ISSN 1816-6075 (Print), 1818-0523 (Online)
Journal of System and Management Sciences
Vol. 14 (2024) No. 6, pp. 490-508
DOI:10.33168/JSMS.2024.0630

Examining Cloud ERP Platform Net Benefits and Influence Factors in Organizations

Aditya Pradana Putra, Astari Retnowardhani

Information Systems Management Department, BINUS Graduate Program - Master of Information Systems Management, Bina Nusantara University, Jakarta, Indonesia 11480

aditya.putra012@binus.ac.id; aretnowardhani@binus.edu

Abstract. This research delves into the effectiveness of cloud-based ERP applications within the context of Industry 4.0, with a particular focus on a prominent Indonesian B2B research and consulting firm. By utilizing the Delone & McLean Information System Success Model and Structural Equation Modeling, the study investigates the factors that impact the benefits of ERP application adoption. The results provide practical recommendations for maximizing net benefits, boosting user satisfaction, and optimizing system utilization in the industry 4.0 era. To obtain these results, the study conducted a survey of 302 users, analyzed via partial least squares structural equation modeling. The findings reveal the factors that determine the net benefits of a cloud-based ERP platform in Indonesia. The study discovered that information quality significantly influences user satisfaction, yet it does not directly affect usage. Similarly, service quality has a minor effect on user satisfaction, but it impacts system usage to a certain extent. System quality plays a crucial role in shaping both system usage and user satisfaction, emphasizing its significance in enhancing user experience and utilization. Furthermore, the research explores the relationship between system usage, user satisfaction, and net benefits. The study highlights a positive correlation between system usage and net benefits, with user satisfaction contributing directly to overall benefits. Additionally, the research found that system and service quality have positive impacts on usage levels and user satisfaction. Although information quality correlates positively with satisfaction, its direct influence on usage is limited. The study underscores the importance of maintaining a balanced technology-task alignment, engaging in participative customization, and implementing effective change management strategies for smooth transitions. Both system usage and user satisfaction are strong predictors of perceived net benefits, emphasizing the importance of intentional designs that focus on adaptivity and human welfare. These designs can facilitate asset transformation beyond mere internal functionality enhancement.

Keywords: Cloud-based ERP Application, Industry 4.0, User Satisfaction, Net Benefits.

1. Introduction

The advent of Industry 4.0 signifies a transformative era across various sectors, marked by the adoption of advanced technologies like automation, the Internet of Things (IoT), artificial intelligence (AI), smart factories, and cyber-physical systems (Gessa et al., 2023). This transition promises significant benefits such as increased productivity, sustainable development, and enhanced resilience (Gessa et al., 2023). The integration of these innovations, including IoT, cloud computing, and big data, not only streamlines production processes and product design but also improves company management, leading to enhanced productivity, reduced waste, heightened customer satisfaction, and lower operating costs (Abulibdeh et al., 2024). However, the widespread implementation of Industry 4.0 faces challenges due to the need for a skilled workforce proficient in areas such as information technology and data analytics, emphasizing the critical role of information systems and data processing in optimizing business processes and aligning corporate strategies (Gupta et al., 2022).

XYZ, a leading B2B research and IT consulting company based in Jakarta, Indonesia, has initiated the deployment of a Cloud-based Enterprise Resource Planning (ERP) system to address the growing complexities of business operations, emphasizing the strategic integration of information systems with business functions to enhance competitiveness and ensure successful implementation (Delone & Mclean, 2003). The Cloud-based ERP adopted is a customized system utilizing Amazon Web Services (AWS) tailored to specific business needs, providing structured management with distinct access rights and menu options for each user position. Despite being designed to support business expansion and integration, annual assessments indicate suboptimal utilization, with various user complaints regarding document submissions, system responses, record-keeping, bugs, and defects. The management's goal of positioning the customized Cloud-based ERP application as a marketable product within 3-5 years and receiving numbers of complaints below 50 every year underscores the importance of enhancing application performance, with efforts directed towards addressing user concerns and prioritizing critical factors observed during application development. These factors serve as additional evaluation criteria to assess application utilization success, reflecting the system's efficacy in enhancing ongoing business processes (Delone & Mclean, 2003).

Hence, the study seeks to empirically examine factors affecting the optimization of benefits from XYZ's Cloud-Based ERP. Utilizing the Delone & McLean Information System Success Model underscores the need to validate factors influencing net benefits (E. K. Ghani et al., 2019). A prior study examined the impact of ERP implementation on organizational climate during business transformations in Ghana, introducing an IS success model integrating organizational climate variables such as role clarity, teamwork and support, and training and learning into the Delone and McLean model to evaluate tax ERP system performance. Findings indicate that organizational climate variables significantly influence tax ERP system success, impacting service quality, user satisfaction, and individual outcomes (Akrong et al., 2022). Another study extends the Delone & McLean Information System Success Model by incorporating trust and perceived risk into an expanded success model of cloud-based ERP, identifying structural relationships between system quality, information quality, IT service quality, perceived risk, trust, intention to use, and net benefits (Nguyen & Luc, 2019). Disparities in findings across diverse domains utilizing the Delone & McLean Information System Success Model highlight the need for further research, with a focus on understanding issues affecting the net benefits of employing Cloud-based ERP applications. Acknowledging the crucial role of user satisfaction in evaluating Cloud-based ERP application success, researchers aim to contribute valuable insights and fill the gap in existing literature, collaborating with internal support developers to evaluate success factors before market introduction, and facilitating informed decision-making tailored to the specific context of XYZ Holdings.

2. Literature Review

2.1. Theoretical Background

Enterprise resource planning systems constitute integral software solutions pivotal for optimizing internal organizational operations, encompassing functions such as process efficiency, communication facilitation, data management, and security enhancement (Tagscherer & Carbon, 2023). In the contemporary digitally driven global landscape, these internal applications serve as linchpins for driving organizational growth, fostering competitiveness, and ensuring success. Moreover, the advent of cloud computing has emerged as a transformative force in this domain, offering widespread access to an extensive array of IT resources and catalyzing the adoption of cloud-based ERP solutions. Cloud-based ERP solutions have garnered significant traction owing to their capacity to streamline critical business processes through virtualization, delivering compelling advantages such as cost-effectiveness, scalability, and seamless update mechanisms (SØrheller et al., 2019). However, the implementation of cloud ERP introduces its set of challenges, necessitating a nuanced consideration of various factors crucial for successful deployment.

Furthermore, cloud-based ERP, categorized under the Software-as-a-Service (SaaS) model, encompasses a versatile suite of applications, with its transformative potential being particularly noteworthy. This variant of ERP enhances accessibility through ubiquitous platforms like web browsers and mobile devices, obviating the need for additional customization or hardware investments, thus conferring a notable boost to business efficiency and performance (Christiansen et al., 2021). Additionally, ERP applications amalgamate a spectrum of software solutions aimed at managing and integrating all organizational functions comprehensively. These solutions are engineered to automate processes, facilitate seamless integration, enable data sharing across organizational silos, and provide real-time access to critical information (Pavković et al., 2021).

Despite the promising prospects offered by ERP implementations, their impact on users and organizations can vary significantly, warranting meticulous design and deployment strategies to mitigate potential negative ramifications. In this regard, the adoption of critical success factor analysis emerges as a prudent approach to assess the efficacy of ERP implementations, enabling companies to discern influential factors and align them with overarching organizational objectives. As part of this evaluative framework, researchers have undertaken a critical factor analysis leveraging the information system success model pioneered by Delone and McLean. Moreover, ERP epitomizes a burgeoning trend in Information Systems, serving as a pivotal enabler for organizations seeking to manage resources and operations holistically through the seamless integration of disparate modules. Noteworthy characteristics of ERP encompass the integration of singular activities into multifunctional processes, alongside the consolidation of all organizational activities into a unified system. The manifold benefits proffered by ERP implementations encompass heightened operational efficiency, informed decision-making support, and enhanced operational flexibility, thereby positioning organizations for sustained growth and resilience in dynamic business landscapes (Pavković et al., 2021).

2.2. Information System Success Model

The effectiveness of information systems is of paramount importance within the realm of organizational management, as it serves as a crucial metric for gauging the outcomes of managerial decisions and investments made in these systems (Delone & Mclean, 2003). Given the substantial resources typically allocated to information systems, companies are inherently motivated to evaluate the expected positive impacts resulting from such investments. This evaluation encompasses various facets, including the optimization of process efficiency, communication channels, data management protocols, and security measures (Tagscherer & Carbon, 2023). Moreover, the efficacy of information systems is contingent upon a multitude of factors, spanning organizational dynamics, external environmental influences, and

user interactions, all of which collectively shape the overall effectiveness of these systems (Srisathan et al., 2024).

Central to the assessment of information system effectiveness is the seminal Delone and McLean Model, which elucidates how information systems influence business processes and user satisfaction through key system attributes such as information quality, system quality, and service quality (Delone & Mclean, 2003). Building upon this foundation, recent studies have sought to extend the applicability of the Delone & McLean Information System Success Model to evaluate the quality of specific information system implementations, such as Enterprise Resource Planning (ERP) systems. For instance, a comprehensive survey conducted across 335 medium and large companies in Bosnia and Herzegovina confirmed the model's utility in assessing ERP system quality, albeit with certain modifications to suit the context of the study (Pavković et al., 2021). Additionally, contemporary iterations of the Delone & McLean Information System Success Model underscore the centrality of net benefits in determining information system success, encompassing both individual and organizational gains such as financial prosperity and operational efficiency. Meta-analyses further suggest that this model effectively anticipates changes in system utilization and outcomes, particularly at the individual level, thereby highlighting its significance in evaluating the holistic impact of information systems on organizational performance. Moreover, evaluating information system success also entails scrutinizing information quality, which encompasses the value, relevance, reliability, and completeness of the data generated by these systems, thus providing a comprehensive framework for assessing their overall efficacy and impact.

2.3. Interrelationship Among Variables in the DeLone and McLean Model

The Enhanced DeLone and McLean Model delineates intricate interconnections among various variables, particularly highlighting the interplay between user satisfaction, system usage, and the quality dimensions such as information quality, system quality, and service quality. These relationships transcend individual levels, impacting broader entities ranging from groups to nations. Notably, there exists a robust correlation between the quality of information and user satisfaction, where attributes like clarity, comprehensiveness, timeliness, accuracy, and relevance positively influence user contentment (Pavković et al., 2021). Prior research underscores the significance of system quality in driving user satisfaction, with attributes like reliability and download speed identified as critical factors in ensuring user contentment (Mustafa et al., 2020). Additionally, user satisfaction is contingent upon user-friendly, dependable, and responsive information systems (Jeyaraj, 2020). Service quality, encompassing factors like speed and assistance provided by system administrators, also significantly influences user satisfaction. The technical proficiency of administrators and their empathy toward users emerge as pivotal elements in delivering satisfactory service (Mustafa et al., 2020). Moreover, the alignment between information quality and system usage determines users' reliance on the system, with higher information quality leading to increased system usage (Geebren et al., 2021). Similarly, dependable system quality positively impacts the frequency of system usage, with ease of use and flexibility being key determinants influenced by system quality (Lutfi, 2023).

While service quality exhibits a notable relationship with system usage, its correlation is not as robust as its connection with user satisfaction (W. S. D. W. A. Ghani, 2022). Furthermore, diverse findings exist regarding the correlation between usage and user satisfaction, whereas a relatively strong correlation is observed between usage and net benefits, suggesting that information system utilization can enhance operational effectiveness and efficiency (Delone & Mclean, 2003). The Enhanced DeLone and McLean Model thus provides a comprehensive framework for understanding the multifaceted dynamics of information systems success, encompassing various quality dimensions and their intricate relationships with user satisfaction, system usage, and overall organizational effectiveness. Through empirical investigations, such as those examining the quality of Enterprise Resource Planning systems,

the model's applicability and adaptability across diverse contexts have been affirmed, shedding light on the critical factors driving system success and organizational performance (Pavković et al., 2021).

2.4. Structural Equation Modelling – Partial Least Square (SEM-PLS)

Structural Equation Modeling (SEM) stands out as a pivotal statistical technique within the social and behavioral sciences, facilitating the representation of theoretical concepts as constructs and delineating connections among these constructs through a structural model to explore their interrelations (Benitez et al., 2020). Partial Least Squares (PLS) emerges as a preferred structural equation modeling approach, especially for researchers aiming to test or develop theories with predictive objectives. An examination of PLS-SEM utilization from 2010 to 2015 in prominent Information Systems journals underscores the proficiency of IS researchers in employing this method (Hair et al., 2019). Unlike traditional SEM, PLS adopts a variance-based approach, offering advantages in handling non-normally distributed data and relatively small sample sizes. PLS analysis comprises two models: the internal model, elucidating relationships between latent variables based on substantive theory, and the external model, delineating relationships between latent variables and their indicators.

The decision to employ PLS in this study is rooted in its ability to tackle high complexity, especially in datasets exhibiting non-normal distributions or limited sample sizes. PLS facilitates theory validation, latent relationship identification, structural analysis, and estimation of large and intricate models. Assessment of the PLS structural model is conducted using the SmartPLS software, involving examination of goodness-of-fit for both outer and inner models. Outer model evaluation encompasses convergent validity, discriminant validity, and composite reliability, while predictive strength in the inner model is gauged through R-squared for dependent latent variables and Q-squared for the structural model. Subsequent model refinement entails indicator criteria testing, with indicators exhibiting loadings below 0.70 subject to removal. Relationship testing is then conducted using available algorithms, alongside validity testing, reliability testing, and hypothesis testing through bootstrap resampling with t-statistics. Variables in the research are categorized into exogenous and endogenous, with identified variables including information quality, system quality, service quality, usage, user satisfaction, and net benefits.

2.5. Hypothesis Development

Several interrelated factors have been identified as key metrics influencing the successful implementation of the Cloud-based ERP Application at XYZ. System Quality serves as a metric to gauge the reliability of the Cloud-based ERP Application's functionality, ensuring smooth operation. Information Quality assesses the relevance and comprehensiveness of data provided by the Cloud-based ERP Application to different divisions and management levels. Meanwhile, Service Quality measures the level of support and maintenance provided for the Cloud-based ERP Application, aimed at minimizing user confusion or impediments during usage. The inclusion of the Use variable stems from the understanding that the Cloud-based ERP Application primarily serves internal operational functions at XYZ, thus making it pertinent to focus on internal user experience rather than external users.

User Satisfaction stands as a pivotal metric to evaluate the overall satisfaction level with the Cloud-based ERP Application's performance to date. Additionally, there exists a correlation between common complaints voiced by XYZ employees and the variables within the applied model. For instance, grievances related to document submission failures and sluggish system responses in administration correlate with System Quality, particularly concerning accuracy and speed indicators (Akrong et al., 2022),(Jeyaraj, 2020),(Gable et al., 2020). Complaints regarding inaccurate system records leading to ambiguous information correlate with Information Quality, specifically in terms of relevance and reliability (Delone & Mclean, 2003). Similarly, issues pertaining to overlooked bugs or defects by the internal development team correlate with Service Quality, particularly in terms of support or assistance

indicators (Akrong et al., 2022),(Jo & Bang, 2023). Drawing upon the relationships among these research factors and the attainment of established objectives, this study formulates several hypotheses necessitating rigorous testing.

- **H1. Information Quality positively influences Use.** The relationship underscores that the quality of information generated by the system determines its utility to users. When the provided information meets user expectations, they are more inclined to utilize the system frequently. Extant research on information management systems corroborates this, emphasizing that information quality is closely tied to its intended purposes or user objectives (Hayatu Mazadu et al., 2022).
- **H2. Information Quality positively influences User Satisfaction.** Empirical findings from literature reviews affirm a robust association between information quality and user satisfaction. Users derive satisfaction from information that is easy to comprehend, comprehensive, timely, accurate, and relevant (Costa et al., 2020).
- **H3. Service Quality has a positive influence on Use**. This relationship pertains to the quality of services provided to address various system needs, such as error resolution and customer support. While significant, the correlation between these variables is not as pronounced as the relationship between service quality and user satisfaction (Mustafa et al., 2020).
- **H4. Service Quality has a positive influence on User Satisfaction**. Service Quality encompasses factors like speed and assistance provided by system administrators when users encounter issues beyond their control. The technical competence of administrators is pivotal for delivering satisfactory service, along with a display of empathy towards users (Geebren et al., 2021).
- **H5. System Quality has a positive influence on Use**. Prior research indicates that system quality positively impacts system usage, identifying it as a critical success factor. This conclusion is drawn from studies on ERP or internal application implementations (Akrong et al., 2022).
- **H6. System Quality has a positive influence on User Satisfaction**. Strong correlations have been observed between system quality and user satisfaction, with users expressing satisfaction when information systems are user-friendly, reliable, and responsive (Geebren et al., 2021). Reliability and download speed are particularly highlighted in ensuring user satisfaction, with system quality significantly impacting it (Srisathan et al., 2024).
- **H7. Use has a positive influence on Net Benefits**. Studies have shown that increased system utilization leads to maximum net benefits for users, highlighting a direct positive impact of system usage on behavioral intention (Lutfi, 2023). Moreover, moderate evidence supports the correlation between individual-level system use and benefits, indicating enhanced decision-making with increased information system usage (W. S. D. W. A. Ghani, 2022).
- **H8. Use has a positive influence on User Satisfaction**. While the relationship between usage and user satisfaction has yielded varied results (Geebren et al., 2021), previous research has indicated a significant impact of usage on the benefits derived (Akrong et al., 2022).
- **H9. User Satisfaction has a positive influence on Net Benefits**. Previous studies suggest that user satisfaction with the system enhances user performance, leading to higher job efficiency and increased productivity (Lutfi, 2023).

3. Methodology

3.1. Research Model

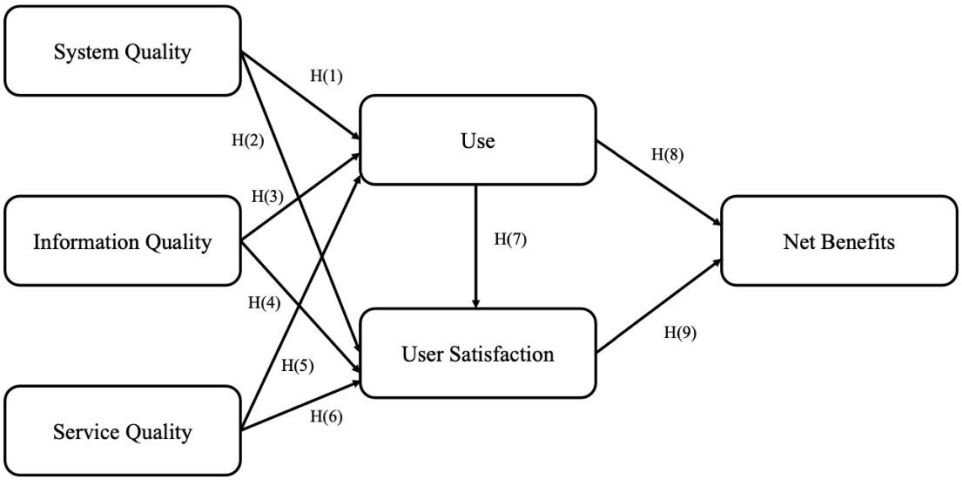

Fig. 1: Delone & McLean Information System Success Model

The Delone & McLean Information System Success Model is renowned for its role in assessing Information System (IS) success, encompassing technology utilization and its outcomes. Initially introduced in 1992, the model has undergone modifications and refinements in response to scholarly critiques, which argue for the inclusion of additional factors beyond the original model's scope. In addressing these critiques, DeLone and McLean conducted an extensive review, incorporating various contributions from the field and proposing an updated model (Sabeh et al., 2021). This study adopts the updated Delone & McLean Information System Success Model, customized to fit the research context, which includes variables such as Information Quality, System Quality, Use, User Satisfaction, and Net Benefits. The selection of this model is grounded in the interrelationships among variables, aligning with the identified challenges and research objectives.

3.2. Sample and Data Collection

This study targets all personnel affiliated with XYZ who possess access privileges to the Cloud-based ERP Application, amounting to a total of 662 individuals actively engaged in the company's operational processes. While the research scope encompasses all subsidiary entities, a sampling strategy employing the Slovin method with a predetermined quota is adopted to streamline data collection. This choice is motivated by the availability of a proficient field team or Q&DC, rendering the collection of data from the entire population inefficient in terms of time. The sampling process is conducted in a randomized proportional stratified manner, encompassing diverse segments of gender and age. Hence, the employed sampling approach in this study adheres to the Slovin method, as elucidated in prior research (Akrong et al., 2022), with the calculation of the sample size conducted using the Slovin formula.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{662}{1 + 662(0{,}05)^2}$$

$$n = 249{,}34 \approx 250 \text{ Respondents}$$

Information:

n = Sample size

N = Population size

e = Standard margin of error (e=5% or 0.05)

Applying the Slovin formula for sample size estimation reveals a population size of 662, with a standard margin of error set at 0.05, yielding a computed sample of 250 respondents. Following the delineation of the sampling strategy, the methodology advances through various phases. Initial verification ensures that the designated personnel possess access to XYZ's internal applications within the Cloud-based ERP Application, thereby validating the authenticity and reliability of the collected responses. Employing a questionnaire as the data collection tool, the survey queries are meticulously designed to encompass PT. XYZ's internal applications, drawing from pertinent literature, notably the DeLone & McLean Information System Success Model. Consequently, the questionnaire will incorporate the following items and metrics, each accompanied by respective statements.

Table 1 Research Indicator and Questionnaire statement

Variable	Item	Indicator	References
Information Quality	IQ1	The operational and licensing data accessible is pertinent and clear.	(Akrong et al., 2022),(Delone & Mclean, 2003)
	IQ2	The operational and licensing summary data provided is relevant and clear.	
	IQ3	The system accurately records all individual or divisional activities.	
	IQ4	I have never received inaccurate information from documents downloaded.	
System Quality	SQ1	All functionalities in the application support my daily tasks effectively.	(Akrong et al., 2022)
	SQ2	The Application fulfils all the necessary features for my operational tasks.	
	SQ3	I can swiftly access the application anytime.	(Akrong et al., 2022),(Gable et al., 2020)
	SQ4	I can swiftly download all data from the application based on my internet speed.	
Service Quality	SEQ1	All complaints I submit to the development team are duly acknowledged and stored.	(Jo & Bang, 2023)
	SEQ2	I regularly get responses from the development team after reporting issues.	
	SEQ3	The development team promptly handles any complaints I have about system quality.	
	SEQ4	I receive timely and efficient service for data loss or damage issues from the application.	(Delone & Mclean, 2003),(Akrong et al., 2022)
	SEQ5	The development team consistently assists me with any data upload issues in the application.	
Use	U1	I utilize the application extensively for my daily operational tasks, beyond adhering to existing operational guidelines.	(Delone & Mclean, 2003),(Akrong et al., 2022)
	U2	I employ the application significantly for my daily administrative duties, surpassing the confines of current operational guidelines.	
	U3	I think all employees benefit greatly from using the application every day for both operational and administrative tasks.	

User Satisfaction	US1	While using the application, I've found it more effective in meeting my operational needs.	(Jo & Bang, 2023)
	US2	I'm satisfied with how the application supports my operational tasks.	(Jeyaraj, 2020)
	US3	I'm satisfied with all the features of the application for my operational tasks.	
Net Benefits	NB1	The application enhances my operational and administrative workflows.	(Gable et al., 2020)
	NB2	The application accelerates my operational and administrative workflows.	
	NB3	The application aids my division in managing operational and administrative project documents.	(Akrong et al., 2022),(Gable et al., 2020)

The indicators will be assessed using a Likert scale with 5 categories: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree, to gauge the relationship among the measurement variables of the Delone & McLean Information System Success Model. The questionnaire will be disseminated via Google form to eligible respondents, with open-ended questions included at the end to enhance response coherence during data analysis. Furthermore, a sampling schedule for data collection will be established. Respondents in the study will not receive any incentives. The collected data comprised responses from 302 participants, and the allocation of respondents will be determined according to the various subsidiaries of XYZ.

Table 2. Total respondent distribution from each subsidiary

XYZ Subsidiaries	Respondent	Percentage
XYZ Digital	57	19%
XYZ Technology	58	19%
XYZ Academy	37	12%
XYZ Capital	22	7%
XYZ Research	82	27%
XYZ Media & Event	46	15%

According to the demographic data provided in Table 2, many respondents belong to the research sub, totaling 82 respondents. This subsidiary, which constitutes the core of XYZ's business, has the highest employee count. XYZ Technology and XYZ Digital have 57 and 46 respondents, respectively. Information regarding respondents' positions or job titles has been included in compliance with XYZ management's directives. No employee IDs or confidential data are requested due to the internal nature of this research. Respondents' divisional positions are determined through an open-ended question, aligning with XYZ management's instruction to cover various divisions. Among the divisions, Research Executive has the largest representation, with 34 respondents, followed by Data Analyst with 31 respondents, and Procurement with 23 respondents.

3.3. Validity and Reliability Test

Ensuring the authenticity and reliability of acquired data represents a fundamental cornerstone within the research sphere, requiring a thorough and meticulous investigation to ensure congruence with the research objectives and uphold the credibility of findings. This comprehensive scrutiny encompasses the exhaustive evaluation of both validity and reliability, which constitute essential components of data quality assessment. Validity, particularly underscored in quantitative research endeavors, pertains to the accuracy and precision of concept measurement. For instance, if a survey intended to explore depression inadvertently captures anxiety instead, it would fall short of meeting the rigorous validity standards stipulated. Validation testing assumes a critical role in determining the extent to which data faithfully

reflects real-world phenomena, assessing the efficacy of an instrument in capturing a specific concept through variable measurement processes. Conversely, if the calculated value falls below the designated threshold, it is deemed inadequate, necessitating further refinement and scrutiny. Conversely, reliability concerns the consistency and stability of measurement across successive administrations, ensuring that the obtained results are reliable and reproducible over time. This reliability dimension plays a pivotal role in establishing the credibility and dependability of research findings.

Therefore, comprehensive validation and reliability testing are imperative to ensure the resilience and precision of research outcomes, ultimately contributing to the progression of knowledge in the respective field (Obeid et al., 2024). For instance, in the context of a motivation assessment, consistent responses from participants across administrations serve as indicators of reliability. Despite the inherent challenges associated with achieving precise reliability quantification, various methodologies offer estimations (Obeid et al., 2024). One such approach involves the utilization of Cronbach's Alpha coefficient as a reliability assessment tool, typically set at a threshold of 0.7. A measure is deemed reliable if its Cronbach's Alpha value exceeds 0.7. Concurrently, convergent validity, frequently assessed through confirmatory factor analysis, seeks to evaluate the correlation level among diverse items within the same construct. During the formulation of measurement indicators, the initial step involves scrutinizing the standardized factor loadings, ideally surpassing 0.5 to establish satisfactory convergent validity. Additionally, it is customary for the average variance extracted (AVE) value to exceed 0.5, indicating that the sample effectively explains over 50% of the total variance. The measurement indicators are presented in Table 3.

Table 3. Statistical value of measured variables for validity test

Variable	Item	Loading	AVE	Conclusion
Information Quality	IQ1	0,868	0,885	Valid
	IQ2	0,863		
	IQ3	0,845		
	IQ4	0,837		
System Quality	SQ1	0,710	0,950	Valid
	SQ2	0,805		
	SQ3	0,801		
	SQ4	0,796		
Service Quality	SEQ1	0,876	0,712	Valid
	SEQ2	0,839		
	SEQ3	0,848		
	SEQ4	0,844		
	SEQ5	0,811		
Use	U1	0,805	0,689	Valid
	U2	0,864		
	U3	0,738		
User Satisfaction	US1	0,899	0,648	Valid
	US2	0,902		
	US3	0,923		
Net Benefits	NB1	0,938	0,938	Valid
	NB2	0,941		
	NB3	0,929		

Table 3 illustrates that each indicator demonstrates a stronger ability to evaluate its respective underlying variable, evidenced by higher loading factor values compared to other latent variables. These computed results indicate that the convergent validity of each variable meets the required criteria, with AVE values surpassing the predefined threshold of 0.5. The evaluation of the measurement tool's precision, focusing on its consistency and stability, is commonly known as reliability testing or

reliability measurement. In this study, we employed the α coefficient method to conduct the reliability assessment. This evaluation involves determining the reliability of the scale through Cronbach's Alpha coefficient and Corrected Item-Total Correlation (CITC). Cronbach's Alpha coefficient assesses the internal consistency among all items within the measurement tool. Typically, a Cronbach's Alpha coefficient below 0.7 suggests poor reliability of the scale, indicating a need for modification. Conversely, a Cronbach's Alpha coefficient above 0.7 suggests good reliability of the scale. Furthermore, after computing the Cronbach's Alpha coefficient, the CITC value can be utilized to guide modifications to the scale. If the CITC value falls below 0.5, it suggests that the item may need to be removed. Subsequently, an assessment of the internal consistency of latent variables is conducted through consistent internal reliability testing. Composite reliability values for each latent variable in PLS are evaluated by comparing the obtained values, if it equals or exceeds 0.7, the composite reliability criterion is considered satisfied. The composite reliability values pertinent to the measurement model are delineated in Table 4.

Table 4. Composite Reliability Value

Variable	Cronbach's Alpha	Composite Reliability Value	Conclusion
Information Quality	0,839	0,927	Reliable
System Quality	0,786	0,901	Reliable
Service Quality	0,899	0,933	Reliable
Use	0,848	0,913	Reliable
User Satisfaction	0,729	0,982	Reliable
Net Benefits	0,808	0,924	Reliable

Based on the calculation results in Table 4, it can be concluded that the reliability of latent variables is fulfilled, as it has Composite Reliability values greater than the established standard.

4. Result

The analysis of the associations between variables is depicted in a bootstrap output diagram presented in Figure 2. This diagram illustrates the t-statistic values denoting the magnitude of relationships among the variables in terms of path coefficients. Determining the significance of these relationships relies on comparing these t-statistic values against a critical threshold, set at 1.96 in this instance, with a significance level of 0.05 and degrees of freedom amounting to 302, corresponding to the sample size. The calculated path coefficients for each relationship between latent variables are elaborated in the subsequent table to enhance clarity and facilitate interpretation.

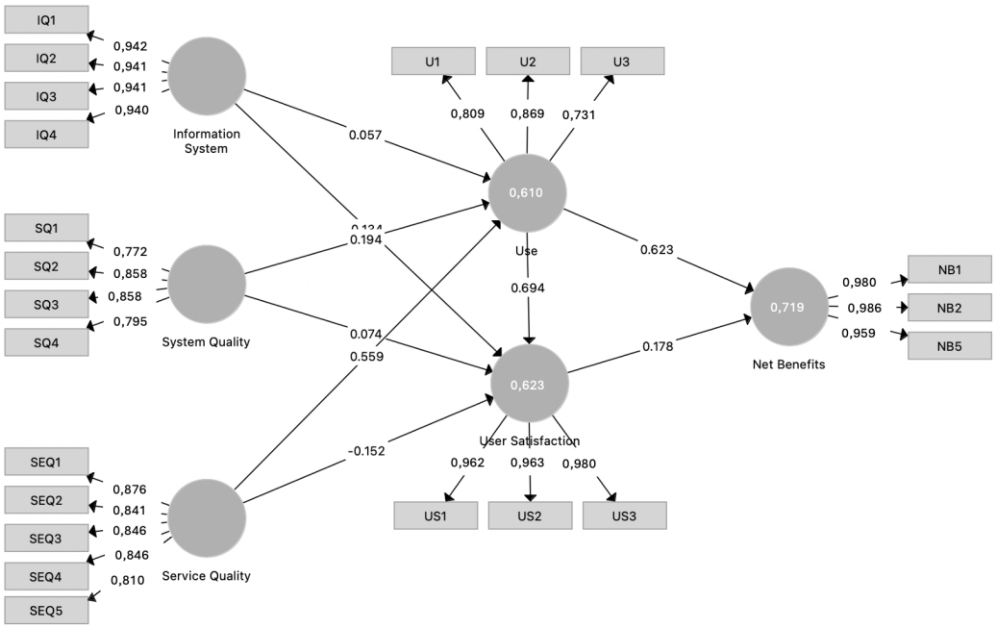

Fig. 2: Bootstraping Diagram Output

Determining the significance of the relationships between variables involves a meticulous comparison between the computed t-statistic values and the corresponding critical t-table value. This critical threshold acts as a standard against which the statistical robustness of these relationships is evaluated. Such thorough examination guarantees that the interpretations concerning the associations between variables are firmly anchored in statistical validity and credibility. Additionally, to furnish a comprehensive comprehension and enable a deeper exploration of these connections, the precise path coefficient values for each relationship between latent variables have been calculated and are delineated in the subsequent table.

Table 5. Significance of Influence

Variable	Original Sample	T-Statistics	P-Value	Conclusion
Information Quality -> Use	-0.023	0,480	0,632	**Not significant**
Information Quality -> User Satisfaction	0,071	1,960	0,051	**Significant**
Service Quality -> Use	0,335	11,652	0,000	**Significant**
Service Quality -> User Satisfaction	0.066	1,204	0,230	**Not significant**
System Quality -> Use	0,184	4,351	0,000	**Significant**
System Quality -> User Satisfaction	0,134	3,508	0,001	**Significant**
Use -> Net Benefits	0,238	6,056	0,000	**Significant**
Use -> User Satisfaction	0,286	9,174	0,000	**Significant**
User Satisfaction -> Net Benefits	0,178	4,270	0,000	**Significant**

5. Discussion and Implication

5.1. Discussion

The comprehensive analysis of variables has yielded substantial support for hypotheses H2, H3, H5, H6, H7, H8, and H9, corroborating findings from prior research and hypothesis testing, which consistently underscore the profound impact of various factors within the system framework. These findings, coupled with subsequent detailed calculations, offer a wealth of insights into the intricate relationships between these variables and provide actionable insights for strategic decision-making in organizational settings.

H1's initial findings propose a marginal negative correlation between Information Quality (IQ) and Use (U), indicating a potential disconnect between Information Quality and its direct influence on usage patterns, which resonates with previous studies (Gotthardt & Mezhuyev, 2022). However, delving deeper into this association reveals a nuanced comprehension that warrants further exploration. Despite the initial negative correlation, it is noteworthy that a decline in Information Quality does not necessarily lead to a proportional reduction in Use. This insight could be attributed to the obligatory usage of the Cloud-based ERP Application within the organizational framework of XYZ. Therefore, it is advised for organizations to adopt a holistic approach in evaluating system effectiveness, considering a multitude of factors beyond Information Quality to gain a comprehensive understanding of usage dynamics and their implications.

H2's findings reveal an initial path coefficient value indicating a significant relationship between Information Quality (IQ) and User Satisfaction (US), with a value of 0.071, suggesting that improvements in Information Quality could lead to heightened User Satisfaction levels. This positive correlation underscores the critical importance of prioritizing enhancements in Information Quality to elevate the overall user experience and foster greater satisfaction among system users, aligning with previous research demonstrating similar outcomes (Franque et al., 2021).

Similarly, H3 uncovers a robust positive association between Service Quality (SEQ) and Use (U), as indicated by the initial sample path coefficient value of 0.335. This suggests a significant influence of Service Quality on Use or usage, aligning with previous studies that emphasize the substantial and positive impact of service quality on usage (Lutfi, 2023). Hence, it can be inferred that with an enhancement in service quality, there is a concurrent increase in usage or optimization of usage, highlighting the importance of prioritizing initiatives aimed at improving service quality to foster greater operational efficiency and efficacy.

While H4's findings indicate that the initial sample path coefficient value pertaining to the relationship between Service Quality (SEQ) and User Satisfaction (US) stands at 0.066, it is concluded that Service Quality does not possess a statistically significant influence on User Satisfaction, consistent with earlier studies that consistently suggest Service Quality lacks significant influence on determining user satisfaction with the system (Franque et al., 2021). However, the positive value of the initial sample path coefficient may be elucidated by observing that user satisfaction with the Cloud-based ERP Application is not primarily driven by service quality but rather by the obligatory usage of the Cloud-based ERP Application for employees at XYZ. This underscores the need for organizations to recognize the multifaceted nature of factors shaping User Satisfaction and adopt a holistic approach in addressing factors influencing user satisfaction levels beyond service quality, thereby ensuring a more comprehensive understanding of the determinants of user satisfaction.

Furthermore, H5 highlights the substantial positive influence of System Quality (SQ) on Use (U), emphasizing the importance of investing in enhancements to system quality to bolster utilization rates and achieve superior operational outcomes. H5 observed that the initial sample path coefficient value for the relationship between System Quality (SQ) and Use (U) stands at 0.184. This suggests that System Quality significantly impacts Use, aligning with previous research indicating a significant and

positive effect of Service Quality on Use (Costa et al., 2020). The positive value of the initial sample path coefficient implies that improvements in System Quality led to an increase in Use.

Delving deeper, H6 delineates the substantial impact of System Quality on User Satisfaction, stressing the importance of prioritizing endeavors aimed at enhancing system quality to elevate the overall user experience and satisfaction levels. H6 discovered that the initial sample path coefficient value pertaining to the relationship between System Quality (SQ) and User Satisfaction (US) is 0.134. This suggests that System Quality significantly influences user satisfaction, in line with previous research emphasizing the pivotal role of System Quality in shaping user satisfaction regarding system usage (Akrong et al., 2022),(Lutfi, 2023). The positive value of the initial sample path coefficient indicates that elevated system quality will notably enhance user satisfaction.

Moreover, H7 underscores the substantial influence of usage on the benefits reaped from the system, implying that heightened system usage leads to optimal utilization and enhances the benefits obtained by users. This highlights the strategic significance of incentivizing and facilitating increased system usage to maximize the benefits garnered from system utilization. H7's findings reveal that the initial sample path coefficient value concerning the relationship between Use (U) and Net Benefits (NB) stands at 0.238. This indicates that usage significantly impacts the benefits acquired, aligning with previous research indicating that heightened system usage leads to optimal system utilization (Lutfi, 2023),(W. S. D. W. A. Ghani, 2022). The positive value of the initial sample path coefficient suggests that increased usage of the Cloud-based ERP Application and more efficient implementation within a company result in users perceiving greater benefits. This underscores the notion that augmenting system usage leads to optimizing system utilization, thereby achieving the net benefits derived by users from system usage.

Expanding on this understanding, H8 highlights the favorable association between system usage and user satisfaction, suggesting that raising system usage levels leads to increased user satisfaction. Consequently, organizations are urged to develop strategies to enhance system usage, effectively boosting overall user satisfaction levels. H8 reveals that the initial sample path coefficient value regarding the relationship between Use (U) and User Satisfaction (US) is 0.286. This suggests a significant impact of usage on user satisfaction, consistent with prior research supporting this conclusion (Akrong et al., 2022). The positive value of the initial sample path coefficient indicates that as usage escalates, user satisfaction also rises. Thus, it can be inferred that augmenting system usage leads to optimization, thereby achieving user satisfaction with the system.

Lastly, H9 emphasizes the substantial influence of User Satisfaction on the benefits obtained from system usage, suggesting that contented users are more likely to achieve maximum benefits from utilizing the system. Therefore, organizations should prioritize efforts aimed at enhancing user satisfaction levels to optimize the benefits derived from system usage, thereby fostering enhanced user performance and productivity. H9 indicates that the relationship between User Satisfaction (US) and Net Benefits (NB) is characterized by an initial sample path coefficient value of 0.178. This implies that user satisfaction significantly affects the benefits obtained from system usage, aligning with previous research indicating that user satisfaction with the system contributes to improved user performance, resulting in enhanced job speed and productivity (Lutfi, 2023). The positive value of the initial sample path coefficient suggests that user satisfaction impacts the effective deployment of the Cloud-based ERP Application within a company, leading to the realization of maximum benefits. This underscores the notion that satisfied users contribute to enhanced user performance, including increased work speed and productivity.

By thoroughly grasping the complexities of these interwoven connections and identifying emerging patterns, organizations are empowered to make well-informed strategic choices. This entails prioritizing initiatives geared towards elevating system quality, fostering user satisfaction, and optimizing overall system utilization. Such strategic decisions culminate in superior operational efficiency and heightened organizational effectiveness. This comprehensive understanding enables organizations to pinpoint areas

for improvement and allocate resources effectively, ensuring that their systems not only meet but exceed the needs and expectations of users. As a result, they can stay ahead of the curve in an ever-evolving landscape, driving innovation, and maintaining a competitive edge in their respective industries.

5.2. Implication

This study provides valuable insights into evaluating opportunities, processes, motivations, and performance among audit managers. Leveraging the research findings, specific recommendations can be proposed to the company. For instance, the negative impact of information quality on the use of the Cloud-based ERP Application (-0.0223) underscores the need to enhance information quality associated with the application to better support XYZ's business processes optimally. Moreover, each module integrated into the Cloud-based ERP Application is systematically designed to facilitate the daily activities of XYZ employees. To further enhance user satisfaction, there's a critical need to improve service quality. Consequently, with an expanding user base, optimal implementation of the Cloud-based ERP Application can be achieved. The research findings present various hypotheses with distinct results, complemented by discussions and data measurements. Notably, one hypothesis suggests that substituting manual or traditional work with information systems can heighten user satisfaction, leading to managerial implications based on significant variables identified.

From the research outcomes, it is inferred that the perceived increase in net benefits by users is positively associated with enhanced usage and satisfaction, influenced by factors such as system information quality and related service quality. Although information, system, and service quality do not directly impact net benefits, they significantly influence usage and satisfaction, thereby affecting net benefits. Optimal system quality fosters increased usage and satisfaction, facilitating optimal system implementation and, consequently, achieving optimal net benefits.

However, the feedback received highlights various concerns regarding the system's quality that necessitate improvements. Hence, there's an urgent need for further development of the Cloud-based ERP Application. This is critical because substandard system quality could deter employee utilization of the application, leading to the avoidance of several processes that should ideally be automated through the Cloud-based ERP Application. Addressing the diversity in business processes among different companies poses a challenge to enhancing system quality before marketing the application, ensuring that XYZ's business processes can fully leverage its benefits.

Based on these insights, specific recommendations can be made for optimizing platform adoption, refining features, and managing changes around the ERP system to maximize individual and organizational advantages:

- **Enhance Information Quality**. Prioritize efforts to improve the quality of information within the system by implementing data validation processes and providing comprehensive training to users.
- **Improve Service Quality**. Focus on enhancing support and services provided to users, including responsive customer support and user-friendly interfaces.
- **Optimize Platform Adoption**. Develop comprehensive training programs and incentives to encourage broader adoption of the ERP system.
- **Refine Features**. Continuously gather feedback from users to identify areas for feature refinement and prioritize updates based on user needs.
- **Implement Change Management Strategies**. Implement robust change management strategies to minimize resistance to change and ensure user buy-in.
- **Address System Quality Concerns**. Proactively address concerns regarding system quality through further development and quality assurance processes.

- **Tailor Features to Business Processes**. Customize features within the ERP system to align with XYZ's specific business processes.

Implementing these recommendations will enable XYZ to maximize both individual user satisfaction and organizational advantages, leading to enhanced operational efficiency and greater success for the organization.

6. Conclusion

Through in-depth analysis, discussions, and hypothesis testing, it becomes evident that Information Quality, Service Quality, System Quality, Usage, and User Satisfaction play pivotal roles in shaping various aspects of Cloud-based ERP Application utilization and benefits. These findings provide valuable insights for enhancing system quality and elevating user satisfaction, ultimately leading to enhanced system utilization and benefits for users. While Information Quality might not significantly affect Cloud-based ERP Application usage at XYZ, System Quality emerges as a key driver of both usage and user satisfaction. Anticipated improvements in System Quality are expected to have a positive impact on both usage and satisfaction levels. Additionally, the services provided by internal teams significantly influence application usage, highlighting the importance of enhancing both System and Service Quality to maximize application benefits. Moreover, user satisfaction with the Cloud-based ERP Application is closely linked to Information and System Quality, with Services playing a less significant role. Recognizing that employees are required to use the application regardless of Service Quality underscores the importance of other factors, such as operational needs, in influencing application usage decisions. Furthermore, the level of Cloud-based ERP Application usage significantly impacts user satisfaction and net benefits, with higher usage levels correlating with increased satisfaction and benefits. Thus, user satisfaction emerges as a critical metric for evaluating the effectiveness and value provided by the application. Despite its pivotal role, feedback and complaints emphasize the urgent need for enhancements to improve the operational efficiency of XYZ's business processes.

This evaluative assessment of emerging ERP platform success factors provides directional insights into persistent misalignments between technology and work practices that impede productivity and agility. While constrained as an evaluative audit, evidence indicates the necessity for corrective adjustments regarding feature augmentation, workflow integration, and usability. However, beyond superficial improvements, fostering participative transparency in tool development and management can enhance holistic transition coherence. Ultimately, digital stewardship entails upholding ethics, empathy, and justice as integral components of technical excellence to foster welfare rather than focusing solely on mechanics. Technologies, instead of being viewed as panaceas, should be integrated within collaborative cultures that prioritize meaning over metrics through continuous nurturing.

6.1. Limitation

This study operates within a confined data scope, centering on grievances regarding the Cloud-based ERP Application voiced by all employees of XYZ, encompassing its seven subsidiaries. The primary objective is to meticulously assess the myriad factors that influence the benefits derived from utilizing the Cloud-based ERP Application across the entire project lifecycle. Employing the Delone & McLean Information System Success Model method, data collection involves the integration of six key variables: information quality, system quality, service quality, usage, user satisfaction, and net benefits. The subsequent analysis unfolds through Structural Equation Model Analysis (SEM), facilitated by the Partial Least Square (PLS) method utilizing the Smart PLS tool.

This study yields several recommendations for future research and stakeholders alike. The insights gleaned could serve as a foundational reference point for informed decision-making concerning the

evolution and advancement of the Cloud-based ERP Application. Stakeholders may find value in leveraging these results as an evaluative mechanism, offering insights into potential areas of enhancement before marketing the Cloud-based ERP Application to B2B customers. Furthermore, there exists an opportunity for subsequent researchers to broaden the scope of inquiry by introducing additional variables that are germane to the research theme. This expansion would serve to refine the Delone & McLean Information System Success Model, fostering a more nuanced and comprehensive understanding of both the subject matter and the underlying models at play.

References

Abulibdeh, A., Zaidan, E., & Abulibdeh, R. (2024). Navigating the confluence of artificial intelligence and education for sustainable development in the era of industry 4.0: Challenges, opportunities, and ethical dimensions. *Journal of Cleaner Production*, *437*. https://doi.org/10.1016/j.jclepro.2023.140527

Akrong, G. B., Shao, Y., & Owusu, E. (2022). Evaluation of organizational climate factors on tax administration enterprise resource planning (ERP) system. *Heliyon*, *8*(6). https://doi.org/10.1016/j.heliyon.2022.e09642

Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information and Management*, *57*(2). https://doi.org/10.1016/j.im.2019.05.003

Christiansen, V., Haddara, M., & Langseth, M. (2021). Factors Affecting Cloud ERP Adoption Decisions in Organizations. *Procedia Computer Science*, *196*, 255–262. https://doi.org/10.1016/j.procs.2021.12.012

Costa, C. J., Aparicio, M., & Raposo, J. (2020). Determinants of the management learning performance in ERP context. *Heliyon*, *6*(4). https://doi.org/10.1016/j.heliyon.2020.e03689

Delone, W. H., & Mclean, E. R. (2003). The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. In *Information Systems Research, Journal of Management Information Systems* (Vol. 19, Issue 4).

Franque, F. B., Oliveira, T., & Tam, C. (2021). Understanding the factors of mobile payment continuance intention: empirical test in an African context. *Heliyon*, *7*(8). https://doi.org/10.1016/j.heliyon.2021.e07807

Gable, G. G., Sedera, D., & Chan, T. (2020). Re-conceptualizing information system success: The IS-impact measurement model. *Journal of the Association for Information Systems*, *9*(7), 377–408. https://doi.org/10.17705/1jais.00164

Geebren, A., Jabbar, A., & Luo, M. (2021). Examining the role of consumer satisfaction within mobile eco-systems: Evidence from mobile banking services. *Computers in Human Behavior*, *114*. https://doi.org/10.1016/j.chb.2020.106584

Gessa, A., Jiménez, A., & Sancha, P. (2023). Exploring ERP systems adoption in challenging times. Insights of SMEs stories. *Technological Forecasting and Social Change*, *195*. https://doi.org/10.1016/j.techfore.2023.122795

Ghani, E. K., Yasin, S. A. M., & Ali, M. M. (2019). Examining enterprise resource planning post implementation and employees' performance in small and medium enterprises using delone and mclean's information system success model. *International Journal of Financial Research*, *10*(3), 153–169. https://doi.org/10.5430/ijfr.v10n3p153

Ghani, W. S. D. W. A. (2022). Exploring System Quality Elements of Mobile Marketplace Application for Textile Cyberpreneurs. *Procedia Computer Science*, *204*, 354–361. https://doi.org/10.1016/j.procs.2022.08.043

Gotthardt, M., & Mezhuyev, V. (2022). Measuring the Success of Recommender Systems: A PLS-SEM Approach. *IEEE Access*, *10*, 30610–30623. https://doi.org/10.1109/ACCESS.2022.3159652

Gupta, S., Tuunanen, T., Kar, A. K., & Modgil, S. (2022). Managing Digital Knowledge for Ensuring Business Efficiency and Continuity. *Journal of Knowledge Management*. https://doi.org/10.1108/JKM-09-2021-0703

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2019). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management and Data Systems*, *117*(3), 442–458. https://doi.org/10.1108/IMDS-04-2016-0130

Hayatu Mazadu, U., Ibrahim, M. M., Ibrahim, A. S., & Salahudeen Mansur, M. (2022). Examining the instructor management benefits of student information system: An empirical investigation. *Social Sciences and Humanities Open*, *6*(1). https://doi.org/10.1016/j.ssaho.2022.100322

Jeyaraj, A. (2020). DeLone & McLean models of information system success: Critical meta-review and research directions. *International Journal of Information Management*, *54*. https://doi.org/10.1016/j.ijinfomgt.2020.102139

Jo, H., & Bang, Y. (2023). Understanding continuance intention of enterprise resource planning (ERP): TOE, TAM, and IS success model. *Heliyon*, *9*(10). https://doi.org/10.1016/j.heliyon.2023.e21019

Lutfi, A. (2023). Factors affecting the success of accounting information system from the lens of DeLone and McLean IS model. *International Journal of Information Management Data Insights*, *3*(2). https://doi.org/10.1016/j.jjimei.2023.100202

Mustafa, S. Z., Kar, A. K., & Janssen, M. F. W. H. A. (2020). Understanding the impact of digital service failure on users: Integrating Tan's failure and DeLone and McLean's success model. *International Journal of Information Management*, *53*. https://doi.org/10.1016/j.ijinfomgt.2020.102119

Nguyen, T. D., & Luc, K. V. T. (2019). Information systems success: Empirical evidence on cloud-based ERP. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *11251 LNCS*, 471–485. https://doi.org/10.1007/978-3-030-03192-3_36

Obeid, A., Ibrahim, R., & Fadhil, A. (2024). Extended Model of Expectation Confirmation Model to Examine User's Continuous Intention Toward the Utilization of E-Learning Platform. *IEEE Access*. https://doi.org/10.1109/ACCESS.2024.3373190

Pavković, V., Gašpar, D., & Jadrić, M. (2021). Adaption of Delone and McLean Model for ERP System Quality Evaluation. *Economic Review*, *XIX*(2), 37–52. https://doi.org/10.51558/2303-680x.2021.19.2.37

Sabeh, H. N., Husin, M. H., Kee, D. M. H., Baharudin, A. S., & Abdullah, R. (2021). A Systematic Review of the DeLone and McLean Model of Information Systems Success in an E-Learning Context (2010-2020). In *IEEE Access* (Vol. 9, pp. 81210–81235). Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/ACCESS.2021.3084815

SØrheller, V. U., HØvik, E. Jø., Hustad, E., & Vassilakopoulou, P. (2019). Implementing cloud ERP solutions: A review of sociotechnical concerns. *Procedia Computer Science*, *138*, 470–477. https://doi.org/10.1016/j.procs.2018.10.065

Srisathan, W. A., Ketkaew, C., Jantuma, N., & Naruetharadhol, P. (2024). Trust and website conversion in consumer responses to green product purchasing: A new perspective through the lens of innovative

website Design's technology integration. *Heliyon*, *10*(1). https://doi.org/10.1016/j.heliyon.2023.e23764

Tagscherer, F., & Carbon, C. C. (2023). Leadership for successful digitalization: A literature review on companies' internal and external aspects of digitalization. In *Sustainable Technology and Entrepreneurship* (Vol. 2, Issue 2). Elsevier B.V. https://doi.org/10.1016/j.stae.2023.100039