traveler Satisfaction and Willingness to Repurchase." *Sustainability (Switzerland)* 13(2): 1–14.

Irawan, E, and Sudarmiatin. 2024. "Review of Literature: The Impact of Competitive Advantage on Business Marketing Performance." *Formosa Journal of Multidisciplinary Research* 4(1): 179–88. https://doi.org/10.55927/fjmr.v4i1.12562.

Jumhur, Aam, and M Prabawati. 2019. "The Competitive Advantage of Small Industry Batik." *KnE Social Sciences* 3: 287.

Kadir, Abdul, and Terra C H Triwahyuni. 2013. *Pengenalan Teknologi Informasi*. Yogyakarta: Andi.

Kareem, Mohanad, and Ibrahim Hussein. 2019. "The Impact of Human Resource Development on Employee Performance and Organizational Effectiveness." *MANAGEMENT DYNAMICS IN THE KNOWLEDGE ECONOMY* 7: 307–22.

Kartiraharjo, Hartanto, and Dessy Isfianadewi. 2022. "Enhancing Competitive Advantage through Knowledge Sharing, Absorptive Capacity, and Innovation Capability." *International Journal of Research in Business and Social Science (2147- 4478)* 10: 83–93.

Kasmir. 2016. *Manajemen Sumber Daya Manusia*. Jakarta: Rajawali Pers.

Kotler, Philip, Keller, Manceau, and Aurélie Hemonnet-Goujot. 2015. 83 Décisions Marketing *Marketing Management 15th*.

Lee, Chaohsien, Chihkang Wu, and Din Jong. 2022. "Understanding the Impact of Competitive Advantage and Core Competency on Regional Tourism Revitalization: Empirical Evidence in Taiwan." *Frontiers in Psychology* 13: 922211.

Luo, Xiyuan. 2024. "The Impact of Digital Transformation on Enterprises." *Advances in Economics, Management and Political Sciences* 81(1): 324–35.

Numan, A Harits, and Haim Hilman. 2017. "Strategic Effect of Human Resource Capability and Production Planning System on Performance of Indonesian Small Medium Industries (SMES)." *International Journal of Applied Business and Economic Research* 15(20): 485–97.

Organization, International Civil Aviation. 2013. *Doc 9562: Airport Economics Manual*. 3rd ed. Montreal: ICAO.

Pattarani, H. 2022. "Pengembangan Sumber Daya Manusia Untuk Meningkatkan Kinerja Dan Pencapaian Tujuan Perusahaan." *Journal of Business and Management* 10(2): 112–24.

Sari, Kholisna, and Yacobo P Sijabat. 2022. "Kompetensi Sdm Dan Pengaruhnya Terhadap Kinerja Umkm Di Magelang Tengah." *Inspirasi Ekonomi Jurnal Ekonomi Manajemen* 4(1): 37–49.

Shmueli, Galit et al. 2019. "Predictive Model Assessment in PLS-SEM: Guidelines for Using PLSpredict." *European Journal of Marketing* 53(11): 2322–47.
https://doi.org/10.1108/EJM-02-2019-0189.

Subagio, Gunawan Adhi, Andar Sri Sumantri, and Wasi Sumarsono. 2022. *Manajemen Bandar Udara*. Semarang: Penerbit UNIMAR AMNI.

Suhanto, Suhanto et al. 2024. "Analysis of Service Satisfaction at A. A. Bere Tallo Atambua Airport Using Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) Methods." In , 4–17.

Syed, Asif et al. 2021. "The Impact of Information Technology on Retail Industry: An Empirical Study." *International Journal of Procurement Management* 1: 1.

Wang, Hui Ming Deanna, and Nin Ho Foo. 2023. "The Effects of Information Technology in Retailer Performance and Survival: The Case of Store-Based Retailers." *SAGE Open* 13(4): 1–15.

Wright, P M, G C McMahan, and A McWilliams. 1994. "Human Resources and Sustained Competitive Advantage: A Resource-Based Perspective." *International Journal of Human Resource Management* 5(2): 301–26.