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ERP IMPLEMENTATION READINESS ASSESSMENT AT SKPD INDRAMAYU REGENCY REVIEWED FROM THE SIDE TECHNOLOGY, ORGANIZATION, AND ENVIRONMENT USING THE PLS-SEM METHOD

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ABSTRACT

The Electronic-Based Government System (SPBE) is the core of e-Government, which aims to create a clean, transparent, and free government from corruption, collusion, and nepotism. SPBE utilizes information and communication technology to improve the efficiency and effectiveness of public services, so that it plays an important role in improving the quality of services, the implementation of government duties, and interaction with the community and inter-institutions. Enterprise Resource Planning (ERP) systems are the main tool for optimizing information management by integrating eGovernment systems for more structured problem monitoring. This research measures the readiness of ERP implementation in the local government of Indramayu Regency, with a focus on technology, organization, and environmental readiness. This research uses a quantitative approach by distributing questionnaires to 230 respondents from 5 SKPDs in Indramayu Regency. Data analysis was carried out using the PLS-SEM method through the R Study application. The results showed that of the three hypotheses developed, one was accepted with a positive and significant influence (p-value < 0.05, t-statistic > 2.045), while the other two were rejected. The technological aspect has a negative and insignificant influence on ERP readiness, the organizational aspect has a positive and significant influence, and the environmental aspect has a weak and insignificant positive influence. Improving the quality of technology and the environment is important for the successful implementation of ERP.

KEYWORDS **Electronic-Based Government System (SPBE), Enterprise Resource Planning (ERP), TechnologyOrganization-Environment (TOE), SEM-PLS, R Studio**

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INTRODUCTION

The implementation of the Electronic-Based Government System (SPBE) or e-Government is a strategic step to realize a clean and trans (Alshaer et al., 2017; Malelea & Furqan, 2024; Naida et al., 2023)parent government in Indonesia, which is free from corruption, collusion, and nepotism. SPBE as part of eGovernment aims to increase efficiency, effectiveness, and transparency in government administration, as well as improve the quality of public services. This technology enables more effective interaction between government and society (G2C), government and business (G2B), and between government agencies (G2G) (Sudirman & Saidin, 2022).

However, the implementation of e-Government faces various challenges, such as inadequate digital infrastructure, involvement of non-governmental parties, and high investment and operational costs (Aljazzaf et al., 2020; Ethania, 2021; Liu et al., 2024; Pérez-Morote et al., 2020; Rokhman et al., 2023). Richard Heeks emphasizes that the failure of e-Government implementation in developing countries is often caused by a lack of understanding of the current situation and the goals to be achieved, with a gap between plans and reality.

Indonesia has taken concrete steps by implementing policies such as Presidential Instruction No. 3 of 2003 on the national strategy for e-Government development, and has shown significant progress in the world's E-Government Development Index (EGDI) ranking. However, challenges remain, including fragmented infrastructure and a lack of skilled human resources (Ethania, 2021).

One solution to this problem is implementing Enterprise Resource Planning (ERP) to integrate e-Government systems, boost efficiency, and optimize resource use. Evaluating government technology readiness (e-readiness) using models like Technology Organization-Environment (TOE) is essential to identify obstacles in ERP implementation (Nugroho, 2020).

This research aims to analyze the readiness of ERP implementation in the local government of Indramayu Regency using the TOE approach, focusing on technology, organizational, and environmental variables. This research is expected to provide recommendations for improvement for local governments in improving the readiness of ERP implementation, which can ultimately support the implementation of e-Government more effectively and efficiently (Septiawan et al., 2023).

THEORETICAL STUDIES

Presenting and explaining theories related to research variables. The subheading points are written in alphabets.

Information and Technology Adoption Model

Many theories are based on information systems research, especially about the adoption of technology. Some of the most commonly used theories are the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Diffusion of Innovation (DOI), Unified Theory of Acceptance and Use of Technology (UTAUT), and Technology, Organization, and Environment (TOE) Framework. DOI and TOE theories are more suitable for analysis at the organizational level, while TAM, TPB and UTAUT are more suitable for analysis on individuals (Setiyani & Rostiani, 2021).

Technology, Organization, and Environment Framework

In 1990, Tornatzky and Fleischer developed the TOE framework. This framework identifies three contexts within a company that affect the process of adoption and implementation of technological innovations, namely the context of technology, organization, and environment.

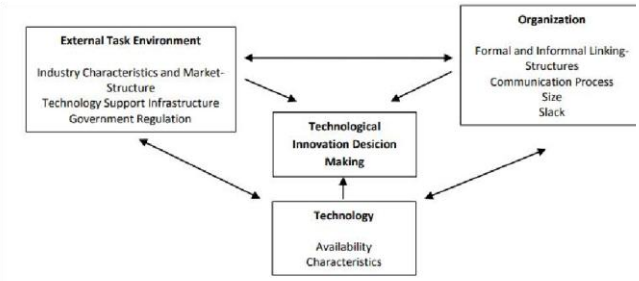

Figure 1. TOE Structure

The technical context describes the internal and external technologies that are relevant to the company, including a range of externally accessible technologies as well as existing internal processes and tools. In the context of an organization, this includes the size, scope, and managerial structure of the organization. Meanwhile, the environmental context includes the environment in which the company operates, including sectors, competitors, and relationships with governments. The TOE framework, which was originally developed and modified in IT adoption studies, provides a useful analytical framework for researching the use and integration of different forms of IT innovation. Although the specific elements in the three contexts may vary between studies, the TOE framework has a strong theoretical basis, consistent empirical support, and potential applicability in the field of information systems innovation (Gui et al., 2020a).

Research Model

Based on the gap in previous research, the model was modified into a research framework as seen in figure 2 below.

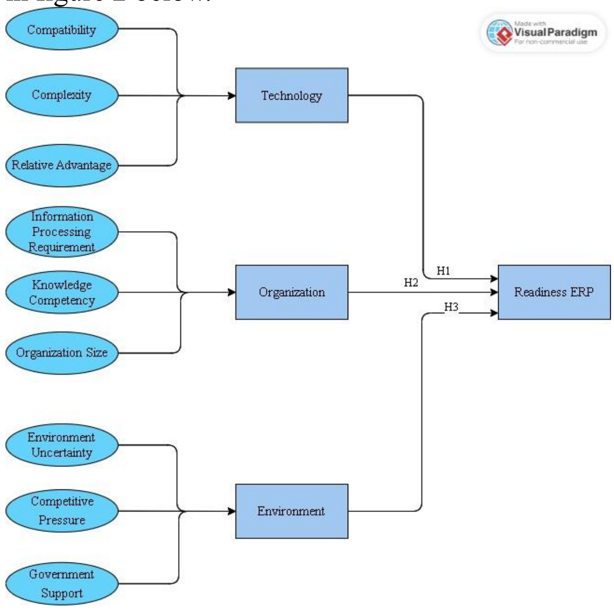

Figure 2. Thinking Framework

From Figure 2, the conceptual framework is designed to examine ERP implementation readiness in SKPD Indramayu Regency. This framework incorporates factors from the Technology-Organization-Environment (TOE) model, where the variables 'Technology,' 'Organization,' and 'Environment' are measured through related indicators, which are then analyzed in relation to the dependent variable 'ERP Readiness.' Hypotheses H1, H2, and H3 test the influence of technology, organization, and environment on ERP implementation readiness.

Hypothesis

From the research model in Figure 2, the following research hypothesis will be prepared:

1. H1 : Technology will have a positive and significant effect on ERP Readiness
2. H2 : Organization will have a positive and significant effect on ERP Readiness
3. H3 : Environment will have a positive and significant effect on ERP Readiness

METHOD

Providing an overview of the research design which includes research procedures or steps, research time, data sources, data acquisition methods and explaining the methods to be used in the research.

Data Collection Methods

In this research, data collection was conducted primarily through the distribution of questionnaires, both in person and online. This method was chosen because it allows for efficient data gathering from a broad range of SKPD employees in the Indramayu Regency. Using questionnaires enables the collection of standardized responses, which is crucial for ensuring comparability and consistency in the data, especially when measuring perceptions of ERP readiness.

The research team utilized a purposive sampling method, selecting respondents based on specific criteria to ensure that the data collected was relevant to the research objectives. The key criterion was that the respondents should be SKPD supervisors on duty in Indramayu Regency. This group was targeted because they are responsible for managing the implementation of ERP systems and are well-positioned to provide insights into organizational readiness, including the technological, organizational, and environmental factors that influence ERP adoption.

By focusing on SKPD supervisors, the study ensures that the sample is composed of individuals who have the necessary knowledge and experience to assess ERP readiness, thereby enhancing the reliability and validity of the findings. The use of purposive sampling also allows for the selection of participants who meet the specific needs of the study, avoiding the inclusion of individuals who may not be familiar with the ERP processes being examined. This method, therefore, maximizes the relevance of the data and ensures that the study provides a clear and accurate picture of ERP readiness within the context of the Indramayu Regency.

Definition of Variable Indicators

Explanatory research, or research according to the level of explanation used by the research framework above, aims to explain the position of the variables tested as well as the influence of between variable towards variable other.

This research uses the following research variables:

1. **Technology:**
   - **Compatibility:** The compatibility of digital technologies refers to how well they align with the infrastructure, culture, values, and work procedures chosen by the organization (Ghobakhloo & Ching, 2019).
   - **Complexity:** Complexity can hinder the understanding and application of digital technologies, which requires significant effort to developing solutions through innovation (Setiyani & Rostiani, 2021).
   - **Relative Advantage**: Relative advantage is the extent to which an innovation is considered better than the idea or technology it replaces (Gui et al., 2020b).
2. **Organization:**

- **Information Processing Requirement**: This refers to the gap between the information required by the organization and the information provided through the adoption of technology.
- **Knowledge Competency**: Knowledge competency involves human resource expertise in digital technology, which requires organizations to have knowledge competencies in this area.
- **Organization Size**: Larger organizations tend to be more receptive to and implement innovations or updates in information technology due to their ability to manage greater risk and adapt to change.

3. **Environment:**
   - **Environment Uncertainty:** An uncertain environment is one that can undermine the use of the latest technology. Environmental fragility occurs when change takes place in a complex and rapid manner. Organizations facing high uncertainty should not adopt new technologies without adequate infrastructure and clear operational guidelines (Kanematsu & Barry, 2016).
   - **Competitive Pressure:** Competitive pressure reflects how organizations respond to challenges from rival companies, which often drives the adoption of the latest technologies to stay competitive. An organization's strength and resilience can be judged by how it meets these challenges and adheres to standards industry.
   - **Government Support**: Government support signifies the role of the government as a catalyst or leader in encouraging companies to adopt digital technology (Gani, 2024).

Analysis Methods

Partial Least Square (PLS) is a method introduced by Will in 1985, serving as a partial approach to Structural Equation Modeling (SEM). In contrast to SEM which is based on covariance and aims to produce a covariance matrix, PLS focuses on maximizing the observed variants in independent variables that can be explained by dependent variables. PLS works by estimating the block variables and effects of the measurement model before estimating the structural model, as well as estimating the measurement and structural models simultaneously (Malak et al., 2022).

PLS is a very powerful analysis technique because it does not require any specific distribution assumptions on the data and can be used even if the sample size is relatively small. This method considers all variants as important elements that need to be explained. As an approach to predict latent variables consisting of a combination of linear indicators, PLS aims to overcome uncertainty and provide a clear understanding of the Score.

In PLS, there are three main arrangements of relationships between latent variables: the internal model, which analyzes the relationship between latent variables (structural model); external model, which relates the latent variable to an indicator or manifest variable (measurement model), as well as determines weights based on the predictive value of the latent variable; and manifest relationship, which is the third setting. Assuming that the latent variable and indicator have a mean of zero and a variant of one, the (constant) location parameter can be omitted from the model without compromising the generality of the analysis results.

RESULTS AND DISCUSSION

Respondent Profile

In this research, we distributed questionnaires in five SKPDs, namely the Manpower Office, the Communication & Informatics Service Education & Culture, Regional Finance Agency, and Personnel & Human Resources Development Agency. The purpose of this grouping is to map the workplace of respondents. Table 1 provides a detailed explanation of the characteristics of the respondents who have filled out the survey.

Table 1. Respondent Profile

Regional Apparatus Work Unit	Frequency
Manpower Office	27
Communication & Information Service	32
Education & Culture Office	69
Regional Finance Agency	27
Personnel & Agency Human Resource Development	45
Total	**200**

Descriptive Static Analysis

Descriptive statistics are statistics that use sample or population data to describe a subject without conducting analysis and making generally applicable conclusions. Descriptive data analysis looks at the central measures of variables such as ordinary tables, contingency tables, and frequency distribution tables, as well as graphs and group explanations using central or location measures such as mode, median, mean, and variation (Abdillah & Hartono, 2015a, 2015b; Hamid & Anwar, 2019).

The average value for each variable of the respondents is indicated by the mean value. The standard deviation value, which is a reflection of a very high deviation, indicates the maximum error that will occur in a single variable. Therefore, the standard deviation value must be less than the mean value to indicate whether the data distribution is normal or not. Table 2 below shows the results of a descriptive statistical analysis that shows the mean and standard deviation values for each indicator in the research variable.

Table 2. Standard Deviation

No	Variable	Code	Mean	Standard Deviation
1.	Technology	TECH1	3.02	0.77
		TECH2	2.88	0.80
		TECH3	2.90	0.77
		TECH4	3.00	0.66
2.	Organization	ORGN1	3.27	0.69
		ORGN2	3.24	0.77
		ORGN3	3.15	0.75
		ORGN4	3.35	0.63
		ORGN5	2.93	0.70

No	Variable	Code	Mean	Standard Deviation
		ORGN6	2.72	0.83
3.	Environment	ENVI1	2.88	0.78
		ENVI2	2.98	0.73
		ENVI3	2.96	0.72
		ENVI4	2.84	0.73
		ENVI5	2.67	0.81
		ENVI6	2.72	0.76
4.	Readiness ERP	READ1	3.42	0.73
		READ2	3.42	0.61
		READ3	3.44	0.65

Table 2 shows that the data for all variables are distributed normally. Since the standard deviation value is smaller than the mean value, it can be concluded that the data is distributed normally.

Indicator Reliability Characteristics

Indicator Reliability is the first step in the evaluation of reflective measurement models. It measures how much variance each indicator is described by its construct, which indicates the reliability of the indicator. To calculate the variance explained by the indicator, it is necessary to perform the quadratic of the loading indicator, which is the bivariate correlation between the indicator and the construct. The reliability of the indicator indicates the communalism of the indicator. It is recommended that the indicator loads above 0.7, as this indicates that the construct explains more than 50 percent of the variance of the indicator, thus providing acceptable reliability of the indicator (F. Hair Jr et al., 2014).

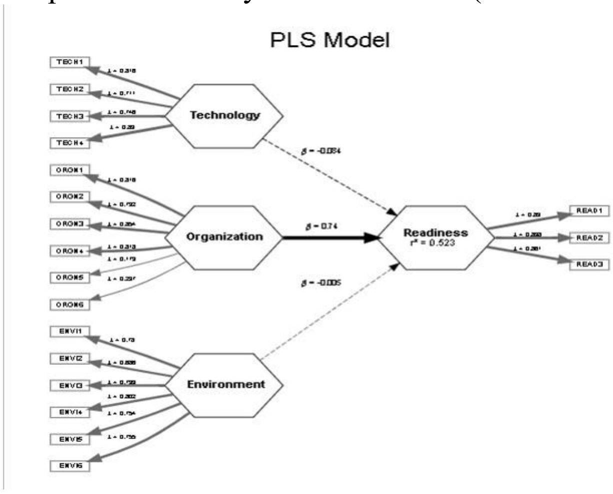

Figure 3. First Outer Model Diagram in R Studio

From figure 3, several things can be concluded, namely:

1. First Outer Loading

The following are the results of the outer loading shown in Table 3.

Table 3. Outer Loading Results

Code	Minimum Outer Loading	Outer Loading	Information
TECH1	>0.7	0.715	Valid
TECH2	>0.7	0.802	Valid
TECH3	>0.7	0.816	Valid
TECH4	>0.7	0.737	Valid
ORGN1	>0.7	0.707	Valid
ORGN2	>0.7	0.753	Valid
ORGN3	>0.7	0.807	Valid
ORGN4	>0.7	0.883	Valid
ORGN5	>0.7	0.198	Invalid
ORGN6	>0.7	0.285	Invalid
ENVI1	>0.7	0.821	Valid
ENVI2	>0.7	0.616	Invalid
ENVI3	>0.7	0.761	Valid
ENVI4	>0.7	0.822	Valid
ENVI5	>0.7	0.837	Valid
ENVI6	>0.7	0.719	Valid
READ1	>0.7	0.892	Valid
READ2	>0.7	0.916	Valid
READ3	>0.7	0.881	Valid

Based on Table 3 shown above, it can be concluded that the loading factor values for the ORGN5, ORGN6, and ENVI2 indicators are below 0.7 so that these indicators need to be removed because they cannot be used. The purpose of removing invalid indicators is to become valid. Then it will be done Running the second outer factor after removal

2. First Loading Indicator
   The following are the results of the loading indicator shown in Table 4.

Table 4. Indicator Loading

Code	Minimum Outer Loading	Outer Loading	Information
TECH1	>0.5	0.512	Valid
TECH2	>0.5	0.643	Valid
TECH3	>0.5	0.666	Valid
TECH4	>0.5	0.544	Valid
ORGN1	>0.5	0.500	Valid
ORGN2	>0.5	0.567	Valid
ORGN3	>0.5	0.652	Valid
ORGN4	>0.5	0.780	Valid
ORGN5	>0.5	0.039	Invalid
ORGN6	>0.5	0.081	Invalid
ENVI1	>0.5	0.674	Valid
ENVI2	>0.5	0.380	Invalid

ENVI3	>0.5	0.579	Valid
ENVI4	>0.5	0.676	Valid
ENVI5	>0.5	0.700	Valid
ENVI6	>0.5	0.518	Valid
READ1	>0.5	0.796	Valid
READ2	>0.5	0.839	Valid
READ3	>0.5	0.776	Valid

After the calculation is carried out on the loading indicator, there are several indicators that do not exceed the minimum standard set. The ORGN5, ORGN6, and ENVI2 grades did not meet the minimum threshold value for acceptance, the minimum threshold value for acceptance was > 0.5. Based on the reference from the calculation of outer loading and indicator loading, it can be concluded that the ORGN5, ORGN6, and ENVI2 indicators are considered irrelevant so that they cannot proceed to the next data processing.

Second Outer Model

After removing invalid indicators, the researcher will assess the indicators that have been declared valid.

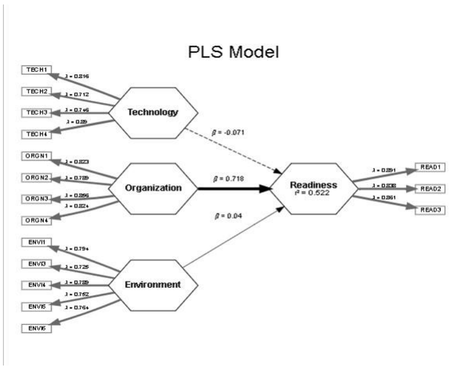

Figure 4. Second Outer Model at R Studio

From the results of the second outer model, several things can be concluded, namely:
1. Outer Loading to 2nd

The following are the results of the 2nd outer loading shown in Table IV.5.

Table 5. Outer Loading to 2

Code	Minimum Outer Loading	Outer Loading	Information
TECH1	>0.7	0.816	Valid
TECH2	>0.7	0.712	Valid
TECH3	>0.7	0.746	Valid
TECH4	>0.7	0.890	Valid
ORGN1	>0.7	0.823	Valid
ORGN2	>0.7	0.789	Valid
ORGN3	>0.7	0.856	Valid
ORGN4	>0.7	0.824	Valid
ENVI1	>0.7	0.794	Valid
ENVI3	>0.7	0.725	Valid
ENVI4	>0.7	0.789	Valid
ENVI5	>0.7	0.752	Valid

ENVI6	>0.7	0.764	Valid
READ1	>0.7	0.891	Valid
READ2	>0.7	0.838	Valid
READ3	>0.7	0.861	Valid

Based on Table 5 shown above, it can be concluded that the value of loading factor for all indicators are above 0.7 so that the indicators are declared valid. Then a second running outer factor will be carried out after all indicators are declared valid.

2. 2nd Loading Indicator

The following are the results of the 2nd loading indicator shown in Table 6.

Table 6. Loading Indicator 2

Code	Minimum Outer Loading	Outer Loading	Information
TECH1	>0.5	0.666	Valid
TECH2	>0.5	0.507	Valid
TECH3	>0.5	0.556	Valid
TECH4	>0.5	0.792	Valid
ORGN1	>0.5	0.678	Valid
ORGN2	>0.5	0.623	Valid
ORGN3	>0.5	0.733	Valid
ORGN4	>0.5	0.678	Valid
ENVI1	>0.5	0.630	Valid
ENVI3	>0.5	0.525	Valid
ENVI4	>0.5	0.622	Valid
ENVI5	>0.5	0.565	Valid
ENVI6	>0.5	0.584	Valid
READ1	>0.5	0.793	Valid
READ2	>0.5	0.703	Valid
READ3	>0.5	0.741	Valid

After the calculation on the loading indicator, the entire indicator exceeded the minimum standard set at 0.5. Based on the reference of the calculation of outer loading and indicator loading, it can be concluded that all indicators are considered relevant or valid so that they can proceed to the next data processing.

Internal Consistency Reliability (Internal Consistency Reliability)

Internal Consistency Reliability is the second step in the assessment of the reflective measurement model. It measures the extent to which indicators measuring the same construct are interconnected. One of the main measures used in PLS-SEM is the composite reliability (ρc) of Jöreskog. Higher values indicate a higher level of reliability. For example, a reliability value between 0.60 and 0.70 is considered "acceptable in exploratory research," while a value between 0.70 and 0.90 ranges from "satisfactory to good." Values above 0.90 (and definitely above 0.95) are problematic, as they indicate that the indicators are redundant, thus reducing the validity of the construct (Hair & Alamer, 2022).

Cronbach's alpha is another measure of internal consistency reliability, which assumes the same threshold as composite reliability. However, the main limitation of Cronbach's alpha is that it assumes all indicators loadings are the same in the population (also called tau-equivalence). Violation of this assumption results in a lower reliability value compared to composite reliability. Nevertheless, research shows that even without tauequivalence, Cronbach's alpha is an acceptable lower limit estimate of true internal consistency reliability.

1. Cronbach's Alpha and RhoA Values

Table 7. Alpha and Alpha and RhoA Values

Variable	Threshold Minimum Alpha and RhoA	Value Alpha	Value RhoA	Information
Technology	>0.7	0.853	0.809	Satisfying
Organization		0.831	0.872	Satisfying
Environment		0.842	0.843	Satisfying
Readiness		0.830	0.837	Satisfying

According to Table 7, the value of the Technology, Organization, Environment and Readiness indicators is 0.70 < x < 0.90. This shows that the two variables to be analyzed have a satisfactory correlation, so that the data can be said to be accurate.

2. RhoC Composite Value

Table 8. RhoC Values

Variable	Threshold Minimum Alpha and RhoC	Value RhoC	Information
Technology	>0.7	0.871	Satisfying
Organization		0.876	Satisfying
Environment		0.894	Satisfying
Readiness		0.898	Satisfying

According to Table IV.8, the value of the Technology, Organization, Environment and Readiness indicators is 0.70 < x < 0.90. This shows that the two variables to be analyzed have a satisfactory correlation, so that the data can be said to be accurate.

Convergent Validity

Convergent validity is the extent to which a construct can explain the variance of its indicators. To evaluate the validity of convergence, the average variance extracted (AVE) metric is used for all indicators on each construct.

- AVE is defined as the average value of the square of the load of the indicator associated with the construct (i.e. the sum of the squared of the load divided by the number of indicators).
- The minimum acceptable AVE value is **0.50**. An AVE value of 0.50 or higher indicates that the construct explains 50 percent or more of the ndicator variance that makes up the construct.

Table 9. AVE

No	Variable	AVE	Information
1.	Technology	0.630	Valid
2.	Organization	0.585	Valid
3.	Environment	0.678	Valid
4.	Readiness	0.746	Valid

Based on table IV.9, it can be seen that the AVE values for the technology, organization, environment, and readiness variables are above 0.5 so that all variables are declared valid.

Validity Discrepancy

Discriminatory validity measures the extent to which a construct is empirically different from other constructs in a structural model. Heterotrait-monotraite ratio (HTMT) The recommended method for assessing the validity of discrimination is the HTMT ratio of correlation (Henseler et al., 2015). HTMT is defined as the mean value of the inter-construct (heterotrait-heteromethod) indicator correlation relative to the geometric mean of the indicator correlation that measure the same construct (monotraitheteromethod). The issue of the validity of discrimination arises when the HTMT value is high. A threshold value of 0.90 is proposed for structural models with very similar constructs conceptually.

Table 10. HTMT Table

	Technology	Environment	Organization	Readiness
Technolo gy				
Environm ent	0.881			
Ion organizat	0.182	0.418		
Readiness	0.074	0.289	0.855	

The following is an explanation of the results of the HTMT in Table IV.10:

- Technology - Environment: HTMT = 0.881
  This value is below the threshold of 0.90, indicating sufficient validity of discrimination.
- Technology - Organization: HTMT = 0.182
  This value is very low, indicating excellent discriminatory validity.
- Technology - Readiness: HTMT = 0.074
  This value is also very low, indicating excellent discriminatory validity.
- Environment - Organization: HTMT = 0.418
  This value is below the threshold, indicating good validity of discrimination.
- Environment - Readiness: HTMT = 0.289
  This value indicates the validity of good discrimination.
- Organization - Readiness: HTMT = 0.855

This value is below the threshold of 0.90, indicating sufficient validity of discrimination. Overall, this model shows good validity of discrimination according to HTMT, so that further analysis can be carried out.

Checking for Linearity Issues (Collinearity Issues)

The first step is to check if there are any collinear issues among the predictor constructs in the structural model. The path coefficients in the structural model are based on the regression of the ordinary least squares (OLS) of each endogenous construct to the corresponding predictor construct.

The Variance Inflation Factor (VIF) value is used to measure the level of collinearity. A VIF value above 5 indicates the presence of a possible collinearity problem, although collinearity can also occur in VIF values between
3 to 5.

Table 11. VIF Table

Technology	Organization	Environment
1.791	2.043	1.192

Table 11 shows that the VIF values for all constructs are below 5, indicating that there are no significant collinearity issues among the independent variables.

Assessing the significance and relevance of structural model relationships

After ensuring there are no collinearity issues, the next step is to assess the significance and relevance of the relationship in the structural model (i.e., path coefficient). The significance of the path coefficient is usually tested using the bootstrapping procedure to obtain the t-value or confidence interval of bootstrapping.

Table 12. T Stat Results

Hypothesis	Relationship	Origina l Est	T Stat	Conclusion
H1	Technology -> Readiness	-0.071	-0.760	Insignificant
H2	Organizatio n -> Readiness	0.718	15.29 9	Significant
H3	Environmen t -> Readiness	0.040	0.534	Insignificant

The significance and relevance of the relationship between variables can be assessed from the bootstrap results for the path coefficient. Statistics and confidence intervals are used to assess significance.

- Technology -> Readiness:
  It is insignificant because the T-statistic < 1.96 and the confidence interval includes zero.
- Organization -> Readiness:
  Significant because the T-statistic > 1.96 and the confidence interval does not include zero.
- Environment -> Readiness:

It is insignificant because the T-statistic < 1.96 and the confidence interval includes zero. Only the relationship between Organization and Readiness is significant, indicating that Organization is a key predictor of Readiness.

Assess the explanatory power of the model (Explanatory Power)

The explanatory power of the model is measured using the coefficient of determination (R^2). R^2 shows how much variation in endogenous constructs can be explained by

Predictor construct

Table 13. R Square Results

	R Square	R Square Adjusted
Readiness	0.522	0.515

The explanatory power analysis is performed by looking at the percentage of variance described, which is the R Square value for the dependent latent construct. The rule of thumb R Square is 0.75 belonging to the strong category, 0.50 being included in the medium category, and 0.25 falling into the low or weak category (D. T. Guerrero et al., 2023; L. M. B. Guerrero & García, 2024).

The results of the analysis for the readiness model test show that the R Square value of the readiness construct is 0.522, which shows that the variability of technology adoption that can be explained by the technology, organization, and environmental dimensions in the model is 52.2%, and is in the category of medium model.

Analysis and Discussion of Hypothesis Results

Based on the results of the structural model analysis, the following is the analysis and discussion of the hypothesis results for the research model:

1. H1: Technology will have a positive and significant effect on ERP Readiness

Table 14. Table H1

Hypothesis	Relationship	Original Est	T Stat	Information
H1	Technology -> Readiness	-0.071	- 0.760	Rejected

There is no significant relationship between technology and readiness. This shows that the technology factor in this research does not have a significant influence on the readiness to use ERP. This hypothesis is in line with research Ibrahim et al. (2023) which states that the need for technological facilities and infrastructure in SKPD Indramayu Regency is still incomplete and adequate. For example, the limitations of equipment in the diskominfo office such as computers are still lacking in order to meet more needs. Then, the internet network is also considered to have poor quality because it is not fast and limited in use.

ERP (first hypothesis rejected). This is due to various technological factors in SKPD Indramayu Regency that have not supported the implementation of ERP. In contrast, the organizational variable showed a positive and significant influence on readiness (the second hypothesis was accepted), suggesting that even though the organization was ready to receive H2

2. H2: Organization will have a positive and significant influence to ERP Readiness

Table 15. Hypothesis 2

Hypothesis	Relationship	Origina l Est	T Stat	Description
H2	Organization -> Readiness	0.718	15.29 9	Accepted

The influence of organizations on ERP adoption readiness shows that organizational elements are a key factor in readiness to adopt ERP technology. This hypothesis is in line with the theory L. M. B. Guerrero & García (2024) which in the form of the influence of the organizational dimension on the adoption of technology, the organizational dimension has a direct and significant impact.

3. H3 : Environment will have a positive and significant effect on ERP Readiness

Table 16. Hypothesis 2

Hypothesis	Relationship	Original Est	T Stat	Information
H3	Environment -> Readiness	0.040	0.534	Rejected

Environment has a weak positive relationship with readiness. This shows that the environmental factors in this researchstudy do not have a significant influence on the readiness to use ERP. This hypothesis is in line with research Ibrahim et al. (2023) which states that the limited budget of the local government makes application development in Indramayu not optimal.

This hypothesis is also in line with research Sulistiyo et al. (2023) which states that the public sector represented by the government must face an uncertain environment, such as policy changes from the old top mangament to the new one.

Recapitulation of Hypothesis Results

Recapitulation result Hypothesis useful in summarizing the results of hypothesis analysis. The results obtained from the hypothesis analysis can be seen in Table 17.

Table 17. Hypothesis Results

Hypothesis	Relationship	Original Est	T Stat	Remarksa
H1	Technology -> Readiness	-0.071	-0.760	Rejected
H2	Organization -> Readiness	0.718	15.29 9	Accepted
H3	Environment -> Readiness	0.040	0.534	Rejected

Based on table 17, it is concluded that:
1. Technology has a negative and insignificant effect on readiness (hypothesis 1 rejected)
2. Organization has a positive and significant effect on readiness (hypothesis 2 accepted)
3. Environment has a weak and insignificant positive effect on readiness (hypothesis 3 rejected)

Repair Recommendations

The results of the hypothesis that have been obtained will be the final result of this improvement recommendation. This recommendation will be made based on the research variables in the model used and can be used as a reference when implementing ERP implementation.

1. Technology
    - Invest in upgrading adequate technological equipment, such as the addition of computers and other hardware, to ensure that operational needs can be properly met. So that they can implement ERP.
    - Changing the quality of the internet network, in order to speed up connections and expand network coverage, in order to support the effective use of ERP.
    - Provide training programs for staff to familiarize them with new technologies and ERP. Adequate knowledge can increase an organization's readiness to adopt new technologies.
2. Organization
    - Planning a comprehensive change management strategy to minimize resistance to ERP adoption. This includes such as effective communication, creating training, and providing support during the transition process.
    - Conduct periodic evaluations of the progress of ERP implementation and adjust strategies according to emerging needs and challenges.
    - Creating an organizational culture that can encourage innovation and adaptation to new technologies. Including to promote openness to change and continuous learning.
3. Environment
    - Establish a binding long-term policy framework, in order to ensure that technology and ERP policies remain consistent despite changes at the top management level.
    - The development and implementation of technology, including ERP, should be prioritized in the regional budget.

CONCLUSION

Based on the results of the research, the readiness of ERP implementation in SKPD Indramayu Regency was assessed using the TOE model, which consisted of three variables analyzed using R Studio software and processed using the SEM-PLS method. After conducting descriptive analysis using quantitative data, validity and reliability testing, and hypothesis testing, it can be concluded that in the implementation of ERP in SKPD Indramayu Regency, there are obstacles in several variables tested using the TOE model (Louis G. Tornatzky and Mitchell Fleischer, 1990). From the hypothesis analysis, it was found that of the three hypotheses tested, two of them were rejected and one was accepted. The technology variable showed a negative and insignificant influence on the readiness of ERP implementation (the first hypothesis was rejected). This is due to various technological factors in SKPD Indramayu Regency that have not supported the implementation of ERP. In contrast, the organizational variable showed a positive and significant influence on readiness (the second hypothesis was accepted), suggesting that even if the organization is ready to accept ERP implementation, adjustments are still needed from the other two variables that have not yet met the requirements for ERP implementation in the organization. Environmental variables have a weak and insignificant positive influence on readiness (the third hypothesis is rejected), which can be caused by environmental factors that often change according to the prevailing political conditions. To improve the implementation of ERP in the Regency SKPD Indramayu, attention needs to be paid to technological and environmental variables, which currently provide insignificant results. Improvement steps need to be taken to improve ERP readiness, so that it can maximize the benefits of improving SKPD performance, both overall and partially.

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