International Journal of Cyber and IT Service Management (IJCITSM)
Vol. 5, No. 2, October 2025, pp. 214−222
E-ISSN: 2808-554X | P-ISSN: 2797-1325, DOI:10.34306

Evaluation of Oracle NetSuite Adoption Using UTAUT Model at PT Austin Engineering Indonesia

Sri Zuliarni[1*], Dwi Kartikasari[2]
[1, 2]Dept. of Management and Business, Batam State Polytechnic, Indonesia
[1]sri.zuliarni@polibatam.ac.id, [2]dwi@polibatam.ac.id
***Corresponding Author**

Article Info

Article history:

Submission July 10, 2025
Revised August 19, 2025
Accepted August 28, 2025
Published September 16, 2025

Keywords:

Oracle NetSuite
UTAUT
Behavioral Intentions
Use Behavior

ABSTRACT

The purpose of this study is to evaluate the extent of acceptance and use of the Oracle NetSuite system at PT Austin Engineering Indonesia based on the Unified Theory of Acceptance and Use of Technology (UTAUT) approach. In an effort to improve operational efficiency and effectiveness, many companies have begun to adopt cloud-based Enterprise Resource Planning (ERP) systems such as Oracle NetSuite. However, the success of its implementation is highly dependent on the level of acceptance from users. **This study is a quantitative approach**, involving 50 respondents taken through purposive sampling, namely active employees who use Oracle NetSuite. The questionnaire used was designed with a Likert scale of 1-5 and analyzed using SmartPLS software. The results of the analysis showed that Effort Expectancy and Facilitating Conditions had a significant influence on Behavioral Intention and Use Behavior. Meanwhile, Performance Expectancy and Social Influence did not show a significant influence on Behavioral Intention. **The results of this study** offer insights for the development of ERP technology adoption strategies in the corporate environment.

DOI: https://doi.org/10.34306/ijcitsm.v5i2.216

1. INTRODUCTION

In a rapidly growing business world, companies are required to continuously improve productivity and operational efficiency. The increasing complexity of business processes and the risk of misinformation make integrated information systems an important requirement to support strategic decisions [1]. The various risks faced by companies, such as human error, business process irregularities, and potential fraud, require a system that is able of produce valid data and manage information efficiently [2]. Enterprise Resource Planning (ERP) is present as the main solution by integrating all business units into one centralized platform to increase company efficiency and productivity. Currently, cloud-based ERP implementation is trending because it offers flexibility and cost efficiency [3].

In addition, the implementation of ERP systems such as Oracle NetSuite is also in line with the Sustainable Development Goals (SDGs), particularly SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation, and Infrastructure), which emphasize sustainable industrial innovation, operational efficiency, and the strengthening of digital infrastructure to support inclusive economic growth [4]. Furthermore, by integrating business processes into a centralized and transparent system, ERP adoption also contributes to

creating resilient organizations that are better prepared to face global challenges, while supporting long-term sustainability agendas in both economic and technological dimensions [5].

PT Austin Engineering Indonesia is a heavy equipment manufacturing company that has implemented Oracle NetSuite as a cloud-based ERP system, to integrate financial, manufacturing, and supply chain management functions. It is expected that this implementation will be able to increase efficiency and transparency in the company's operations [6].

However, ERP implementation often faces challenges, especially in the post-implementation stage. Several factors such as lack of training for users, inconsistency of business processes, and weak internal communication are often the causes of system implementation failure [7]. Therefore, evaluating the success of Oracle NetSuite implementation at PT Austin Engineering Indonesia is important, especially regarding system acceptance by users [8].

In addition, ERP adoption presents nuanced challenges across different industries and geographical regions. For example, service-based industries often emphasize customer interaction and flexibility, while manufacturing industries focus on operational efficiency and supply chain integration [9]. Similarly, ERP implementations in Southeast Asia may face cultural and infrastructure-related challenges distinct from those in Western countries. Positioning this study within such a comparative perspective not only strengthens originality but also provides broader insights into how Oracle NetSuite adoption can be contextualized across diverse business environments [10]. To further enrich this research, the study also highlights that ERP adoption in manufacturing industries, such as PT Austin Engineering Indonesia, differs significantly from service-based or logistics industries where customer engagement and flexibility dominate [11]. In addition, geographical factors such as cultural acceptance, infrastructure readiness, and government digital policies in Southeast Asia may create unique challenges and opportunities when compared to implementations in Western contexts. Including these nuances not only enhances the comparative depth of the research but also strengthens its originality by situating the Oracle NetSuite adoption within a broader, cross-industry and cross-regional framework [12, 13].

UTAUT model as a framework for evaluating the level of technology acceptance. The main objective of this study is to identify the main factors that contribute to the success of system adoption and provide strategic recommendations to support the sustainability of system use [14]. This study is also expected to be able to fill the literature gap related to ERP system evaluation, especially in the aspect of sustainable adoption in the corporate environment [15].

2. RESEARCH METHODS

The Oracle NetSuite system serves as the research object in this study. The Likert scale used ranges from 1 (strongly disagree) to 5 (strongly agree). The UTAUT model was applied to design the questionnaire. The questionnaire used for data collection was analyzed using SmartPLS software [16]. The respondents of this study were Oracle NetSuite system users employed at PT Austin Engineering Indonesia. A total of 50 active Oracle NetSuite users participated, and their data was processed. Purposive sampling was used, where only employees who regularly use the Oracle NetSuite system were included in the sample [17].

Although this study is limited to 50 respondents from a single company, it acknowledges the potential limitation in generalizing the findings [18]. Future research is recommended to increase the sample size and include multiple organizations across various industries to provide a more comprehensive perspective on ERP adoption. Furthermore, the use of SEM-PLS in this study is justified due to its suitability for small to medium sample sizes and complex models. Assumptions such as non-normal data distribution and multicollinearity were taken into account, while robustness was ensured through convergent validity, discriminant validity, and reliability testing. These aspects enhance the replicability and credibility of the model applied in this research [19, 20].

Additionally, the study explicitly validated the measurement model by reporting Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha to ensure internal consistency and convergent validity. Discriminant validity was further assessed using the Fornell-Larcker criterion and cross-loadings to confirm construct independence. Bootstrapping with 5,000 resamples was employed to evaluate the stability of path coefficients and significance levels [21]. These methodological details not only improve the transparency of the analysis but also provide a solid reference framework for researchers who aim to replicate or extend the model in similar ERP adoption contexts. These elements enhance the replicability and credibility of the model applied in this research [22].

3. RESULT AND DISCUSSION

3.1. Descriptive Statistics of Respondents

Table 1. Respondent data

	Respondents	Usage Status
Gender		
Man	31	76%
Woman	19	24%
Age		
< 20 years	1	2%
20–29 years old	18	34%
30–39 years old	18	42%
≥ 40 years	13	22%
Experience		
< 6 months	11	22%
6–12 months	26	52%
1–2 years	11	22%
> 2 years	2	4%
Usage Status		
Required	46	92%
Voluntary	4	8%

Based on the data collected, the majority of respondents were male employees (62%) who were in the productive age range, namely between 30 and 39 years (36%). Most respondents (52%) have experience using the Oracle NetSuite system for 6 to 12 months, and the use of this system is mandatory for 92% of respondents according to company policy as shown in Table 1 [23].

This shows that the system implementation has been carried out comprehensively through a top-down approach, requiring adaptation from all employee levels. The predominance of male and young to middle-aged groups indicates adoption by core workers with strategic roles in daily operations [24]. Although most usage is mandatory, a small number of voluntary users reflects a relatively high acceptance of the technology. Overall, this demonstrates a strong adoption level, though still in the adaptation stage of user experience [25]. The demographic composition and usage characteristics thus provide a crucial foundation for evaluating the measurement model and ensuring continuity between descriptive findings and the analysis of validity and reliability [26, 27].

3.2. Evaluation of Measurement Model

- convergent validity and reliability

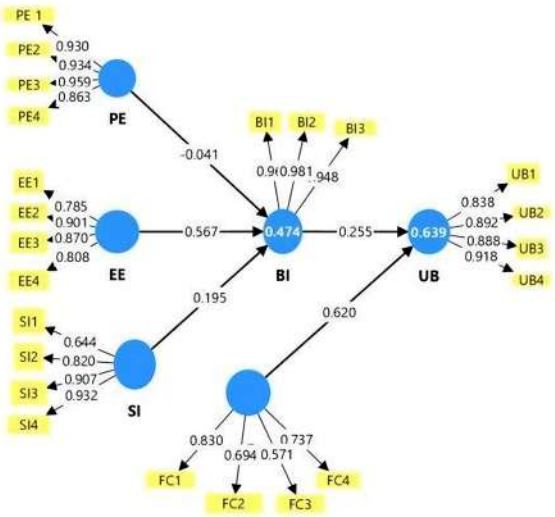

Figure 1. Path diagram of the UTAUT model

The Figure 1 of the SmartPLS analysis show that most indicators have outer loading values above 0.70,

indicating strong convergent validity. Several indicators with values below 0.70 (such as SI1, FC2, FC3, FC4) are still considered feasible to use because their AVE values and construct reliability are within acceptable limits [28].

– Average Variance Extracted (AVE)

Table 2. Results of validity and reliability tests

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
BI	0.962	0.973	0.929
EE	0.863	0.886	0.709
FC	0.680	0.707	0.510
PE	0.941	0.941	0.851
SI	0.853	0.951	0.695
UB	0.907	0.918	0.782

All constructs in the model have AVE values greater than 0.50. As shown in Table 2, all variable values obtained exceed 0.50. In other words, the outer loadings are considered to meet the required standards, allowing the measurement process to proceed to the next stage [29].

– Construct Reliability
The Composite Reliability values of all constructs exceeded the threshold of 0.70, even most of them were above 0.80, reflecting high internal consistency. Although the Cronbach's Alpha value on the FC construct was slightly below the minimum limit (0.680), its Composite Reliability value (0.804) still met the reliability requirements.

- Discriminant validity test

– Fornell-Larcker Criterion

Table 3. Fornell-Larcker Criterion

	BI	EE	FC	PE	SI	UB
BI	0.964					
EE	0.677	0.842				
FC	0.600	0.732	0.714			
PE	0.510	0.713	0.650	0.922		
SI	0.571	0.718	0.745	0.753	0.834	
UB	0.627	0.840	0.773	0.831	0.792	0.884

A construct is considered valid when the root AVE value is compared with the correlation values between latent variables. If the root AVE value exceeds the correlation between other constructs, it indicates a clear distinction between the constructs, thus meeting the criteria for discriminant validity [30]. As shown in Table 3, no value exceeds the diagonal value being compared. Therefore, it can be concluded that the data in the Fornell-Larcker calculation is valid [31].

3.3. Structural Model Evaluation

- R-square value (R^2)
R-square is used to assess how much the independent variables contribute to predicting the dependent variable and how much of the effect variable can be explained by the causal variables [32].

Table 4. Results of R-square calculations

	R-square	R-square adjusted
BI	0.474	0.439
UB	0.639	0.623

The table 4 above shows the R^2 value for endogenous variables:

– Behavioral Intention (BI): $R^2 = 0.474$. This indicates that 47.4% of the variation in Behavioral Intention can be accounted for by Performance Expectancy, Effort Expectancy, and Social Influence [33].

– Use Behavior (UB): $R^2 = 0.639$. This suggests that 63.9% of the variation in Use Behavior can be explained by Behavioral Intention and Facilitating Conditions, reflecting a relatively strong predictive power of the model [34].

- F-square

Table 5. F-square

	BI	EE	FC	PE	SI	UB
BI						0.115
EE	0.253					
FC						0.680
PE	0.001					
SI	0.026					
UB						

Based on the calculation results of the effect size (f^2), it can be observed that **Effort Expectancy (EE)** exerts a strong influence on **Behavioral Intention (BI)** with a value of 0.253, indicating a significant contribution to users' intention to adopt the system [35]. In contrast, **Social Influence (SI)** shows only a minor effect on BI with a value of 0.026, suggesting that peer or organizational pressure plays a limited role in shaping user intention. Likewise, **Performance Expectancy (PE)** demonstrates a very weak effect on BI ($f^2 = 0.001$), which can practically be considered negligible as shown in Table 5 [36].

Furthermore, **Behavioral Intention (BI)** has a moderate effect on **Use Behavior (UB)**, as indicated by a value of 0.115. This highlights that users' intention to use the system contributes meaningfully to actual system utilization [10]. On the other hand, **Facilitating Conditions (FC)** show a strong effect on UB, with a value of 0.680, underscoring the critical importance of adequate infrastructure, technical support, and resources in driving actual system use [37].

- Path Coefficients and Significance

Table 6. Hypothesis test results

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (—O/STDEV—)	P values
BI → UB	0.255	0.245	0.095	2.681	0.007
EE → BI	0.567	0.531	0.170	3.336	0.001
FC → UB	0.620	0.642	0.087	7.126	0.000
PE → BI	-0.041	-0.027	0.191	0.216	0.829
SI → BI	0.195	0.238	0.192	1.012	0.311

Based on the results from testing the relationship between variables using the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method, it was found that **Behavioral Intention (BI)** has a positive and significant effect on **Use Behavior (UB)**, as shown in Table 6. This is supported by a path coefficient of 0.255, a t-statistic value of 2.881, and a p-value of 0.007 ($p < 0.05$) [38]. This indicates that the greater the user's intention to use the system, the higher the probability of actual system usage.

Furthermore, **Effort Expectancy (EE)** also has a positive and significant effect on **Behavioral Intention (BI)**, with a coefficient value of 0.567, a t-statistic of 3.336, and a p-value of 0.001 ($p < 0.01$). This suggests that the system's ease of use plays a significant role in shaping users' intention to adopt it [39].

In addition, **Facilitating Conditions (FC)** are shown to have a positive and significant impact on **Use Behavior (UB)**, with a coefficient value of 0.620, a t-statistic of 7.126, and a p-value of 0.000 ($p < 0.01$). This emphasizes the critical role of sufficient infrastructure, facilities, and IT support in promoting actual system usage [40].

On the other hand, **Performance Expectancy (PE)** does not show a significant effect on **Behavioral Intention (BI)** (coefficient = -0.041, t-statistic = 0.216, p-value = 0.829). Similarly, **Social Influence (SI)** has no significant effect on **Behavioral Intention (BI)** (coefficient = 0.195, t-statistic = 1.012, p-value = 0.311) [41]. Thus, neither performance expectations nor social pressure appear to play a critical role in shaping behavioral intentions in this study context [42].

From a practical perspective, these findings imply that ERP implementation strategies should prioritize **ease of use** and **facilitating conditions** rather than relying heavily on performance perceptions or peer influence [43]. Organizations can improve ERP adoption by providing targeted training programs, simplifying workflows, and ensuring rapid-response IT support. Such measures help transform behavioral intention into consistent system use, reducing user resistance and maximizing the value of ERP investments [44].

From a practical perspective, these findings indicate that organizations must prioritize user-friendly system design and strong technical support rather than relying heavily on performance perceptions or peer influence [45, 46]. For example, when implementing ERP systems like Oracle NetSuite, companies can enhance adoption rates by providing hands-on training, simplifying workflows, and ensuring responsive IT support. This creates a smoother transition from behavioral intention to actual system usage, making the research findings directly applicable to practitioners who manage ERP rollouts in real world environments [47].

4. MANAGERIAL IMPLICATION

The results of this study emphasize that effort expectancy is key in influencing users' behavioral intention. This suggests that managers should focus on the system's ease of use when implementing ERP systems. Practical actions include designing intuitive interfaces, offering thorough training, and providing ongoing support to help employees transition smoothly and confidently into using the system.

The strong influence of facilitating conditions on actual system use also emphasizes the need for reliable infrastructure and responsive technical support. Managers should ensure adequate IT facilities, establish a dedicated helpdesk, and implement clear operational guidelines. These efforts will not only reduce resistance but also encourage consistent system utilization, making ERP adoption more sustainable within the organization.

On the other hand, the insignificant effects of performance expectancy and social influence suggest that management should not overly rely on perceived usefulness or peer encouragement to drive adoption. Instead, greater emphasis should be placed on hands-on support and workflow simplification that employees can directly experience as tangible benefits in their daily tasks.

From a managerial perspective, ERP adoption plays a crucial role in enhancing operational efficiency and strengthening digital infrastructure. By improving system performance and promoting sustainable innovation, ERP implementation not only helps achieve operational excellence but also supports long-term organizational resilience and sustainable business practices.

5. CONCLUSION

This study assessed the acceptance and utilization of the Oracle NetSuite system at PT Austin Engineering Indonesia using the UTAUT model. The findings revealed that effort expectancy and facilitating conditions significantly impact both behavioral intention and use behavior, whereas performance expectancy and social influence do not. This suggests that the ease of use and available support facilities are more critical factors in driving ERP adoption than perceived usefulness or peer influence.

The findings also highlight the importance of strengthening technical training, user assistance, and internal IT support to optimize ERP utilization. Technology acceptance is not solely determined by system performance, but also by how simple and well-supported the system feels to users. Therefore, companies are advised to provide sustainable training and support strategies so that ERP adoption can deliver maximum benefits for operational performance.

Furthermore, future ERP strategies should consider integration with emerging technologies such as Artificial Intelligence (AI) and blockchain to enhance predictive analytics, decision-making, transparency, and data integrity. However, this study has limitations in terms of a small sample size and focus on a single company, which reduces generalizability. Future research is encouraged to expand the scope across industries and regions to provide a more comprehensive view of ERP adoption and capture variations influenced by organizational culture and regional context.

6. DECLARATIONS

6.1. About Authors

Sri Zuliarni (SZ) https://orcid.org/0009-0008-9925-396X
Dwi Kartikasari (DK) https://orcid.org/0000-0002-3222-4426

6.2. Author Contributions

Conceptualization: SZ; Methodology: DK; Software: DK; Validation: SZ and DK; Formal Analysis: DK and SZ; Investigation: SZ; Resources: DK; Data Curation: DK; Writing Original Draft Preparation: SZ and DK; Writing Review and Editing: SZ and DK; Visualization: SZ; All authors, SZ, and DK, have read and agreed to the published version of the manuscript.

6.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.4. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

REFERENCES

[1] Y. H. S. Al-Mamary, "Why do students adopt and use learning management systems?: Insights from saudi arabia," *International Journal of Information Management Data Insights*, vol. 2, no. 2, 2022.
[2] S. Lestari, S. Watini, and D. E. Rose, "Impact of self-efficacy and work discipline on employee performance in sociopreneur initiatives," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 6, no. 2, pp. 270–284, 2024.
[3] A. Balić, L. Turulja, E. Kuloglija, and M. Pejić-Bach, "Erp quality and the organizational performance: Technical characteristics vs. information and services," *Information (Switzerland)*, vol. 13, no. 10, 2022.
[4] T. Mariyanti, I. Wijaya, C. Lukita, S. Setiawan, and E. Fletcher, "Ethical framework for artificial intelligence and urban sustainability," *Blockchain Frontier Technology*, vol. 4, no. 2, pp. 98–108, 2025.
[5] S. Tongsuksai, S. Mathrani, K. Weerasinghe, and C. Scogings, "A conceptual model for cloud erp adoption in smes in new zealand: a case study of a retail company," in *2024 International Conference on Sustainable Technology and Engineering (i-COSTE)*. IEEE, 2024, pp. 01–06.
[6] B. E. Sibarani, C. Anggreani, B. Artasya, and D. A. P. Harahap, "Unraveling the impact of self-efficacy, computer anxiety, trait anxiety, and cognitive distortions on learning mind your own business: The student perspective," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 6, no. 1, pp. 29–40, 2024.
[7] L. E. L. Barna, B. Ionescu, and L. Ionescu-Feleagă, "The relationship between the implementation of erp systems and the financial and non-financial reporting of organizations," *Sustainability (Switzerland)*, vol. 13, no. 21, 2021.
[8] P. Mulyaningsih and L. Meria, "The impact of product quality and brand image on repurchase intention through customer satisfaction," *Aptisi Transactions On Management (Atm)*, vol. 8, no. 1, pp. 1–13, 2024.
[9] C. Chairia, C. Sukmadilaga, and I. Yuliafitri, "The role of performance expectations, effort expectations, influence social, and supportive conditions to behavior itqan mobile users mediated by intention behavior using it," *Maksipreneur Journal: Management, Cooperatives, and Entrepreneurship*, vol. 10, no. 1, p. 48, 2020.
[10] M. M. Kowsar and M. A. Rahman, "Enterprise resource planning and customer relationship management integration: A systematic review of adoption models and organizational impact," *Review of Applied Science and Technology*, vol. 1, no. 02, pp. 26–52, 2022.
[11] R. Aprianto, R. Haris, A. Williams, H. Agustian, and N. Aptwell, "Social influence on ai-driven air quality monitoring adoption: Smartpls analysis," *Sundara Advanced Research on Artificial Intelligence*, vol. 1, no. 1, pp. 28–36, 2025.

[12] F. Marsintauli and M. Sari, "Evaluation of erp oracle netsuite implementation using the unified theory of acceptance and use of technology (utaut) model to create a sustainable business," in *E3S Web of Conferences*, vol. 426, 2023.

[13] S. S. Wulandari and K. Maulana, "Enhancing operational efficiency and financial reporting through oracle netsuite erp implementation: A case study in a logistics company," *International Research Journal of Science, Technology, Education, and Management*, vol. 3, no. 3, pp. 103–121, 2023.

[14] F. Zidan, D. Nugroho, and B. A. Putra, "Securing enterprises: Harnessing blockchain technology against cybercrime threats," *International Journal of Cyber and IT Service Management*, vol. 3, no. 2, pp. 168–173, 2023.

[15] M. A. Rouidi, A. E. A. Elmajid, A. B. Hamdoune, and K. C. A. C. Choujtani, "Tam-utaut and the acceptance of remote healthcare technologies by healthcare professionals: A systematic review," *Informatics in Medicine Unlocked*, 2022, application of the UTAUT Model The Unified Theory of Accept.

[16] J. Siswanto, V. A. Goeltom, I. N. Hikam, E. A. Lisangan, and A. Fitriani, "Market trend analysis and data-based decision making in increasing business competitiveness," *Sundara Advanced Research on Artificial Intelligence*, vol. 1, no. 1, pp. 1–8, 2025.

[17] F. Rahmadan, Y. T. Mursityo, and N. H. Wardani, "Evaluation of user acceptance of enterprise resource planning system at material resource planning division of pt. xacti indonesia," *INTENSIVE: Journal Scientific Research and Application Technology System Information*, vol. 5, no. 1, pp. 27–42, 2021.

[18] S. Purnama, B. L. Pradana, G. Khanna, S. Suhandi, A. Rizky, I. N. Hikam, and M. F. Kamil, "The impact of war on the cryptocurrency economy from a management perspective," *International Journal of Cyber and IT Service Management*, vol. 4, no. 2, pp. 143–154, 2024.

[19] M. Dadhich, S. Rathore, B. A. Gyamfi, S.-S. M. Ajibade, and D. Q. Agozie, "Quantifying the dynamic factors influencing new-age users' adoption of 5g using tam and utaut models in emerging country: A multistage pls-sem approach," *Education Research International*, vol. 2023, no. 1, p. 5452563, 2023.

[20] R. Wei and D. Cao, "Learning effectiveness in erp systems training: A structural equation model of self-efficacy, passion, and resilience in higher educationdevelopment of learning effectiveness among higher education in enterprise resource planning (erp) systems training through the analysis of the interrelationships among self-efficacy, learning efficacy, passion, and resilience by structural equation modeling approach," in *Frontiers in Education*, vol. 10. Frontiers, 2025, p. 1590309.

[21] I. Amsyar, E. Cristhopher, U. Rahardja, N. Lutfiani, and A. Rizky, "Application of building workers services in facing industrial revolution 4.0," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 3, no. 1, pp. 32–41, 2021.

[22] S. S. Wulandari and K. Maulana, "Enhancing operational efficiency and financial reporting through oracle netsuite erp implementation: A case study in a logistics company," *EINFO*, vol. 3, no. 3, p. 103, 2023.

[23] O. Jayanagara and D. S. S. Wuisan, "An overview of concepts, applications, difficulties, unresolved issues in fog computing and machine learning," *International Transactions on Artificial Intelligence*, vol. 1, no. 2, pp. 213–229, 2023.

[24] F. Marsintauli and M. Sari, "Evaluation of erp oracle netsuite implementation using the unified theory of acceptance and use of technology (utaut) model to create a sustainable business," in *E3S Web of Conferences*, vol. 426. EDP Sciences, 2023, p. 02037.

[25] F. Marsintauli, M. P. H. Adi, G. Melinia, S. Bella, and A. Zaldin, "Evaluation of mobile banking for indonesian banking sustainability," in *2024 9th International Conference on Business and Industrial Research (ICBIR)*. IEEE, 2024, pp. 0930–0935.

[26] H. R. Shibly, A. Abdullah, and M. W. Murad, "Erp adoption in organizations," *The Factors in Technology Acceptance Among Employees. Sl: Palgrave Maxmillan*, 2022.

[27] H. Nurhaeni, A. Delhi, O. P. M. Daeli, S. A. Anjani, and N. A. Yusuf, "Optimizing electrical energy use through ai: An integrated approach for efficiency and sustainability," *International Transactions on Artificial Intelligence*, vol. 2, no. 2, pp. 106–113, 2024.

[28] S. K. C. Tulli, "The unified theory of acceptance and use of technology (utaut) model in evaluating net suite erp adoption," *International Journal of Acta Informatica*, vol. 3, no. 1, pp. 59–80, 2024.

[29] J. Jones, E. Harris, Y. Febriansah, A. Adiwijaya, and I. N. Hikam, "Ai for sustainable development: Applications in natural resource management, agriculture, and waste management," *International Transactions on Artificial Intelligence*, vol. 2, no. 2, pp. 143–149, 2024.

[30] V. Venkatesh, "Adoption and use of ai tools: a research agenda grounded in utaut," *Annals of operations*

research, vol. 308, no. 1, pp. 641–652, 2022.
[31] D. P. Lazirkha, J. Hom, and V. Melinda, "Quality analysis of digital business services in improving customer satisfaction," *Startupreneur Business Digital (SABDA Journal)*, vol. 1, no. 2, pp. 156–166, 2022.
[32] A. Al-Momani and T. Ramayah, "The utaut model in understanding ehr adoption: a systematic review," *Intelligence-Driven Circular Economy: Regeneration Towards Sustainability and Social Responsibility—Volume 2*, pp. 179–194, 2025.
[33] J. I. Saputro, L. F. Sa'adah, Y. Syifa, K. D. Ramadhanti, and M. F. Gojali, "Transforming learning experiences with advanced educational technology solutions," *International Transactions on Education Technology (ITEE)*, vol. 3, no. 2, pp. 114–124, 2025.
[34] Z. Teng, Y. Cai, Y. Gao, X. Zhang, and X. Li, "Factors affecting learners' adoption of an educational metaverse platform: An empirical study based on an extended utaut model," *Mobile Information Systems*, vol. 2022, no. 1, p. 5479215, 2022.
[35] M. R. Mohamad Zain, S. Tajul Urus, S. M. Amirul, T. Z. Tuan Mat *et al.*, "Erp post-implementation phase: deployment of the unified theory of acceptance and use of technology (utaut) model on user acceptance," *Asia-Pacific Management Accounting Journal (APMAJ)*, vol. 18, no. 1, pp. 85–129, 2023.
[36] M. Ajeng, A. Kirei, and K. Amanda, "Blockchain technology application for information system security in education," *Blockchain Frontier Technology*, vol. 3, no. 1, pp. 26–31, 2023.
[37] M. A. Bhat, C. K. Tiwari, P. Bhaskar, and S. T. Khan, "Examining chatgpt adoption among educators in higher educational institutions using extended utaut model," *Journal of Information, Communication and Ethics in Society*, vol. 22, no. 3, pp. 331–353, 2024.
[38] I. Handayani, D. Apriani, M. Mulyati, N. A. Yusuf, and A. R. A. Zahra, "A survey on user experience of blockchain transactions: Security and adaptability issues," *Blockchain Frontier Technology*, vol. 3, no. 1, pp. 80–88, 2023.
[39] J. Kim and K. S.-S. Lee, "Conceptual model to predict filipino teachers' adoption of ict-based instruction in class: using the utaut model," *Asia Pacific Journal of Education*, vol. 42, no. 4, pp. 699–713, 2022.
[40] P. Hendriyati, F. Agustin, U. Rahardja, and T. Ramadhan, "Management information systems on integrated student and lecturer data," *Aptisi Transactions on Management (ATM)*, vol. 6, no. 1, pp. 1–9, 2022.
[41] Á. F. Villarejo-Ramos, J.-P. Cabrera-Sánchez, J. Lara-Rubio, and F. Liébana-Cabanillas, "Predicting big data adoption in companies with an explanatory and predictive model," *Frontiers in psychology*, vol. 12, p. 651398, 2021.
[42] R. G. Munthe, Q. Aini, N. Lutfiani, I. Van Persie, and A. Ramadhan, "Transforming scientific publication management in the era of disruption: Smartpls approach in innovation and efficiency analysis," *APTISI Transactions on Management*, vol. 8, no. 2, pp. 123–130, 2024.
[43] D. Liu and X. Wu, "Research on the use behavior of agricultural big data in the era of intelligent agriculture based on utaut model," in *BDEIM 2022: Proceedings of the 3rd International Conference on Big Data Economy and Information Management, BDEIM 2022, December 2-3, 2022, Zhengzhou, China*. European Alliance for Innovation, 2023, p. 200.
[44] A. Amroni, A. A. Darmawan, and G. A. Pangilinan, "The role of big data and blockchain in enabling transparent and sustainable business processes," *ADI Journal on Recent Innovation*, vol. 6, no. 2, pp. 180–189, 2025.
[45] J. E. Andrews, H. Ward, and J. Yoon, "Utaut as a model for understanding intention to adopt ai and related technologies among librarians," *The Journal of Academic Librarianship*, vol. 47, no. 6, p. 102437, 2021.
[46] T. T. Wijaya, Y. Cao, R. Weinhandl, E. Yusron, and Z. Lavicza, "Applying the utaut model to understand factors affecting micro-lecture usage by mathematics teachers in china," *Mathematics*, vol. 10, no. 7, p. 1008, 2022.
[47] A. Sutarman, D. Juliastuti, I. Yati, L. P. Pasha *et al.*, "Enhancing security and privacy in blockchain systems for tax administration," *Blockchain Frontier Technology*, vol. 4, no. 2, pp. 145–155, 2025.