

# ACCEPTANCE OF E-PERFORMANCE SYSTEMS USING THE TECHNOLOGY ACCEPTANCE MODEL (TAM) APPROACH IN AN OUTSOURCHING COMPANY

Zara Larasati<sup>1</sup>, Imam Ali Yoda<sup>2</sup>, Dr. Ratri Wahyuningtyas<sup>3</sup>  
Universitas Telkom<sup>1,3</sup>, Binus University<sup>2</sup>

---

## ARTICLE INFO

## ABSTRACT

### Keywords:

Digital Transformation, technology acceptance model, e-performance, Cleaning service, technology adoption

In the era of technological development, digital-transformation is a widely implemented program in companies. One of the digital transformation applications implemented in the organization is the application of the e-performance system in cleaning services at PT ISS Indonesia. The e-performances system is an Android-based applications system implemented by ISS to monitor the performance of cleaning service employees. The cleaning service carries out this e-performance filling daily to complete previously approved work orders/Service Level Agreements. So this study aims to examine the acceptance of the existing e-performance system at PT ISS Indonesia using the technology acceptance model (TAM) approach. This study aims to determine the effects of perceived usefulness on attitude toward use, the effect of perceived ease of use on attitude toward use, the effect of attitude toward use on behavioral intention to use, and the effect of behavioral intention to use on actual system use e-performance in the TIMAH Energy Resources area. This study used a questionnaires method by taking a sample of 158 people. This study used quantitative methods and distributed questionnaires. Data processing uses the PLS (Partial Least Square) analysis-method, and this research method is taken from the basic theory of the Technology Acceptance Model (TAM) and its variables, namely perceived ease of use, perceived-usefulness, attitude toward use, behavioral-intention to use and actual-systems use. This study found that the four research hypotheses were acceptable, and the implementation of the e-performance system at PT ISS Indonesia was well-received in the field. Each variable influences the other to get the results of acceptance of using the e-performance system. Furthermore, it is hoped that the results of this research can be used as material for evaluation and consideration for companies in carrying out digital transformation. In addition, training employees, strengthening the e-performance system, and adding features to the e-performance system can increase the use of this e-performance system.

---

### E-mail:

[zaralarasati@gmail.com](mailto:zaralarasati@gmail.com)  
[imam.yoda@binus.ac.id](mailto:imam.yoda@binus.ac.id)

Copyright © 2023 Economic Journal. All rights reserved.  
is Licensed under a Creative Commons Attribution-NonCommercial 4.0  
International License (CC BY-NC 4.0)

---

## 1. INTRODUCTION

Implementing a digital business strategy is one way for organizations to be able to survive in this industrial revolution 4.0 era. Industry 4.0 is a combination of network technology and automation technology. The industrial revolution 4.0 is also known as the "network-physical system". The concept of its application focuses on automation. With the help of information technology in the implementation process, the involvement of human labor in the process can be reduced. For companies to survive this industrial revolution, they still need to update their business strategies.

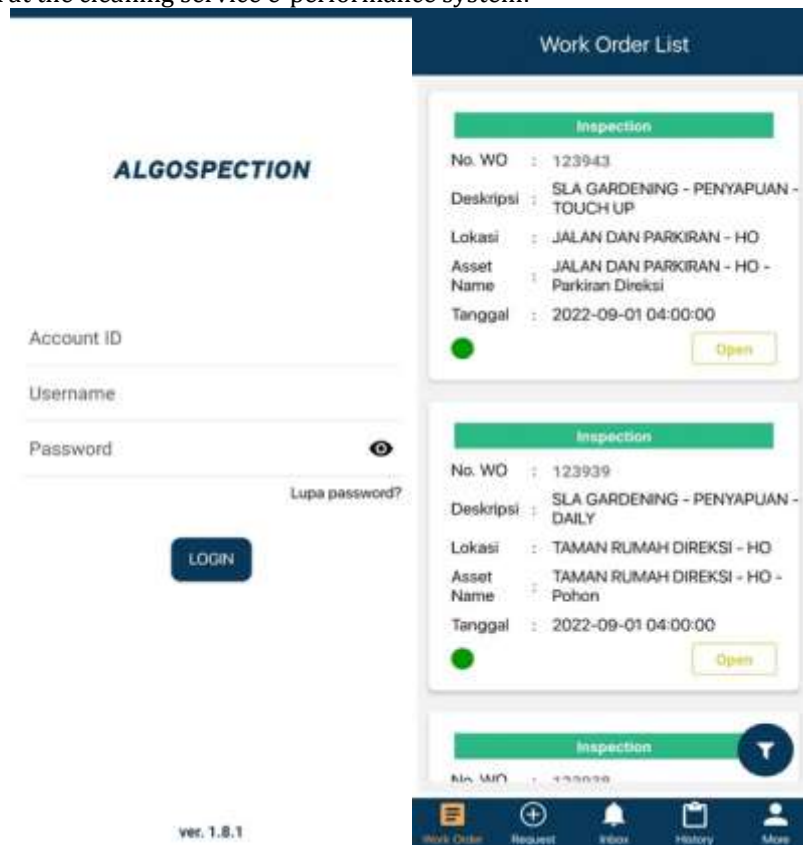
One of the digital business strategy models commonly used by companies is digital transformation. Digital transformation involves rethinking how a business uses data and technology to deliver value to its customers. One of the applications of digital transformation in its company is PT ISS Indonesia. ISS Indonesia is an integrated-facility service-based company and a partner for companies that need services to support their core business. The types of facility services offered by ISS Indonesia include: cleaning service, office, gardening & landscaping, support service building maintenance service, Integrated Pest Management, wash room service, portable toilet service, indoor air quality service, Access-Control, security service, Catering-Service, and Parkinga Management Service. (ISS Indonesia, 2022).

*Acceptance of E-Performance systems using the Technology Acceptance Model (TAM) approach in an Outsourcing Company. Zara Larasati*

One of the services offered by PT ISS Indonesia using digital transformation is the cleaning service. Cleaning service is the work of keeping clean - and serving cleaning services in a -place, office or agency (Semesta, 2022). Almost all buildings and public places are managed by cleaning services to help keep the place clean. People who do cleaning work are often referred to as cleaners. E-performance is an android-based application system implemented by ISS to monitor the performance of cleaning service employees. The monitoring process of this application can be accessed anywhere by the PIC who is given special access by the company and this application is mandatory environmental. Every day this system must be used by every cleaner to monitor what work has been done at the workplace. Therefore, each cleaner has their own account and has to report every day. Performance reporting includes glass cleaning, floor sweeping, floor mopping, and so on. The jobs recorded in this application include:

- a. Floor Sweeping
- b. Ceiling Cleaning
- c. Garbage removal
- d. Workbench cleaning
- e. Washing cutlery, and so on.

Here is a look at the cleaning service e-performance system:



**Figure 1.** Display of E-performance Cleaning Service system

The application of e-performance in the cleaning service environment aims to monitor which areas/rooms have not been cleaned. As in Figure 1 that there is a "Work order" that appears and must be completed by the cleaning service on the day they work. This is certainly very helpful for cleaners to make it easier to report their work. Furthermore, the use of this e-performance application is carried out by installing it on each cleaner's cellphone. The following is a scheme for implementing e-performance cleaning service:



**Figure 2.** Cleaning service e-performance scheme  
Source: Company Data, 2022

This E-performance must be filled in by every cleaner when they are in working hours. So every day every Cleaner is required to take photos of his work reporting starting from photos before action, action progress and after action. Every day, the average work order / work report carried out by cleaners is 80 to 90 work orders. The level of use of E-performance is quite a lot as based on data from November 2022 as below:

No	ID	Nama	Workforce	Open	Working	Waiting Approval	Closed	Total WO	% Completion
1	R1839173	Abdul Rahim	CLEANING SERVICE	0	0	0	736	736	100.00
2	R1839152	Achmad Fauzi	CLEANING SERVICE	0	0	0	1827	1827	100.00
3	R1867964	Ade Susanti	CLEANING SERVICE	0	0	0	1830	1830	100.00
4	R813583	Adi Soltaman	CLEANING SERVICE	0	0	0	7	7	100.00
5	R1867143	Adi Soltaman	CLEANING SERVICE	0	0	0	394	394	100.00
6	R1867361	Ahmad Salsbi	CLEANING SERVICE	0	0	0	575	575	100.00
7	R1866638	Aji Fitriastiyah	CLEANING SERVICE	0	0	0	1852	1852	100.00
8	R1867418	Amanda Salsbi	CLEANING SERVICE	0	0	0	526	526	100.00
9	R813353	Anadi	CLEANING SERVICE	0	0	0	94	94	100.00
10	R1866628	Aprianti	CLEANING SERVICE	0	0	0	25	25	100.00
11	R1866566	Andrianyah	CLEANING SERVICE	0	0	0	1280	1280	100.00
12	R1866629	Andrianyah	CLEANING SERVICE	0	0	0	21	21	100.00
13	R1866627	Ananda	CLEANING SERVICE	0	0	0	804	804	100.00
14	987842	Aryanti	CLEANING SERVICE	0	0	0	829	829	100.00
15	987795	Ayu Lestari	CLEANING SERVICE	0	0	0	443	443	100.00
16	R1866642	Dani Aniswari	CLEANING SERVICE	0	0	0	657	657	100.00
17	R18642041	Devi Febriyanti	CLEANING SERVICE	0	0	0	207	207	100.00
18	R813358	Diana	CLEANING SERVICE	0	0	0	563	563	100.00
19	R1866307	Dwi Endang Anandi	CLEANING SERVICE	0	0	0	441	441	100.00
20	R1867420	Dwi Janatha Pratama	CLEANING SERVICE	0	0	0	359	359	100.00
21	987793	Elio	CLEANING SERVICE	0	0	0	784	784	100.00
22	R1867961	Elio	CLEANING SERVICE	0	0	0	240	240	100.00

**Figure 3.** E-Kinerja Application Users in November 2022

From the picture above, it can be seen that for 22 Cleaning Service people during the period of November 2022 have completed 100% of their work. With an average of one month each person completing approximately 577 Work Orders / Jobs. With this high level of usage, there are several obstacles felt by the Cleaner based on direct interviews with eight cleaning service people on November 20, 2022, including:

- E-Kinerja application often closes suddenly (Forced Closed) during peak hours.
- If one E-Kinerja account is opened on two devices, the two devices will be locked by the system and automatically cannot be used.
- Reporting on sudden and unscheduled work often experiences errors.
- There are several cleaners who feel that the implementation of E-Kinerja does not have any impact but only adds work.

So from some of the obstacles felt by cleaners, the authors draw a temporary conclusion that this system is still not acceptable to its users due to technical constraints and rejection or negative opinions of cleaners on this system. So in this study intends to measure the acceptance of the e-Kinerja system for cleaning service employees. This study aims to measure the effect of perceived usefulness on attitude towards using the e-performance system.

## 2. METHOD

The research approach in this study uses quantitative methods with descriptive research types. Descriptive research is one type of research that reveals in-depth, broad, and comprehensive facts of the problems that occur. By describing the relationship between the problem factors faced with the intended subject. In this study, researchers want to analyze and ascertain whether the relationship between variables in the TAM theory, namely the effect of the usefulness of the e-performance system user on the attitude of using the e-performance system, the effect of the ease of use of the e-performance system on the attitude of the e-performance system user, the effect of the attitude of using e-performance on the intention to use the e-performance system, the effect of the intention to use the e-performance system on the use of the performance system. In the path diagram used in this study, namely one-way arrows that produce a direct influence from an exogenous variable [causal variable (X)] on an endogenous variable [effect variable (Y)]. Example:  $X \rightarrow Y$ . (Riduwan & Kuncoro, 2017) Data processing using SEM-PLS in this study using the SmartPLS 3.3.5 application. The application is relatively easy to use and is able to describe the path model graph on latent variables. PLS technique used for a component-based approach in its testing.

## 3. RESULTS AND DISCUSSION

### Hypothesis Test 1

**Table 1.** Direct Effect Hipotesis 1

Kriteria	Perceived usefulness	eta	
P- Value	0,000	,611	Attitude Toward Use System

Based on table 1, it explains that the P-Value is  $0.000 < 0.05$  and the Beta value is 0.611, then  $H_0$  is rejected and  $H_a$  is accepted, which means that Perceived usefulness has a positive and significant effect on Attitude Toward Use System.

$H_0$  = There is no effect of Perceived usefulness on Attitude Toward Use System

$H_a$  = There is an effect of Perceived usefulness on Attitude Toward Use System

### Hypothesis Test 2

**Table 2.** Direct Effect Hipotesis 2

Kriteria	Perceived Ease Of Use	eta	
P- Value	0,044	0,289	Attitude Toward Use System

Based on table 2, it explains that the P-Value is  $0.044 < 0.05$  and the Beta value is 0.289, then  $H_0$  is rejected and  $H_a$  is accepted, which means that Perceived Ease Of Use has a positive and significant effect on Attitude Toward Use System.

$H_0$  = There is no effect of Perceived Ease Of Use on Attitude Toward Use System

$H_a$  = There is an effect of Perceived Ease Of Use on Attitude Toward Use System

### Hypothesis Test 3

**Table 3.** Direct Effect Hipotesis 3

Kriteria	Attitude Toward Use	eta	
P- Value	0,038	0,132	Behavioral Intention To Use System

Based on table 3, it explains that the P-Value is  $0.038 < 0.05$  and the Beta value is 0.132, then  $H_0$  is rejected and  $H_a$  is accepted, which means that Attitude Toward Use has a positive and significant effect on Behavioral Intention To Use System.

$H_0$  = There is no effect of Attitude Toward Use on Behavioral Intention To Use System

$H_a$  = There is an influence of Attitude Toward Use on Behavioral Intention To Use System

### Hypothesis Test 4

**Table 4.** Direct Effect Hipotesis 4

Kriteria	Behavioral Intention To Use	eta	
P- Value	0,000	0,623	Actual System Use System

Based on table 4, it explains that the P-Value is  $0.000 < 0.05$ , and the Beta value is 0.623, then  $H_0$  is rejected and  $H_a$  is accepted, which means that Behavioral Intention To Use has a positive and significant effect on Actual System Use System.

$H_0$  = There is no influence of Behavioral Intention To Use on Actual System Use System

$H_a$  = There is an influence of Behavioral Intention To Use on Actual System Use System

## Discussion

This research was conducted by providing questionnaires via google form to 158 respondents. The respondents are all employees of PT ISS Indonesia in the PT TIMAH Tbk area who have positions as

*Acceptance of E-Performance systems using the Technology Acceptance Model (TAM) approach in an Outsourcing Company. Zara Larasati*

Cleaning Service and are located in Bangka Belitung. Based on the results of research on 158 respondents, it can be concluded that the average age of respondents is 35-39 years old and is dominated by women. This is in line with research (Syavina, 2014) which states that the average cleaning service job is a woman who is 35 years old and female.

Based on the results of descriptive analysis conducted by the author, the Perceived Usefulness variable gets a cumulative total score of 90.13% or in the very good category. This means that cleaners who use the e-performance application feel that the application is very useful, in this case useful for work activities. With the e-performance application, users can more easily report on the work they do. Of the eight statements regarding the perceived usefulness variable, the statement that has the greatest value is "my work system can always be used and is always active" with a percentage of 91.13% that Cleaner feels that the current e-performance system can always be used and is always active. While the statement that has the lowest value is "The existence of a performance monitoring system makes work better" with a percentage of 89.24% that cleaners feel that the existence of their performance monitoring system (e-Kinerja) can make the work done better even though it is not entirely good because accessing and reporting in real-time and continuously certainly requires more effort from the cleaner.

Based on the results of descriptive analysis conducted by the author, the perceived ease of use variable gets a cumulative total score of 91.05% or in a very good category. This means that cleaners can and are able to operate technology and cleaners consider the use of the e-performance system to be relatively easy and requires minimal effort. Of the nine statements regarding the perceived ease of use variable, the statement that has the greatest value is "logging in to the e-performance system is very easy" with a percentage of 91.46% that the cleaner feels that there is ease when logging in to the e-performance system. While there are three statements that have the lowest score, among others, are "the e-performance system is very clear" with a percentage of 90.82% that cleaners feel the e-performance system is very clear to use. Next is the statement "the e-performance system is easy to remember" with a percentage of 90.82% that cleaners feel the e-performance system is easy to remember in using the system. The last statement that has the same percentage of 90.82% is "the e-performance system is very fast to access" that cleaners feel this e-performance system is able to run on their respective cellphones and is very fast to access. This is also supported by an internet provider that is strong enough at the work location.

Based on the results of descriptive analysis conducted by the author, the attitude towards using variable gets a cumulative total score of 90.30% or in a very good category. This means that the cleaner considers the implemented e-performance system positively. Of the three statements regarding the attitude towards using variable, there are two statements that have the greatest value, including "I find it easy to access the e-performance system" with a percentage of 89.92% that cleaners find it easy to access the e-performance system every day while working. Furthermore, the statement that has the next highest percentage is "I feel that my skills have improved after using the e-performance system" with a percentage of 89.92% that cleaners after using the e-performance system in their work feel they have improved their skills at work. Furthermore, the statement that has the lowest value is "I feel an increase in performance by using the e-performance system" with a percentage of 89.76% that cleaners feel an increase in performance while using the e-performance system.

Based on the results of descriptive analysis conducted by the author, the behavior intention to use variable gets a cumulative total score of 92.0% or in a very good category. This means that the cleaner shows an attitude of accepting the use of the e-performance system and wants the e-performance system to be used continuously. Of the four statements in the variable behavior intention to use, there are two statements that have the same value of 92.09%, including "I use the e-performance system every day" and "I hope the e-performance system can always be used at any time" that the cleaner feels like using the e-performance system every day while working and the e-performance system can be used forever. Furthermore, there are two statements with the lowest score of 91.93%, including "I use the e-performance system in certain circumstances" and "I always use the e-performance system because it is very easy and feasible to use" from this statement it can be concluded that cleaners also use this e-performance system in all circumstances until certain circumstances and cleaners like the e-performance system because it is very easy and feasible to use in daily activities.

Based on the results of the description analysis conducted by the author, the actual system to use variable gets a cumulative total score of 90.67% or in a very good category. This means that the cleaner shows that the e-performance system has been accepted in his daily work. Of the three statements in the actual system to use variable, there are two statements that get the highest and same value of 91.30%,

including "I use the e-performance system every time" and "using the e-performance system makes working conditions better" that the cleaner uses the e-performance system every time while working because with this e-performance system, the working conditions carried out by the cleaner are better. Furthermore, the statement that has the lowest value is "I use the e-performance system because it has a lot of frequency in the company" with a value of 89.40% that the cleaner uses the e-performance system because of the frequency of use set by the company.

From the results of hypothesis testing, the perceived usefulness variable has a positive and significant effect on attitude towards using the e-performance system. That cleaners believe that utilizing the e-performance system can improve work performance. This has an effect because of the mandatory from the company to use the e-performance system. This is in line with research conducted by (Almajali, Majali, Masa'deh, Al-Bashayreh, & Altamimi, 2023) where in his research the variable perceived usefulness has a positive effect on attitude towards use for e-procurement systems in Jordanian public shareholder companies. Similar research results were conducted by (Castillo S. & Bigne, 2021) in his research on Augmented Reality (AR) with self-services technology, it was found that the variable perceived usefulness has a positive effect on the variable attitude towards use.

From the results of hypothesis testing, the perceived ease of use variable has a positive and significant effect on attitude towards using the e-performance system. It can be concluded that cleaners are capable of operating the e-performance system and consider using the e-performance system to be quite easy and require minimal effort in operating it. This is supported by the fact that the cleaner has a mobile device and the internet network provided by the company is able to operate the e-performance system. This is in line with research conducted by (Kampa, 2023) who conducted research on the readiness and acceptance of M-learning in higher education in India. In this study, the perceived ease of use variable has a positive influence on attitude toward use ( $\beta = 4.006$ ,  $p < 0.002$ ) because students are reported to have used m-learning easily. Similar research results were conducted by (Khan, Khan, Khan, & Khan, 2023) in a study on understanding consumer adaptation to mobile payments in Pakistan getting the hail that the variable perceived ease of use has an effect on the variable attitude towards use.

From the results of hypothesis testing, the attitude toward use variable has a positive and significant effect on behavioral intention to use. This is supported by the fact that cleaners do not need to do work-related reporting that was done manually in the past. So, cleaners feel facilitated by this e-performance system. Similar results were also carried out in research conducted by (Wiafe, Koranteng, Tettey, Kastriku, & Abdulai, 2019) which stated that attitude towards use of INTTRA has a positive impact on behavioral intention to use. In addition, this is also reinforced by the results of research conducted by (Singh, Jain, Munjal, & Rakesh, 2020) which states that attitude is positively related to behavioral intention to use, especially in the subject of his research on the use of blockchain technology for corporate equity trading.

From the results of hypothesis testing, the behavioral intention to use variable has a positive and significant effect on the actual system to use. This is supported by the fact that since January 2022 this e-performance system has been implemented, changes in cleaner culture have begun to be felt and cleaners have become proficient in using the e-performance system. Similar results were also carried out in research conducted by (Singh, Jain, Munjal, & Rakesh, 2020) where his research stated that behavioral intention to use is positively related to actual system to use with research subjects regarding the use of blockchain for corporate equity trading. Furthermore, there is also research from (Calegari, R.D., & Fettermann, 2023) which states that the variable behavioral intention to use has a positive effect on strengthening the actual system to use on M-Health technology.

#### 4. CONCLUSION

Berdasarkan hasil penelitian dan pembahasan mengenai variabel perceived usefulness, perceived ease of use, attitude toward use, behavioral intention to use dan actual system use dari penerapan sistem e-kinerja pada cleaning service PT ISS Indonesia di area PT TIMAH Tbk dapat disimpulkan variabel perceived usefulness berpengaruh terhadap attitude toward use system E-Kinerja. Variabel perceived ease of use berpengaruh terhadap attitude toward use system E-Kinerja. Variabel attitude toward use berpengaruh terhadap behavioral intention to use system E-Kinerja. Variabel behavioral intention to use berpengaruh terhadap actual system to use sistem E-Kinerja.

## REFERENCES

1. Abdillah, W., & Hartono, J. (2015). Partial Least Square (PLS) Alternatif Structural Equation Modelling (SEM) dalam Penelitian Bisnis. Yogyakarta: Penerbit Andi.
2. Almajali, D. A., Majali, T., Masa'deh, R., Al-Bashayreh, M. G., & Altamimi, A. M. (2023). Antecedents of acceptance model for. Emerald Publishing Limited.
3. Ardhiani, I. N. (2015). Analisis faktor-faktor penerimaan penggunaan quipperschool.com dengan menggunakan pendekatan technology acceptance model (TAM) dan Theory of Planned Behavior (TPB) di SMA Negeri 7 Yogyakarta.
4. Aulifin, S. A. (2022). Analisis Penerimaan Pengguna ShopeePay Sebagai Sistem Pembayaran Elektronik Menggunakan Technology Acceptance Model (TAM) di Wilayah Kota Bogor. Telkom.
5. Barclay, D., Higgins, C., & Thompson, R. (1995). The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration. *Technology Studies*, 285-309.
6. Calegari, L. P., R.D., B., & Fettermann, D. C. (2023). A meta-analysis of a comprehensive m-health technology acceptance. Emerald Publishing Limited.
7. Castillo S., M. J., & Bigne, E. (2021). A model of adoption of AR-based. Emerald Publishing Limited.
8. Craig, & Grant. (2016). Manajemen Strategi. Jakarta: Alex Media Komputindo.
9. Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. 318-340.
10. Echeberria, A. L. (2020). A Digital Framework for Industry 4.0. London: Palgrave Macmillan.
11. Fajri, R. A. (2022). Analisis Minat Penggunaan Gopaylater pada Aplikasi Gojek dengan Pendekatan Technology Acceptance Model (TAM) di Kota Bandung. Universitas Telkom, 34.
12. Ghozali, I., & Latan, H. (2015). Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris. Semarang: BP Undip.
13. Hamid, R. S., Suhardi, M., & Anwar. (2019). Structural Equation Modeling (SEM) Berbasis Varian: Konsep Dasar dan Aplikasi dengan Program SmartPLS 3.2.8 dalam Riset Bisnis. PT Inkubator Penulis Indonesia.
14. Hamzah, D. A. (2021). Metode Penelitian Kuantitatif Rekonstruksi Pemikiran Dasar Serta Contoh Penerapan Pada Ilmu Pendidikan, Sosial & Humaniora. Malang: CV Literasi Nusantara Abadi .
15. ISS Indonesia. (2018). NCC Cleaning Program. Jakarta: ISS Indonesia.
16. ISS Indonesia. (2022, Oktober 5). ISS Indonesia. Retrieved from ISS Indonesia: <https://www.id.issworld.com/>
17. Johnson, G., & Scholes, K. (2016). Exploring Corporate Strategy-Text and. Cases. Hemel Hempstead: Prentice-Hall.
18. Kampa, R. K. (2023). Combining technology readiness and acceptance model for investigating the acceptance of m-learning in higher education in India. Emerald Publishing Limited.
19. Khan, S., Khan, S. U., Khan, I. U., Khan, S. Z., & Khan, R. U. (2023). Understanding consumer adoption of mobile payment in Pakistan. Emerald Publishing Limited.
20. Kusumastuti, A., Khoiron, A. M., & Achmadi, T. A. (2020). Metode Penelitian Kuantitatif. Yogyakarta: Deepublish.
21. Li, J., Saide, S., Ismail, M. N., & Indrajit, R. E. (2021). Exploring IT/IS proactive and knowledge transfer on enterprise digital business transformation (EDBT): a technology-knowledge perspective. Emerald, 3.
22. Lubis, R. L., & Pusparani, A. (2022). What Do University Students Know About SDG4 Quality Education? A Case Study of Business Management Education at Telkom University Indonesia. *Jurnal Manajemen Indonesia*, 103-113.
23. Musriannur, M. H. (2022). Pengukuran dan Analisis Penerimaan LMS sebagai Media Belajar Online menggunakan Technology Acceptance Model di Universitas Telkom. Telkom.
24. Nurhayati, E. (2017). Pengaruh Penerapan Sistem Penilaian E-Kinerja dan Kompetensi Terhadap Kinerja Pegawai di Kecamatan Semarang Timur melalui Motivasi Sebagai Variabel Intervening. *Jurnal Pendidikan Ekonomi dan Bisnis*, 5.
25. Pasaribu, R. D., Hartaman, A., Sutjipto, M. R., Umbara, T., Purwanadita, R., & Masfiroh, A. (2022). Human-Centered Sustainable University Model. *Jurnal Manajemen Indonesia*, 1-12.
26. Purwanto, E. A., & Sulistyastuti, R. D. (2017). Metode Penelitian Kuantitatif. Yogyakarta: Gava Media.
27. Riduwan, & Kuncoro, E. A. (2017). Cara Menggunakan dan Memakai. Path Analysis (Analisis Jalur). Bandung: Alfabeta.

28. Rogers, D. L. (2017). *The Digital Transformation Playbook Rethink Your Business for the Digital Age*. Columbia: Columbia Business School Publishing.
29. Safitri, J. L. (2022). Analisis Penerimaan Augmented Reality Pada Wardah Virtual Try On Dengan Pendekatan Technology Acceptance Model (TAM). Telkom.
30. SAS. (2019). SAS. *Digital transformation: Thriving in a changing world*, 1.
31. Setiawan, S. (2022). Analisis Manfaat Dan Kemudahan Penggunaan Sistem Igracias Terhadap Mahasiswa Di Telkom University Menggunakan Metode TAM (Technology Acceptance Model). Telkom.
32. Sinambela, L. P., & Sinambela, S. (2021). *Metodologi Penelitian Kuantitatif - Teori dan Praktik*. Depok: Rajawali Pers.
33. Singh, H., Jain, G., Munjal, A., & Rakesh, S. (2020). *Blockchain technology in corporate governance: disrupting chain reaction or not?* Emerald Publishing Limited.
34. Sitio, P. A. (2022). Pengaruh Gaya Kepemimpinan Demokratis Terhadap Kinerja Pegawai Pada Balai Prasarana Permukiman Wilayah Sumatera Utara . Telkom University, 24-25.
35. Sofyan, D. M. (2022). Analisis Pengguna Layanan Streaming Netflix Pada Generasi Muda Indonesia Menggunakan Teori Technology Acceptance Model. Universitas Telkom, 20-21.
36. Sugiarto. (2022). *Metodelogi Penelitian Bisnis*. Yogyakarta: Andi.
37. Sugiono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* . Bandung : Alfabeta.
38. Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
39. Supardi. (1993). *Populasi dan Sampel Penelitian*. UNISIA.
40. Syavina, M. T. (2014). Faktor-faktor yang Berhubungan dengan Kelelahan Kerja pada Petugas Cleaning Service di RSUD kota Semarang Tahun 2013. Universitas Dian Nuswantoro.
41. Tahir, H. (2021). Penerapan E-Kinerja dalam Menilai Kinerja Aparatur Sipil Negeri (ASN) pada Kantor Dinas Perumahan Kawasan Permukiman dan Pertanahan Provinsi Sulawesi Selatan. 29.
42. Tatnall, A. (2020). *Encyclopedia of Education and Information Technologies* pp 537-547 Cite as Different Methodological Approaches to Considering the Adoption of ICT. Springer, 51.
43. The Enterprisers Project. (2020). *What is digital transformation?* The Enterprisers Project, 1.
44. Trenggonowati, D. L., & Kulsum, K. (2018). Analisis Faktor Optimalisasi Golden Age Anak Usia Dini Studi Kasus Di Kota Cilegon. *Journal Industrial Services*.
45. Ulfa, R. (2021). Variabel Penelitian Dalam Penelitian Pendidikan. *Al Fathonah*, 342-351.
46. Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 2.
47. Westerman, G. e. (2011). *Digital Transformation: A Road-Map for Billion-Dollar Organizations*. 1-68.
48. Wiafe, I., Koranteng, F. N., Tettey, T., Kastriku , F. A., & Abdulai, J.-D. (2019). Factors that affect acceptance and use of information systems within the Maritime industry in developing countries The case of Ghana. Emerald Publishing Limited.
49. Widodo. (2017). *Metodelogi Penelitian Populer dan Praktis*. Jakarta: Rajawali Pers.
50. Yuliana, E., Putro, U. S., Hermawan, P., & Ghina, A. (2023). Viable System Model as A Framework for Value Co-Creation Service System Analysis of Technology-based Business Incubator. *Jurnal Manajemen Indonesia*, 36-47.