



Analysis of Human Resource Information System Implementation and Employee Trust in Employee Satisfaction and Performance

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ABSTRACT

This study aims to analyze the effect of system implementation on Employee Trust (X4) in superiors and Employee Satisfaction (Y1) in the subsidiary of BUMN Petrokopindo Cipta Selaras, East Java. The variables studied included Service Quality (X1), Information Quality (X2), System Quality (X3), Employee Trust (X4), Employee Trust (Y1), and Employee Performance (Y2) as the final results. Quantitative methods were used in this study using the Partial Least Squares Structural Equation Modeling (PLS-SEM) version 4 analysis tool. Data was collected through a survey of employees at a subsidiary of BUMN Petrokopindo Cipta Selaras, East Java. Seven hypotheses were tested through data analysis using the PLS-SEM approach. The trials were carried out twice to ensure the validity and stability of the results. The results of this study reveal that Service Quality (X1), Information Quality (X2), and System Quality (X3) have a significant positive impact on Employee Trust (X4). Furthermore, Employee Trust (X4) has a positive and significant influence on Employee Satisfaction (Y1). These findings indicate that exemplary system implementation can affect employee trust and satisfaction perceptions. Furthermore, Employee Satisfaction (Y1) has a positive and significant impact on Employee Performance (Y2). This underscores the importance of employee satisfaction in stimulating better performance. These findings provide valuable insights for organizational management to design more effective system implementation strategies, focusing on factors such as service quality, information quality, and system quality.

Keywords: *H.R. Information System, Employee Trust, Employee Satisfaction, Employee Performance*

1. INTRODUCTION

Organizations are increasingly under pressure to achieve high performance while remaining relevant and sustainable in the marketplace; they invest carefully in human capital and development as countries compete for talent to achieve high human resource performance and labor productivity. Human resource professionals (HR) are pressured to align an organization's human resources with broad, strategic organizational goals. Maximizing H.R. performance requires H.R. professionals to recognize and execute their roles. Information technology (I.T.) has become a productivity driver for human resources and larger organizations, and advances in I.T. have resulted in computer-based human resource information systems. The H.R. The Information System has historically been used for employee recruitment, administration, and segregation. Although these processes have remained the same markedly, methods of gathering and storing information have evolved with rapid technological advances, supported by Kovach, A. et al. [1]. The H.R. The Information System consists of modules that make up the organization, such as company, location, department, and organizational changes, including termination and transfer, supported by Chowdhury et al.[2].

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Various components make up an H.R. Information System, and a component that is not successful will negatively affect the functionality of the remaining system, supported by Normalini, et al.[3]. Organizations face many challenges when they implement I.T. projects. International Data Corporation (IDC) reports that 25% of I.T. projects fail, supported by Gullu et al. [4], 20% to 25% of projects provide no return on investment (ROI), and up to 50% of projects require rework of materials. Iijima (2015) points out that large I.T. projects in organizations perform poorly; thus, the return on I.T. investment has become a concern of researchers and practitioners. Without the positive influence of H.R. Information Systems, H.R. professionals cannot carry out their responsibilities and monitor human capital indicators despite common, traditional financial indicators, such as ROI, internal rate of return, and net present value, which present challenges when evaluating I.T. investment decisions, supported by Iijima [5]. Many have turned to perceptual measures as proxies for success, supported by Mayfield et al. [6], and this is true for H.R. Information Systems. The literature shows that measuring the success of I.T. Investments are emphasized when integrating business processes, supported by Arita, S. et al[7].

A comprehensive corpus of empirical investigations has explored the landscape of Human Resources Information Systems (H.R. IS) across diverse global research contexts, spanning sectors such as hospitality in the U.K. supported by Mahapatra, M. et al [8], the Thai textile industry, supported by Pouransari, W et al [9], Jordanian business organizations, supported by Siengthai et al. [10], Al-Dmor et al. [11], and small and medium enterprises in Vietnam, supported by Al-Dmour et al. [12]. These studies contribute to an intricate understanding of the implications and nuances of H.R. IS across industries. However, a conspicuous gap exists in the scholarly discourse regarding the implementation of H.R. IS within tertiary institutions.

Despite the wealth of investigations across sectors, limited scholarly attention has been dedicated to the specific context of higher education within discussions surrounding H.R. IS. While anecdotal evidence underscores the role of information systems in core higher education processes, notably teaching and learning, supported by Gullu et al. [4], a discernible gap exists in the scholarly exploration of secondary processes, particularly within the ambit of Human Resources. This gap is accentuated given the acknowledged significance of the higher education sector as a catalyst for transformation, a supporter of scarce skills, and a contributor to economic growth. The dearth of research in this domain is evident from the scarcity of studies by Duc, N [13], and Aletaibi [14], emphasizing the exigency for more focused inquiries into the intersection of H.R. IS and tertiary education.

In this scholarly panorama, the present study endeavors to address this void by directing attention to the specific implementation and influential factors surrounding H.R. IS within the distinct milieu of higher education. The principal objective is to construct comprehensive models systematically encapsulating the intricacies inherent in the deployment of H.R. IS within tertiary institutions. By doing so, the research aims to bridge extant gaps, not only by contributing substantive insights to the scholarly discourse but also by providing a nuanced understanding of H.R. IS implementation and its profound impact within the unique contours of higher education settings. Through this targeted exploration, the study seeks to offer a valuable addition to the literature, validating essential procedural steps and considerations involved in deploying H.R. IS effectively within tertiary educational institutions. Ultimately, the research aspires to advance the understanding of H.R. processes within higher education, thereby facilitating organizational efficiency and effectiveness in this pivotal sector.

This research endeavors to fill a crucial void by specifically delving into the implementation and influential factors of Human Resources Information Systems (H.R. IS) within the distinctive realm of higher education. It places particular emphasis on the subsidiary of the state-owned enterprise, PT Petrokopindo Cipta Selaras, located in Jawa Timur, highlighting the significance of undertaking this study within the unique organizational context of the mentioned region. The primary aim is to meticulously formulate comprehensive models that aptly capture the intricacies associated with the deployment of H.R. IS within tertiary institutions. The research, in its focus on Jawa Timur, seeks to unravel the nuanced relationships between various factors, offering not only valuable insights to the prevailing academic discourse but also a targeted understanding of H.R. IS implementation and its profound impact within the distinct higher education landscape of this specific geographical area.

Anticipating impactful outcomes, the study is poised to provide researchers and Human Resources professionals with a robust H.R. IS implementation model, substantiating essential procedural steps and considerations vital for the effective deployment of H.R. IS within tertiary educational institutions. Consequently, the overarching goal of this research is to contribute significantly to the enhancement of H.R. processes within the higher education sector, particularly in Jawa Timur, thereby fostering organizational efficiency and effectiveness in this crucial region.

2. METHODS

Participating in the survey were employees from a subsidiary of the Indonesian state-owned enterprise, Petrokopindo Cipta Selaras, situated in East Java. This quantitative study utilized six key indicators, namely Self

Efficacy (X1), Organizational Support (X2), Training (X3), Complexity (X4), Compatibility (X5), ERP Use (Y1), Employee Performance (Y2), and system success, to comprehensively investigate the factors influencing Enterprise Resource Planning (ERP) adoption and its subsequent impact on employee performance within the organizational context. To determine both the population and sample size, the researchers applied the Hair formula, subsequently employing the Likert scale for score calculation. According to this methodological approach, the minimum sample size was derived by multiplying the number of indicators (26 in this instance) by a factor of 5, resulting in a minimum sample size of 130.

The study's data analysis was conducted using SmartPLS 4.0 software, employing inferential statistical analysis through the six steps of structural equation modeling (SEM). This meticulous methodology ensures a robust and reliable examination of the relationships between various indicators and their implications on ERP adoption and employee performance. The outcomes of the analysis will be thoroughly assessed descriptively, contributing valuable insights to the existing body of knowledge in the field of technology adoption and its impact on organizational dynamics. Here's the research model of this study:

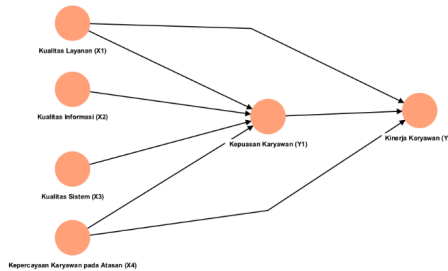


Figure 1 Research Model Study

3. RESULT AND DISCUSSION

3.1. Result

In the SEM test, there are at least three steps of analysis, namely: (1) testing the relationship between indicators and latent or construct variables (the outer model or measurement model); (2) testing the relationship between latent or construct variables (the structural model); and (3) testing the compatibility model. The results of the calculations on the construct validity and reliability tests are shown in Figure 1 below, which is the result of running the outer model test (measurement model).

Figure 1 below shows the results of the construct validity and reliability tests. Questions or indicators with a loading factor value of 0.7 will be excluded from the model when testing their validity, supported by Phahlane et al. [15]. Figure 1 shows that the first running output shows a loading factor value of 0.7, which will then be excluded from the model one by one, namely: $\lambda X2.3 = 0.666$ (Figure 1). After running twice, the external model is obtained, which contains all indicators with a loading factor value of > 0.7 .

Figure 2 PLS Algorithm Run 2

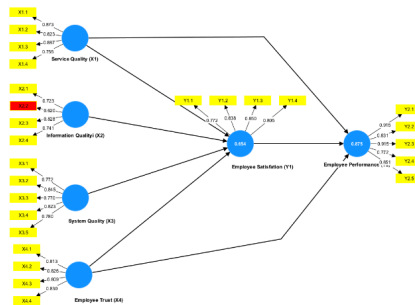
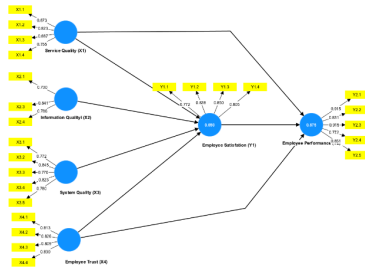


Figure 3 Pls Bootstrapping



The influence analysis between latent and construct variables in the SEM model is nothing more than testing the structural model in path analysis. In the inner model, the research hypotheses will be proven. In this study, the analysis used bootstrapping using SmartPLS software. The results of running calculations with Bootstrapping are shown in Figure 2 below, and the results of several stages of the analysis are explained below.

Display a table of hypothesis test results. This can be seen in the table.

Table 1. Hypothesis Test

	Sample and (S)	Rate nilai sampel (R)	Standar deviasi (STDEV)	T Statistik (OST/STDEV)	Nilai P (P values)
Employee Satisfaction (Y1) → Employee Performance (Y2)	0.988	0.988	0.003	30.154	0.000
Employee Trust (X4) → Employee Performance (Y2)	-0.094	-0.094	0.002	-1.613	0.107
Employee Trust (X4) → Employee Satisfaction (Y1)	0.227	0.245	0.002	3.068	0.002
Information Quality (X2) → Employee Satisfaction (Y1)	0.123	0.401	0.006	4.213	0.000
Service Quality (X1) → Employee Performance (Y2)	0.229	0.309	0.007	0.119	0.906
Service Quality (X1) → Employee Satisfaction (Y1)	0.222	0.272	0.073	0.699	0.338
System Quality (X3) → Employee Satisfaction (Y1)	0.327	0.198	0.006	2.053	0.039

Source: Processed Data 2023

Shown in Table 1 above is the calculation result of bootstrapping to test the inner model, which describes the research hypotheses in the SEM model simultaneously. The results of the path analysis explaining the direct effects of one construct on another are as follows:

- H1 = Service Quality (X1) has no significant positive effect on employee satisfaction (Y1) with a path coefficient of $px1y1 = 0.222$ and $p\text{-value} = 0.338$. So, the first hypothesis is not proven.
- H2 = Information Quality (X2) has significant positive effect on employee satisfaction (Y1) with a path coefficient of $px2y1 = 0.123$ and $p\text{-value} = 0.000$. So, the second hypothesis is proven.
- H3 = System Quality (X3) significantly affects employee satisfaction (Y1) with a path coefficient of $px3y1 = 0.327$ and $p\text{-value} = 0.039$. So, the third hypothesis is proven.
- H4 Employee trust (X4) positively affects employee satisfaction (Y1) with a path coefficient of $px4y1 = 0.227$ with $p\text{-value} = 0.002$. So, the fourth hypothesis is proven.
- H5 Service Quality (X1) has no significant positive effect on employee performance (Y2) with path coefficient $px1y2 = 0.229$ with $p\text{-value} = 0.906$. So, the fifth hypothesis is not proven.
- H6 Employee Trust (X4) has no significant adverse effect on employee performance (Y2) with a path coefficient $px4y2 = -0.093$ with a $p\text{-value} = 0.107$. So, the sixth hypothesis is not proven.
- H7 Employee satisfaction (Y1) has a positive and significant effect on Employee Performance (Y2) with a path coefficient $py1y2 = 0.976$ with a $p\text{-value} = 0.000$. So, the seventh hypothesis is proven.

Model Fit Testing

At the stage of testing the model's suitability, there are five types, among others, by looking at the coefficient of determination (R square), f square, q square, and the standardized root mean square residual (SRMR). In this paper, researchers only used two model fit tests: R square and SRMR. The initial stage of testing the model's suitability is to determine the coefficient of determination (R square) value. The results of calculating R2 are shown in Table 2 below.

Table 2. Model Fit Test (R-square)

	R-square	Adjusted R-square
Employee Satisfaction	0.626	0.630
Employee performance	0.874	0.960

Source: Processed Data 2023

It can be seen in Table 2 that the model fit test with the R-square test shows a significance level of 0.626 or 62% in the Y1 variable. This means that the percentage value of the influence of exogenous variables, namely service quality, information quality, system quality, and employee trust, as an exogenous variable to endogenous variables, namely employee satisfaction, is 62%. Next is still in Table 6, that the model fit test with the R-square test shows a significance level of 0.874 or 87% in the Y2 variable. This means that the percentage value of the effect of the endogenous variable, namely employee satisfaction, on another endogenous variable, namely employee performance, is 87%.

Table 3. SRMR Test

IndexFit	Fit Criteria	Marginal Fit Criteria	Results
Standardized Root Mean Square Residual (SRMR)	≤ 0.08	0.08 – 0.09	0.086

Source: Processed Data 2023

The value that describes the model's mismatch based on the residuals is the SRMR value. Therefore, the model is better and more accurate with a smaller SRMR value. If the SRMR value is 0.08, the model is considered to be fit; if it is between 0.08 and 0.10, the model is said to be marginal; and if it is more significant than 0.10, the model is said to be wrong (unsuitable), supported by Hair Jr et al[16]. Given that the model fit is marginal and acceptable, Table 3's SRMR value of 0.086, which falls between 0.08 and 0.10, indicates.

3.2. Discussion

After testing the relationship between indicators and latent variables, testing the relationship between latent variables, and testing the model's fit, a final model that fits simultaneously has been found. As explained above, the indicator test has implications for the output of indicator X2.3 from the information quality variable (X2). In addition, at the initial inner model testing stage, it has implications for the weakness of the three hypotheses, namely the effect of Information Quality (X2) on employee satisfaction (Y1), service quality (X1) on employee performance (Y2), and employee trust (X4) on employee performance (Y2). Then, the process of finding the final model that fits simultaneously brings implications for all hypothesized models that can be accepted.

1. User satisfaction is assessed as the extent to which users believe that the H.R. The Information System is accessible to meet their information needs, supported by Garson, K [17] and the user's evaluative assessment of experience with the H.R. Information System, supported by Ives M, et al.[18]. The model fit test results prove a positive influence relationship from the Service Quality variable (X1) on Employee Satisfaction (Y1). This influence can be seen through the magnitude of the influence of 0.222. This proves that the better the quality of service in the application of human resource information systems, the better the satisfaction of using the system by employees, which in this study is employee satisfaction in the organization getting better too. But, in the SEM test, the result shown that p-value is not valid makes the first hypothesis not proven, which means the effect of quality of service in the application of human resource information systems is meaningless.
2. Information quality includes users' assessment of the information in the H.R. Information System regarding relevance, timeliness, and accuracy, supported by Doll et al[19]. Information quality research offers inconsistent findings. The results of the model suitability test prove that there is a positive influence relationship from the Information Quality variable (X2) on Employee Satisfaction (Y1). This influence can be seen through the magnitude of the influence of 0.123. This proves that the better the quality of information in the organization's information system, it is directly proportional to employee satisfaction but not significant in the organization
3. System quality is a desirable characteristic of an information-producing H.R. Information System, supported by Seddon [20], and the extent to which an H.R. Information System performs its functionality and characteristics, or the probability of bugs in the system, quality of documentation, system maintenance, user interface, and ease of use, supported by DeLone et al [21]. The model fit test results prove a positive and significant influence relationship from the system quality variable (X3) to employee satisfaction (Y1). The magnitude of the influence of the influence can be seen through the magnitude of the influence of 0.327. This proves that the existence of

good-quality information and technology systems in the organization will provide results that are directly proportional to employee satisfaction

4. Trust can also be interpreted as a desire to join other parties and the hope that other parties will reciprocate if the party cooperates. The model fit test results prove a positive and significant influence relationship from the variable employee trust (X4) to employee satisfaction (Y1). The magnitude of the influence of the influence can be seen through the magnitude of the influence of 0.227. This proves that there is a high level of employee trust in superiors, which will be directly proportional to high employee satisfaction in the H.R. information system in the organization.
5. Service quality includes the functional competence of human resources, technical capabilities, reliability, accuracy, responsiveness, assurance, and empathy of support personnel, supported by Zhang T [22]. The model fit test results prove a positive and not significant influence relationship from the service quality variable (X1) to employee performance (Y2). The magnitude of the influence of the influence can be seen through the magnitude of the influence of 0.029. This proves that good quality of service in information systems and H.R. technology in an organization will provide directly proportional results but insignificant to employee performance. But, in the SEM test, the result showed that p-value is not valid and the first hypothesis is not proven, which meant the effect of quality of service in information systems and H.R. technology is meaningless.
6. Trust can also be interpreted as a desire to join other parties and the hope that other parties will reciprocate if the party cooperates. Trust can be defined as the willingness of one party to be open to a second party based on the belief that the second party fulfills the characteristics of employee trust theory, supported by Iswandi I. et al[23]. The results of the model fit test prove that there is a negative and not significant influence of the employee's trust variable (X4) on employee performance (Y1). The magnitude of the influence of the influence can be seen through the magnitude of the influence of -0.093. This proves that employee trust in superiors is inversely related to increased performance but not significant.
7. Judging the success of information systems, supported by Zviran M, et al [24], user satisfaction is used because of its implementation and ease of use, supported by DeLone et al. [21], Zviran M, et al. [24]. The model fit test results prove a positive and significant influence relationship from the variable employee satisfaction (Y1) to employee performance (Y2). The magnitude of the influence of the influence can be seen through the magnitude of the influence of 0.976. This proves that there is a high level of employee satisfaction in the use of H.R. information systems in organizations; it will be directly proportional to employee performance because employees will feel satisfied and have their needs fulfilled through the existence of an H.R. information system.

AUTHORS' CONTRIBUTIONS

The study's results yield several noteworthy conclusions concerning the interplay between different variables and employee satisfaction and performance within Human Resource (H.R.) Information Systems. Firstly, both service quality and information quality positively impact employee satisfaction, indicating that better service and information provision within H.R. systems enhance overall employee contentment. However, the significance of service quality's influence is put into question due to inconclusive statistical analysis. Secondly, system quality and employee trust significantly contribute to employee satisfaction, highlighting the importance of functional H.R. systems and trust in superiors in fostering employee contentment. Despite the positive correlation between trust and satisfaction, trust exhibits a non-significant negative association with employee performance, suggesting that while trust in superiors' boosts satisfaction, it might not directly translate to improved performance levels. Lastly, there's a robust correlation between employee satisfaction and performance, underlining the pivotal role of satisfaction with H.R. systems in driving overall performance outcomes. These findings underscore the significance of investing in quality H.R. systems and fostering trust in superiors to enhance organizational effectiveness and employee well-being. However, further research is warranted to fully grasp the intricacies of these relationships, particularly concerning the significance of service quality and the complex interplay between trust, satisfaction, and performance.

The results of the model fit test prove that there is a positive and significant influence relationship from the exogenous variables X1, X2, X3, and X4 on the endogenous variable employee satisfaction (Y1) with a value of $R^2 = 0.630$ or 63% and the endogenous variable Y1 employee satisfaction on employee performance (Y2) with a value of $R^2 = 0.96$. The magnitude of the influence of the influence can be seen through the magnitude of the influence of 0.976. This proves that there is a high level of employee satisfaction in the use of H.R. information systems in the organization; it will be directly proportional to employee performance because employees will feel satisfied and have their needs fulfilled through the existence of an H.R. information system. The significant effect of system quality on employee satisfaction is 97%, explaining that in assessing employee performance.

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The results of this research will provide practical benefits for organizations in optimizing Employee Satisfaction and Employee Performance. Hopefully, this research will also become the basis for further research that will be more in-depth and comprehensive in examining other factors that influence organizational dynamics.

REFERENCES

- [1] K. Kovach, A. Hughes, P. Fagan, and P. Maggitti, "Administrative and Strategic Advantages of HRIS," *Employ Relat Today*, vol. 29, pp. 43–48, Aug. 2016, doi: 10.1002/ert.10039.
- [2] J. Chowdhury, P. Bandhyapadhyaya, and G. Hazra, "Integration of Human Resource Information System to DSS, CMS and other applications to increase productivity," *INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY*, vol. 3, pp. 55–59, Jan. 2015, doi: 10.24297/ijct.v3i1a.2726.
- [3] Normalini, Kassim, T. Ramayah, and S. Kurnia, "Antecedents and outcomes of human resource information system (HRIS) use," *International Journal of Productivity and Performance Management*, vol. 61, no. 6, pp. 603–623, Jan. 2017, doi: 10.1108/17410401211249184.
- [4] F. Güllü *et al.*, "An Analysis and Comparison of Adoption of E-learning Systems in Higher Education by Lecturers at Largest Universities in Estonia and Turkey," *Baltic J. Modern Computing*, vol. 4, pp. 428–440, Sep. 2016.
- [5] T. Iijima, "Key points of failure for IT project business cases," *Journal of Corporate Accounting & Finance*, vol. 26, no. 4, pp. 57–63, 2015.
- [6] J. Mayfield and M. Mayfield, *Motivating language theory: Effective leader talk in the workplace*. Springer, 2017.
- [7] S. Arita, R. Aprayuda, D. G. Putra, and R. Syofyan, "Earnings Management Practices From Perspective a Law and Ethical Views," in *Sixth Padang International Conference On Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA 2020)*, Atlantis Press, 2021, pp. 307–313.
- [8] M. Mahapatra and S. Krishnan, "Adoption of open Source ERPs in small and medium-sized enterprises," *Proceedings of the PACIS 2017*, 2017.
- [9] S. Pouransari, W. Al-Karaghoul, and B. Dey, "The role of human resource information system on staff retention management," 2016.
- [10] S. Siengthai and A. Udomphol, "The impact of human resource information system (HRIS) on organizational effectiveness: A case study of the textile industry in Thailand," *International Journal of Asian Business and Information Management (IJABIM)*, vol. 7, no. 3, pp. 40–53, 2016.
- [11] R. H. Al-Dmour, S. Love, and M. M. Al-Debei, "Measuring the effectiveness of HRIS practice in business organisations: a study in the context of a developing country," *International Journal of Business Innovation and Research*, vol. 9, no. 5, pp. 507–525, 2015.
- [12] R. H. Al-Dmour, R. Masa'deh, and B. Y. Obeidat, "Factors influencing the adoption and implementation of HRIS applications: are they similar?," *International Journal of Business Innovation and Research*, vol. 14, no. 2, pp. 139–167, 2017.

- [13] N. N. Duc, "Exploring SMEs Perception and Trust Toward HRIS for a Sustainable HRM Performance: Case Study of SMEs in Vietnam," in *Looking Forward, Looking Back: Drawing on the Past to Shape the Future of Marketing*, C. Campbell and J. (Jonathon) Ma, Eds., Cham: Springer International Publishing, 2016, pp. 171–174.
- [14] R. G. Aletaihi, "An analysis of the adoption and use of HRIS in the public universities in Saudi Arabia," Coventry University, U.K, 2016.
- [15] M. M. Phahlane and R. M. Kekwaletswe, "A conceptual research framework for human resource information systems adoption and use in universities," in *2017 Conference on Information Communication Technology and Society (ICTAS)*, IEEE, 2017, pp. 1–6.
- [16] J. F. Hair Jr, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM)," *European Business Review*, vol. 26, no. 2, pp. 106–121, Jan. 2014, doi: 10.1108/EBR-10-2013-0128.
- [17] K. Garson, "Reframing internationalization.," *Canadian Journal of Higher Education*, vol. 46, no. 2, pp. 19–39, 2016.
- [18] B. Ives, M. H. Olson, and J. J. Baroudi, "The measurement of user information satisfaction," *Commun. ACM*, vol. 26, no. 10, pp. 785–793, Oct. 1983, doi: 10.1145/358413.358430.
- [19] W. J. Doll and G. Torkzadeh, "The Measurement of End-User Computing Satisfaction," *MIS Quarterly*, vol. 12, no. 2, pp. 259–274, 2019, doi: 10.2307/248851.
- [20] P. B. Seddon, "A respecification and extension of the DeLone and McLean model of IS success," *Information systems research*, vol. 8, no. 3, pp. 240–253, 1997.
- [21] W. H. DeLone and E. R. McLean, "The DeLone and McLean model of information systems success: a ten-year update," *Journal of management information systems*, vol. 19, no. 4, pp. 9–30, 2003.
- [22] T. Zhang, "Analysis of multi-stage convex relaxation for sparse regularization.," *Journal of Machine Learning Research*, vol. 11, no. 3, 2010.
- [23] T. Iswandi, A. K. Djaelani, and A. A. Priyono, "Pengaruh Kepercayaan Pada Atasan, Komitmen Organisasi Dan Kepuasan kerja Terhadap Produktivitas Karyawan (Studi Empiris pada Bagian Umum Di Balai Kota Malang Periode 2018)," *E-JRM: Elektronik Jurnal Riset Manajemen*, vol. 7, no. 10, 2018.
- [24] M. Zviran and Z. Erlich, "Measuring IS user satisfaction: review and implications," *Communications of the Association for Information Systems*, vol. 12, no. 1, p. 5, 2016.

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