

## Using Technology Acceptance Model (TAM Model) to Increase Effectiveness the Use of Human Resource Information System (HRIS): Empirical Studies at a Private Company in Indonesia

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### ARTICLE INFO

DOI: 10.32832/jm-uika.v14i3.14492

Article history:

Received:

18 Juni 2023

Accepted:

17 Juli 2023

Available online:

5 Oktober 2023

Keywords:

Perceived Ease of Use,  
Perceived Usefulness,  
Behavioral Intention to Use,  
Actual System Use.

### ABSTRACT

*Studies related to HRIS Applications show that the Technology Acceptance Model can be used in an effort to increase the use of HRIS Applications in a company. The purpose of this study is to examine and uncover empirical factors that influence the use of HRIS-Pakoku Application applied in Pako Group. Both direct factors are perceptions of ease of use and perceptions of usefulness and indirect factors are behavioral intentions to use. This research was conducted in the Pako Group using a survey method using questionnaires and samples were taken using proportioned stratified random sampling techniques as many as 138 employees using HRIS in the Pako Group. SEM analysis is used to determine the influence between research variables. The results showed, there is a positive and significant influence of the perception of ease of use on actual system use, there is a positive and significant influence of usability perception on actual system use, there is a positive and insignificant influence of behavioral intention to use on actual system use, there is a positive and significant influence of ease of use perception on behavioural intention to use, There is a positive and significant influence of usability perception on behavioral intention to use, there is a positive and insignificant influence of ease of use perception on real use through behavioral intention to use and there is a positive and insignificant influence of usability perception on actual system use through behavioural intention to use. This study proposes several recommendations of indicators that strongly contribute high to perceived ease of use, perceived usability and behavioral intention to use to increase the use of HRIS applications.*

## 1. INTRODUCTION

In the process of human resource management, one of the information system technologies that plays a role in the development of the company is the Human Resource Information System (HRIS). The application of HRIS in the company aims to make the company have good organizational capabilities so that its human resources have high competitiveness. This information system is a program that provides convenience for human resource management. There are several conveniences obtained from the application of information technology such as obtaining accurate data about overall company information and helping the effectiveness of human resources in making work reports. The three objectives of HRIS are cost reduction, improvement of HR services and improvement of strategic orientation of HR.

HRIS is an application tool that connects directly to the Human Resources database which includes a customized database of employees in an organization be it employee personal data, expertise, compensation and benefits, loan details, leave details, or others. HRIS is used by organizations for two purposes, One is for administrative and operational efficiency and the other is to increase the effectiveness of use and can be done with less paperwork like we do in the electronic world.

The use of HRIS in Indonesian Companies is still not optimal. From the results of a survey in 2017 conducted by a startup provider of cloud-based HR management services, Gadjian, in 161 companies. The results of this survey show that out of a total of 161 companies, there are 73% or 117 companies in Indonesia that have not used HRIS in managing human resource administration, while only about 27% or 44 companies in Indonesia have used HRIS. This happens because each company has a different perspective and management of HRIS implementation (Rommalla, 2017).

**Table 1.** Use of Human Resource Information System in Indonesia in 2016-2017

Data	Prosentase (%)	Number of Companies
HRIS has not been used by the Company	73 %	117
HRIS is already used by the Company	27 %	44
Total	100 %	161

*Source : Gadjian Survey (2016-2017)*

Pako Group of Companies or Pako Group has been using Human Resource Information System (HRIS) using Uclid system since 2010. Then a migration was carried out in 2017 from the form version to the web. Furthermore, in 2021, HRIS in the Pako Group uses a website-based internet information technology application called Pakoku which can be downloaded through the Play Store so that it is easily accessed and downloaded by employees. The HRIS application under the name PAKOKU is a website-based Employee Self Service (ESS) application via the internet built by the company's IT (information technology) team and provided to support synergy between employees, personnel and HRD. HRIS manages employee data and information related to time management, employee facilities and the approval process of personnel

transactions including: 1) Submission of forms (leave, medical claims, donations and others; 2) Submission of memos; 3) View attendance (attendance and attendance) online; 4) View facility details and earned benefits (personal); 5) E-KIP Monitoring; 6) Main access to PAKO applications: PAKO SEHAT, PAKO PINTAR; and 7) Approval forms and Memos (for those who have Team Members).

Over time, since HRIS-Pakoku was launched in mid-2021, there have been several complaints from application users throughout 2022 which are shown in table 2. Below:

**Table 2.** Report complaints from the use of HRIS Pako Group using HRIS-Pakoku Application:

No	Types of Complaints	Complaint Categories	Total Number of Complaints
1	Treatment claim submission	5	203
2	Leave application	3	75
3	Submission of absence correction memo	3	155
4	Submission of a bereavement donation	3	28
5	Official travel claim submission	4	72

*Source: PGA & IR Division (2022)*

Some phenomena that occur and have been explained above seem to factor in the use of HRIS applications called Pakoku in the Pako Group there are still obstacles in its implementation. So it needs to be further researched and analyzed related to the factors that affect the acceptance of an HRIS system called the HRIS-Pakoku application in the Pako Group company environment using the TAM Model.

Further investigation into the effectiveness of HRIS in this study uses the TAM Model to see how HRIS is actually used and how the antecedent factors of the TAM Model influence. Will Perceived Ease of Use and Perceived Usefulness directly affect Actual System Use? Or does it require the mediating variable Behavioral Intent to Use Does the Behavioral Intent to Use affect actual use of the system? Do these two antecedent factors have a significant influence on behavioral intent to use? The results of research by Tukiran, Martinus (2022) show that Perceived Ease of Use and Perceived Usability have a significant effect on Real Use, but do not have a significant effect through Behavioral Intention to Use. This is because the Behavioral Intention to Use does not have a significant effect on Real Use. However, in the results of Heryanta's research, Jufry from Brawijaya University Malang, showed that Perception of Ease of Use and Perception of Usefulness have a significant effect on Behavioral Intention to Use, and also Behavioral Intention to Use has a significant effect on Actual System Use.

Based on the things described above, the author conducted a research by taking the topic, namely: "Efforts to Increase the Use of Human Resource Information System (HRIS-Pakoku) Using Technology Acceptance Model (TAM Model)". Empirical Studies in the Pako Group"

**2. RESEARCH METHODOLOGY**

This research is a quantitative study to analyze and explain efforts to increase the use of HRIS through the perception of ease of use, perception of usability, behavioral intention to use and the actual use of HRIS-Pakoku information system applications in the Pako Group. The population of this study is employees and leaders who work and are spread throughout the Pako Group companies. So the respondents or units of analysis in this study are employees at Pako Group companies that use the HRIS-Pakoku application.

**Table 3.** The number of users of the Pako Group HRIS application.

No	Description	Sum
1	PT. Inkoasku	61
2	PT. Pakoakuina Plant 2W	81
3	PT. Pakoakuina Plant 4W	68
Total		210

*Source: Primary Data Processed (2022).*

In this study, the sampling technique was taken using a propotio-ded stratified random sampling technique, where samples were taken proportionally from each user HRIS in each company is then grouped by Group/Grade group and from each group is taken randomly (Sekaran & Bougie, 2016). The minimum sample number is determined using the Slovin formula in Umar (2005), namely:

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

Note :

n = Sample size.

N= Population.

e = The degree of error is still within the tolerance limit, this study uses 5%.

Based on the Slovin formula, the minimum number of samples for Pako Group HRIS Application users is calculated as follows :

$$n = \frac{210}{1+210(0.05)^2} \dots\dots\dots (1)$$

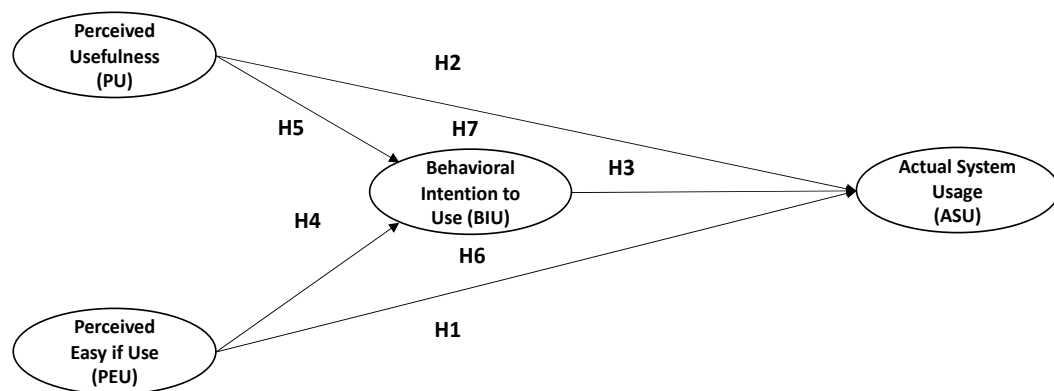
$$n = 137,7 \sim n = 138$$

The construction of the conceptual framework of this study is described in table 4. Below:

**Table 4.** Sub Constructs in TAM

Construct	Definition	Indicators
<i>Perceived Ease of Use- X1</i>	A person's subjective impression or view of the least effort needed to successfully utilize information system applications that can support his work.	X1.1) The system is very easy to learn. X1.2) The system can do exactly what the user wants. X1.3) The system is easy to remember. X1.4) The system is easy to operate.
Perceived Usefulness- X2	A person's subjective impression or view of the benefits obtained in using information system applications to improve their performance.	X2.1). Work is completed faster. X2.2). Make work easier. X2.3). Develop job performance. X2.4). Increase productivity.
<i>Behavioral Intention to Use- Y1</i>	The desire to use certain technology that makes the person intend to learn more about the technology and will use it to support his work.	Y1.1). The desire to use technology in the future. Y1.2). Desire to use technology to help with work Y1.3). The desire to use technology constantly.
<i>Actual System Use- Y2</i>	Behavior in actual conditions which is reflected in aspects of frequency and duration of time in using information system applications in supporting their work.	Y2.1) Consistent use of HRIS Applications. Y2.2) Transparent use of HRIS Application. Y2.3) Conformity of the use of HRIS Application with procedures. Y2.4) Satisfaction of use of HRIS Application.

Source: Researcher (2023)



**Figure 1.** Conceptual Models and Hypotheses

Source: Researcher, 2023

The hypothesis used is a provisional estimate or provisional conjecture with the increasing need for proof of truth. The hypotheses in this study are:

- H1:** Perceived ease of use has a significant effect on actual system use in HRIS users in Pako Group.
- H2:** Perceived usefulness has a significant effect on actual system use in HRIS users in the Pako Group.
- H3:** Behavior that indicates behavioral intention to use has a significant effect on actual system use in HRIS users in the Pako Group.
- H4:** The perceived ease of use has a significant effect on the behavioral intention to use in HRIS users in the Pako Group.
- H5:** Perceived usefulness has a significant effect on behavioral intention to use in HRIS users in Pako Group.
- H6:** The perceived ease of use has a significant effect on actual system use through behavioral intention of use in HRIS users in the Pako Group.
- H7:** Perceived usefulness has a significant effect on actual system use through behavioral intention of use in HRIS users in Pako Group.

This study emphasizes the quantitative approach in conducting data analysis, the data analysis method used can be grouped into two, namely descriptive statistics analysis and inferential statistical analysis. Descriptive analysis is presenting research data descriptively through tables and graphs. While inferential statistical analysis is conducting a series of hypothesis testing in one research hypothesis model. For inferential statistics in hypothesis testing will use structural model analysis (structural equation model).

The framework of this research concept model is built on the basis of theoretical foundations and supported by previous research. Based on the theoretical foundation used, this study uses multidimensional constructs for the variables Perceived Ease of Use, Perceived Usefulness, Behavioral Intention to Use, and Actual System Use. The indicators used are reflective at the first order and second order stages for all variables. The types of scales for variables (constructs) use ordinal scales, namely the 5-point Likert scale and the 5-point Behavior Rating Scales for the assessment of Actual System Use Variables.

By using the SEM-PLS analysis method, hypothesis testing will use structural model analysis with the help of WarpPLS statistical software. In addition to confirming the theory, hypothesis testing will also explain the presence or absence of relationships between latent variables (Ghozali & Latan, 2012). Hypothesis testing by looking at the value of the Path Coefficient calculation in the inner model testing. A hypothesis is said to be accepted if the value of t-count or t-statistic is greater than t-table 1.96 ( $\alpha = 5\%$ ) which means that if the value of t-count in each hypothesis is greater than t-table then the hypothesis can be declared accepted or proven. Thus the coefficient of influence between these variables is statistically significant in terms of larger t-statistics t-tables or by looking at p values or p-values less than 0.05. Hypothesis testing

in WarpPls software uses a sampling algorithm, namely by calculations on parameter estimation, variance calculations and p-values.

This study uses the Mode A algorithm analysis method for the outer model, which means reflective mode where latent variable indicators are operationalized reflexively, and linear algorithm analysis for the inner model. In this study, the resampling method used is Stable1 whose number of resamples has been determined by the WarpPLS program (default 100). Because the number of resamples cannot be set, this method is very useful for analyzing data in quantities big. After conceptualizing the model, determining the algorithm analysis method and sampling method, the next step is to draw a path diagram of the model to be estimated. In drawing a path diagram (path diagram) in the WarpPLS program simply describe the hypothesized variable relationship, while construct-forming indicators do not need to be described because the program has stored the results of first order and second order analysis which is then used to analyze the inner model based on the direction of the casual relationship that has been determined.

The SEM method used consists of two analyses, namely the measurement model and the structural model (Hair, Ringle, & Sarstedt, 2013). In the measurement model, there are two types of variables, namely latent variables and observable variables. Before structural model analysis, the research model will be tested through Confirmatory Factor Analysis (CFA) analysis to see whether the indicators (observed variables) really reflect the latent variables (Hair et al., 2013). For the CFA test, Goodness of Fit Index (GOFI), t-value and loading factor testing will be seen. To find out whether the indicator reflects its latent variable, there are 2 tests that will be carried out, namely the validity test and the reality test. An indicator has good validity, if its absolute t value is  $\geq 1.96$  or significant (equivalent to a probability value of  $\leq 0.05$  and a Standardized Factor Loading (SFL) of  $\geq 0.5$ . For reliability testing, it is carried out by calculating Construct Reliability (CR)  $\geq 0.70$  and Extracted Variant (VE)  $\geq 0.50$ .

Once the CFA test meets the statistical criteria, then structural model analysis can be performed. This structural model analysis contains an overall model fit test using GOFI (Goodness of Fit Index), followed by a significance test of the path. The results of the path coefficient significance test are then used to test the research hypothesis by comparing the statement of the research hypothesis with the results of the previous significance test. From the hypothesis test of this research will be able to conclude whether the research hypothesis is supported or not supported.

According to Hair et al. (2013) there are six stages of SEM formation and analysis procedures. The six steps in the procedure for establishing and analyzing SEM are the first step is forming individual constructs. The SEM method requires that the research model built must use a strong theoretical foundation. Various theories and previous research as presented in Chapter 2 and used to build research models. Operationalization of research indicators needs to refer to previous research.

Step Two is to develop and Define a Measurement Model. In this stage, each latent construct included in the model is further identified with its measuring indicator or variable in measuring the latent construct. Then the third step is to design research to produce empirical results of research. At this stage, the research will focus on developing issues, handling missing data, data normality, to alternative use of estimates such as MLE (Maximum Likelihood Estimation), WLS (Weighted Least Square) or other estimates available in the software used.

The fourth step is to assess the validity of the measurement model, which is done to ensure that all indicators or variables observed, are theoretically valid indicators in the group of each latent variable as shown in the research model. Meanwhile, Measurement Model Analysis consists of steps, namely the Overall Model Fit Test, where this test is intended to see the level of model fit to research data. This test is also carried out to determine whether the level of fit (level of fit) is in good condition, and can be done to compare GOFI which is the output of the estimation process, with GOFI value criteria that can show a good match rate.

The fifth step is to test the significance of the model. The results of simplifying the measurement model in the previous step, are used to build a simplified research model. This research model is then estimated to determine the significance of the path coefficient relationship from one variable to another in accordance with the proposed research model.

The sixth step is the final step to test the research hypothesis. The final stage of the research is an attempt to test the research hypothesis using the results of the competency test of the significance of the relationship between variables that exist in previous structural models. By comparing the results of the significance test with the statements of research hypotheses in the model, it will be able to conclude whether the research hypothesis is supported or not supported.

SEM analysis in this study will use the Partial Least-Square (PLS) method with the help of statistical data processing software WrapPLS. According to Solimun et al (2017) WrapPLS is very suitable with a multivariate analysis model that uses many latent variables together and synchronously and has a structured hierarchy of causal relationships that use multiple indicators of each variable that can be analyzed through the PLS-SEM approach.

### **3. RESULTS & DISCUSSION**

Descriptively, respondents' responses were relatively highest in the Perception of Ease of Use (X1) with an average score of 3.99 or 78.23% of the 5-point Likert scale score, then successively on the variable Intention of Use Behavior (Y2) of 3.90 or 78%, the variable Real Use (Y3) of 3.83 or 76.6%, and finally is the Usability Perception variable (Y1) of 3.69 or 73.8%. When viewed descriptive analysis of variables with demographic analysis of respondents, it shows the relationship between the age, education and position levels of respondents with descriptive variables. The dominant age of Millennial Generation Y and Generation Z is 19 – 44 years old as much as 77% and the dominance of Diploma, Undergraduate and Postgraduate education, And if added up to a total of 77%, it has a high number in terms of ease of use, intention to behave using and actual use. Millennials and Generation Z are generations that are naturally more familiar with the use of technology applications. Results of Calvo-Porrall &



Pesqueira-Sanchez (2020) reported differences in motivations underlying technology behavior in each generational group; And there may also be differences in the way each generation group uses and engages with technology.

Related to the relatively low number on the perception of usefulness of the descriptive analysis of variables, it can also be related to the demographic analysis of respondents, where the results of the same study from Calvo-Porrall and Pesqueira-Sanchez (2020) report that most millennials use and engage with technology for entertainment and hedonic purposes; while Generation X individuals are largely driven by utilitarian goals and information retrieval. Lai and Hong's (2015) research reports that because digital technology is such an indispensable part of young people's daily lives, some commentators claim that the current generation of learners thinks and learns differently from their predecessors. In line with that, Stern (2002) also suggests that the Millennial Generation is the first generation that can adapt to technology, such as they are better at operating a mouse than a pen and they do unlimited activities with the use of the internet, and they are better at using the internet.

Similarly, with regard to gender differences, this study is in line with the research of Gefen and Straub (1997) reporting that women and men differ in their perceptions of technology use, but do not have a significant effect on actual usage. The demographics of the study respondents were dominated by men at 77%, but descriptively had a high average on actual system use variables, compared to usage perceptions. Based on the results of this study, it can be said that generational differences have differences in the perception of ease of use and perception of use, due to the dominance of male gender and the dominance of the age of respondents, most of whom are the Millennial generation and Generation Z, and these differences are not related to the intention to behave using and the results of hypothesis testing this does not affect actual system use.

Based on the results of SEM data processing using WrapPLS 7.0, the results in Table 1 below describe discriminant validity. All correlation values between variables (latent constructs) below the square root value of AVE (see with diagonal lines, in parentheses). Based on the method in determining discriminant validity that compares the square root of each AVE on the diagonal with the correlation coefficient (off-diagonal) for each construction in the relevant row and column on each variable (Fornell & Larcker, 1981), hence entirely, discriminant validity is acceptable for this measurement model and supports discriminant validity between variable constructs.

**Table 5.** Discriminant Validity

	<i>Perceived Ease of Use</i>	<i>Perceived Usefulness</i>	<i>Behavioral Intention to Use</i>	<i>Actual System Use</i>
<i>Perceived Ease of Use</i>	<b>(0,892)</b>			
<i>Perceived Usefulness</i>	0,698	<b>(0,895)</b>		
<i>Behavioral Intention to Use</i>	0,730	0,804	<b>(0,920)</b>	
<i>Actual System Use</i>	0,521	0,532	0,498	<b>(0,854)</b>

Source: Primary Data Processed (2023)

This research is not only to test the hypothesis but also to find a model that fits the original data, this is very useful for measuring the quality of the model. To evaluate the fit model must follow the criteria that have been recommended by experts. The explanation for each fit measure is based on the general result output above, namely the recommended P-value cut-off value for APC, ARS, and AARS as an indication of the fit model must have a significance level of 5% ( $\leq 0.05$ ), while the output above shows the APC, ARS, and AARS values are at the level of significance level  $P < 0.001$  which means the model is excellent.

For the Symson's Paradox index (SPR) the resulting value is 1, the R-squared Contribution Ratio (RSCR) is 1, the Statistical Suppression Ratio (SSR) is 1 and the Nonlinear Bivariate Causality Direction Ratio (NLBCDR) produces a value equal to 1, which means the SPR index, SSR model index, RSCR index, and NLBCDR are ideal, which overall means there are no causality problems in the model.

For AVIF and AFVIF, two fit model measures are used to test for collinearity in PLS models. Recommended values for both sizes It should  $\leq 3.3$  (ideal) or  $\leq 5$  (acceptable), as per the output above shows no multicollinearity issue inside the model.

**Tabel 6.** Hasil Umum Pengukuran Model Struktural

No	Model Fit dan Quality Indices	Value	Description
1	Average path coefficient (APC)	0,306	$P < 0,001$
2	Average R-squared (ARS)	0,515	$P < 0,001$
3	Average adjusted R-squared (AARS)	0,506	$P < 0,001$
4	Average block VIF (AVIF)	2,526	accepted if $\leq 5$ , ideally $\leq 3.3$
5	Average full collinearity VIF (AFVIF)	2,613	accepted if $\leq 5$ , ideally $\leq 3.3$
6	Tenehause GoF (GoF)	0,639	small $\geq 0.1$ , medium $\geq 0.25$ , large $\geq 0.36$
7	Symson's paradox ratio (SPR)	1,000	accepted if $\geq 0.7$ , ideally = 1
8	R-squared contribution ratio (RSCR)	1,000	accepted if $\geq 0.9$ , ideally = 1
9	Statistical suppression ratio (SSR)	1,000	accepted if $\geq 0.7$ , ideally = 1
10	Nonlinier bivariate causality direction ratio (NLBCDR)	1,000	accepted if $\geq 0.7$ , ideally = 1

Source : Primary Data Processed (2023)

The resulting goodness of fit (GoF) is 0.639 ( $\geq 0.36$ ) which means that the model fits well, which indicates that the prediction power of the model is very strong. For SPR is an index measure that indicates causality problems, Ideally this index should be equal to 1 or  $\geq 0.7$  (acceptable), which means there are no causality problems in a model. RSCR is an index to measure the extent to which a model is free from negative R-squared contributions, ideally this RSCR index should be equal to 1 or  $\geq 0.9$  (acceptable), which means there is no negative R-

squared contribution inside a model. SSR is an index for measuring the extent to which a model is free from statistical suppression effect problems.

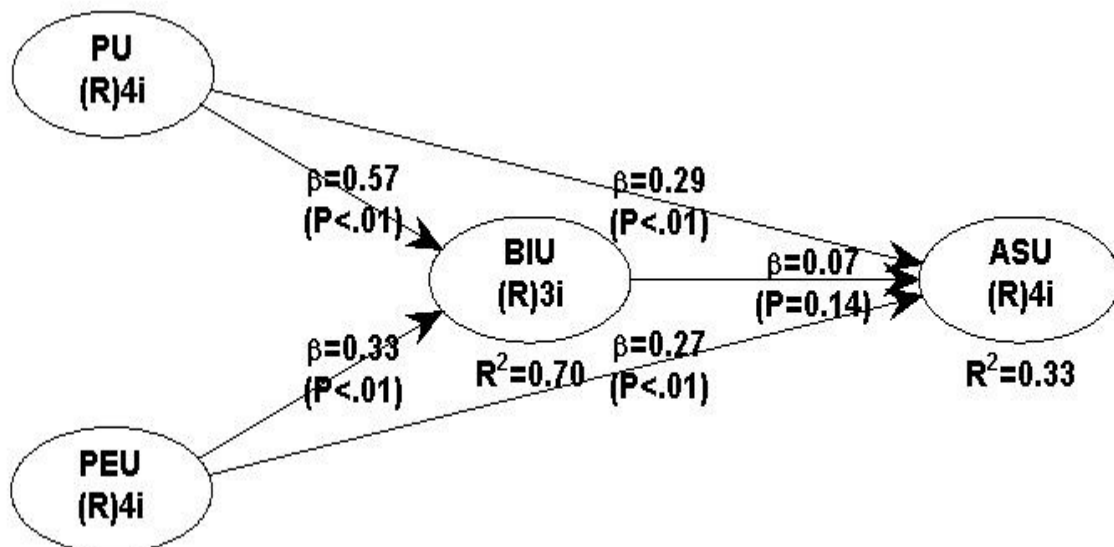
Suppression problems arise when a path coefficient has a value that is large compared to the correlation relationship with the path that connects the two variables. An acceptable SSR value of  $\geq 0.7$  means 70% or more of the path in the statistical suppression-free model.

**Table 7.** Latent variable coefficients

No.	Variabel	R-square	Adj. R-square	Composite reliability	Average variance extracted	Full Collinearity VIF
1.	Perceived Ease of Use			0,940	0,795	2,423
2.	Perceived Usefulness			0,942	0,801	3,179
3.	Behavioral Intention to Use	0,702	0,698	0,943	0,847	3,362
4.	Actual System Use	0,328	0,314	0,915	0,729	1,488

Source : Primary Data Processed (2023)

NLBDCR is an index for measuring the extent to which the non-linear bivariate coefficients of the relationship are supported for the hypothesis of causal relationships in the model. An acceptable NLBDCR value of  $\geq 0.7$  means that 70% or more of the corresponding paths in the model support the hypothesis of a weak causality relationship. Based on the general output results above, the resulting SPR, SSR, RSCR, and NLBDCR values are all = 1 (acceptable), which means there is no causality problem in the model. Table 56 shows the values of R-squared, Adjusted R-squared, Composite Reliability (CR), Average Variance Extracted (AVE), and Full Collinearity VIF.



**Figure 2.** Results of Structural Model Analysis

Source: Primary Data Processed (2023)

Figure 3. above is the result of the analysis of the PLS structural model which in detail shows the path coefficient and its significance. Schematically, the details of the measurement results of the structure-tural model are presented in figure 2. Then Table 3 below describes the results of structural model analysis which can then be used as a basis for drawing conclusions on testing the hypotheses proposed in this study.

**Table 8.** Hypothesis Test Results

Hipotesis	Path	Path coefficient	P-value	Hypothesis Test Results
H1	PEU → ASU	0,269	<0.001	Diterima
H2	PU → ASU	0,288	<0.001	Diterima
H3	BIU → ASU	0,070	0,142	Ditolak
H4	PEU → BIU	0,329	<0.001	Diterima
H5	PU → BIU	0,574	<0.001	Diterima
H6	PEU → BIU → ASU	0,023	0,309	Ditolak
H7	PU → BIU → ASU	0,040	0,192	Ditolak

Ket: Perceived Ease of Use (PEU), Perceived Usability (PU), Behavioral Intention to Use (BIU), Actual System Use (ASU)

Source: Primary Data Processed. (2023)

### Direct Influence of Perceived Ease of Use on Actual System Use.

The Effect of Perceived Ease of Use on Actual System Use, structural co-efficiency is obtained at 0.269 and P-value = 0.001. Because the P-value < 0.05, and the coefficient marked positive indicate that there is a positive and significant influence between the Perceived Ease of Use and Actual System use. This means that the higher the Perceived Ease of Use will result in higher Actual System Use.

This finding proves that empirically the perception of ease of use is the degree to which a person believes that using a particular system will be free from difficulties. The more widely used systems show that they are better known, easier to operate and easier to use by its users in the Pako Group. The comparison of convenience gives an indication that people who use the new system work easier than people who work with the old system.

Referring to the results of the study and the discussion above, the findings in this study which state that there is a positive and significant influence on the perception of ease of use on real use, it can be explained that to increase the real use of the HRIS-Pakoku application, it is necessary to build a strong perception of ease of use of the HRIS-Pakoku application in Pako Group companies.

In this study, there are 4 indicators of Perceived Ease of Use, namely the system is easy to learn, the system can do easily what the user wants, the system is easy to remember and the system is easy to operate. Judging from the coefficient value of loading factors / manifest variables / indicators. The results of SEM analysis, respectively X1.1, X1.2, X1.3 and X1.4 have matrix coefficient values of 0.909, 0.886, 0.848 and 0.923. The largest indicator is X1.4 (Easy to Operate System). With the company paying attention to the strongest indicator through the need to improve the ease of operation of the HRIS-Pakoku Application in Pako Group companies so that there are no complaints from users or HRIS-Pakoku users so that they do not experience

difficulties in operating the HRIS-Pakoku application, so that there is no perception in users that the HRIS-Pakoku application is difficult to use.

The findings in this study are in line with Tukiran's research, Martinus et al (2022), in their research concluded that the Perception of Ease of Use has a significant effect on Actual System Use which conducted research on Postgraduate students of Pakuan University Bogor and was reinforced by research from Putu Ayu Mira et al (2016) who examined the application of the TAM (Technology Acceptance Model) model on Instagram user behavior concluded that Perceived Ease of Use has a significant effect on Actual System Use with a probability value of 0.019 ( $<0.05$ ) and a coefficient value of 0.231.

### **The Direct Influence of Perceived Usefulness on Actual System use.**

The Effect of Perceived Usefulness on Actual System Use obtained a structural coefficient of 0.288 and P-value = 0.001. Because the P-value  $< 0.05$ , and the coefficient marked positive indicate that there is a positive and significant influence between the Perception of Consciousness and Real Use. This means that the higher the Perceived Usefulness will result in higher Actual System Use.

Hypothesis testing shows that there is a direct positive and significant influence of perceived usability on real use. This finding proves that empirically the perception of good usability of HRIS-Pakoku application will have a strong impact on the real use of HRIS-Pakoku application in Pako Group companies is getting better and more significant.

In this study, there are 4 indicators of Usability Perception, namely work is completed faster, makes work easier, develops employee performance and increases productivity. Judging from the coefficient value of loading factors/manifest variables/indicators in table 51. SEM analysis, respectively X2.1, X2.2, X2.3 and X2.4 have matrix coefficient values of 0.909, 0.886, 0.848 and 0.923. The largest indicator is X2.4 (increasing productivity). With companies paying attention to the strongest indicators through the establishment of the perception of usability of the HRIS-Pakoku application will influence users in using the HRIS-Pakoku application so that users feel that the HRIS-Pakoku application can be useful in completing their tasks and can increase their work productivity. Users will think that by using the HRIS-Pakoku Application, the work they have will be easily completed. That way users who use the HRIS-Pakoku application will have confidence that all their work can be completed faster and more productively.

The findings in this study are in line with Tukiran's research, Martinus et al (2022), in their research concluded that Perception of Usefulness has a significant effect on Actual System Use which conducted research on Postgraduate students of Pakuan University Bogor and reinforced by research from Putu Ayu Mira et al who examined the application of the TAM (Technology Acceptance Model) model on Instagram user behavior concluded that Usability Perception has a significant effect on Actual System Use with a probability value of 0.007 ( $<0.05$ ) and a coefficient value of 0.289.

**Direct Influence of Behavioral Intention to Use on Actual System Use.**

The Effect of Behavioral Intention to Use on Actual System Use obtained a structural coefficient of 0.070 and P-value = 0.142. Because the P-value > 0.05, thus indicates that there is no significant influence between Behavioral Intention to Use and Real Use. This means that Behavioral Intention to Use will not result in higher Actual System Use.

Hypothesis testing showed no significant influence of behavioral intention to use the HRIS-Pakoku application on the actual use of the HRIS-Pakoku application. This finding proves that empirically the behavioral intention to use does not have a significant impact on the actual system use of HRIS-Pakoku applications in Pako Group.

In this study, there are 3 indicators of behavioral intention, namely the desire to use technology in the future, the desire to use technology to help work and the desire to use technology continuously. Judging from the coefficient value of loading factors/manifest variables/indicators in table 52. SEM analysis, respectively Y1.1, Y1.2 and Y1.3 have matrix coefficient values of 0.919, 0.903 and 0.939. The largest indicator is Y1.3 (desire to use technology continuously). That is, the high and low Behavioral Intention to Use is determined by the high and low desire to use technology to help work. With the company paying attention to the highest indicators through serious efforts that must be taken to improve reputation from the HRIS-Pakoku application which seems to be quite problematic in Pako Group companies, so that users' desire to continue using the HRIS-Pakoku application will increase again. And there is no longer a factor of user coercion in using the application. Given that the use of HRIS-Pakoku application in Pako Group companies is mandatory. So it takes tremendous effort to realize this HRIS-Pakoku application with a high reputation that has a reliable support team so that HRIS-Pakoku users volunteer to use the application continuously because of its convenience and very reliable usability.

The findings in this study are in line with Tukiran's research, Martinus et al (2022), in their research concluded that Behavioral Intention to Use does not have a significant effect on Actual System Use which conducted research on Postgraduate students of Pakuan University Bogor and was strengthened by research from Muliati, Niswah (2019) which examined the Effect of Perceived Usefulness, Perceived Ease Of Use, Attitude Toward Using and Behavior Intention To Use Towards Actual System Use In the Implementation of Enterprise Resource Planning (ERP) System Technology at PT Semen Gresik concluded that the Behavioral Intention To Use had a positive but not significant influence on the Real Use of HRIS-Pakoku Applications applied in Pako Group companies. Similarly, Nasir's research (2013) that the investigation of the use of technology using the Technology Acceptance Model model or TAM reports four elements in the TAM model, namely Perceived Ease of Use and Perceived Usefulness, significantly affect Behavioral Intention to Use and Behavioral Intention to Use significantly affect Actual System Use. It is said that effective use of HRIS improves employee performance. Because Behavioral Intention to Use does not have a significant effect on Intentional Use, the use of HRIS has not been effective in improving employee performance.

**The Direct Influence of Perceived Ease of Use on Behavioral Intention to Use.**

The Effect of Perceived Ease of Use on Behavioral Intention to Use obtained a structural coefficient of 0.329 and P-value = 0.001. Because the P-value < 0.05, and the coefficient marked positive indicate that there is a positive and significant influence between the Perception of Ease of Use and the Behavioral Intention to Use. This means that the higher the Perceived Ease of Use will result in the higher the Behavioral Intention to Use.

In this study, there are 4 indicators of Perceived Ease of Use, namely the system is easy to learn, the system can do easily what the user wants, the HRIS system is easy to remember and the system is easy to operate. Judging from the coefficient value of loading factors / manifest variables / indicators. The results of SEM analysis, respectively X1.1, X1.2, X1.3 and X1.4 have matrix coefficient values of 0.909, 0.886, 0.848 and 0.923. The largest indicator is X1.4 (Easy System Operated). With the company paying attention to the strongest indicator through the need for efforts to improve the ease of operation of the HRIS-Pakoku Application in Pako Group companies so that there are no complaints from users or HRIS-Pakoku users so that they do not experience difficulties in operating the HRIS-Pakoku application, so that there is no perception in users that the HRIS-Pakoku application is difficult to use. It is necessary to socialize how to operate the HRIS-Pakoku application properly, correctly, massively and structurally so that users of the HRIS-Pakoku Application do not find it difficult to operate. In other words, as long as the individual feels that information technology can be beneficial in accomplishing his tasks, then the individual intends to use it regardless of whether information technology is easy or not. People will think that using this technology the work you have will be easily completed. That way people who use technology will have a positive attitude towards the technology which will later affect attitudes towards the behavior itself.

The findings in this study are in line with Tukiran's research, Martinus et al (2022), in their research concluded that Perception of Ease of Use has a significant effect on Behavioral Intention to Use which conducted research on Postgraduate students of Pakuan University Bogor and was reinforced by research by Heryanta, Jufry from Brawijaya University Malang, who conducted research on Gojek users which concluded that Perception of Ease of Use had a significant effect against Behavioral Intent To Use.

**Direct influence of perceived usefulness on behavioral intention of use.**

The Effect of Perceived Usefulness on Behavioral Intention to Use obtained a structural coefficient of 0.574 and P-value = 0.001. Because the P-value < 0.05, and the coefficient marked positive indicate that there is a positive and significant influence between Perceived Usefulness and Behavioral Intention to Use. This means that the higher the Perception of Usefulness will result in the higher the Behavioral Intention to Use.

Hypothesis testing shows that there is a positive and significant direct influence of perceived usefulness on behavioral intention to use. This finding proves that empirically the perception of good usability of HRIS-Pakoku application will have a strong impact on behavioural inten-

tion to use HRIS-Pakoku application in Pako Group companies is getting better and more significant.

In this study, there are 4 indicators of Usability Perception, namely work is completed faster, makes work easier, develops employee performance and increases productivity. Judging from the coefficient value of loading factors / manifest variables / indicators. The results of SEM analysis, respectively X2.1, X2.2, X2.3 and X2.4 have matrix coefficient values of 0.909, 0.886, 0.848 and 0.923. The largest indicator is X2.4 (increasing productivity). With companies paying attention to the strongest indicators through the establishment of the perception of usability of the HRIS-Pakoku application will influence users in using the HRIS-Pakoku application so that users feel that the HRIS-Pakoku application can be useful in completing their tasks and can increase their work productivity. Basically, usability perception is the level to which someone believes that using the system can improve their performance, so that there will be behavioral intentions to use the HRIS-Pakoku application to support their work.

The findings in this study are in line with the research of Tukiran, Martinus et al. (2022), in their research concluded that Perception of Usefulness has a significant effect on Behavioral Intention to Use which conducted research on Postgraduate students of Pakuan University Bogor and was reinforced by research by Heryanta, Jufry from Brawijaya University Malang, who conducted research on Gojek users which concluded that Perceived Usefulness has a significant effect on Behavioral Intention To Use and research from Nursiah (2017) which examines the Effect of Perceived Ease Of Use and Perceived Usefulness on Behavior Intention To Use. The t test also shows that the calculated t value of the perceived usefulness variable is greater than the table t value ( $2.930 > 2.048$ ). These results mean that there is a significant relationship between perceived usefulness and behavioral intention to use. In other words, changing perceived usefulness will directly change the behavior intention to use.

### **The indirect influence of perceived ease of use on actual system use through behavioral intention to use.**

The mediating effect of Behavioral Intention to Use on the relationship between Perceived Ease of Use and Use In fact, a total structural coefficient of 0.023 was obtained and P-value = 0.309. Because the P-value > 0.05, and the coefficient marked positive indicate that there is a positive influence that is not significant between Perceived Ease of Use and Actual System Use through Behavioral Intention to Use. That is, Behavioral Intention to Use cannot be a mediator for the relationship of Perception, Ease of Use and Actual System Use.

Based on the results of the research and discussion above, the findings in this finding which state that there is a positive indirect influence and insignificant perception of ease of use on real use through behavioral intentions to use, It can be explained that the behavioral intention to use will not result in higher actual use of the HRIS-Pakoku application. So that efforts to increase the perception of ease of use that use mediation of behavioral intentions to use cannot be done.

The findings in this study are in line with the research of Tukiran, Martinus et al (2022), in their



research concluded the mediating Effect of Behavioral Intention to Use on the relationship between Perceived Ease of Use and Real Use, showing that there is an insignificant positive influence between Perceived Ease of Use and Actual Use through Behavioral Intent to Use. This means that Behavioral Intention to Use cannot be a mediator for the relationship between Perception, Ease of Use and Use conducting research on Postgraduate students of Pakuan University Bogor.

### **The indirect influence of perceived usefulness on use actually goes through the behavioral intention of use.**

The mediating effect of Behavioral Intention to Use on the relationship between Perception of Usefulness and Use In fact, a total structural coefficient of 0.040 and P-value = 0.192 was obtained. Because the P-value > 0.05, and the coefficient marked positive indicate that there is a positive influence that is not significant between Perception of Usefulness and Actual System Use through Behavioral Intention to Use. That is, Behavioral Intention to Use cannot be a mediator for the relationship of Perception, Usefulness, and Actual System Use.

Based on the results of the research and discussion above, the findings in this finding that there is a positive indirect influence and insignificant perception of usefulness on actual system use through behavioral intentions to use, It can be explained that the behavioral intention to use will not result in higher actual system use of the HRIS-Pakoku application. So that efforts to increase the perception of usefulness that uses the mediation of behavioral intentions to use cannot be done.

The findings in this study are in line with the research of Tukiran, Martinus et al. (2022), in their research concluded the mediated effect of Behavioral Intention to Use on the relationship between Perception of Usefulness and Actual System Use, showing that there is an insignificant positive influence between Perception of Usefulness and Actual System Use through Behavioral Intention to Use. This means that Behavioral Intention to Use cannot be a mediator for the relationship between Perception of Usefulness and Use conducting research on Graduate students of Pakuan University Bogor.

## **4. CONCLUSIONS AND SUGGESTIONS**

Based on the results of research and discussion on Efforts to Increase the Use of Human Resource Information System (HRIS) Using Technology Acceptance Model (TAM Model)". Empirical Studies in the Pako Group carried out in Pako Group companies can be concluded, namely: 1) There is a positive and significant influence of Perceived Ease of Use on Actual System Use; 2) There is a positive and significant influence between Perceived Usability on Actual System Use; 3) There is no significant influence between the Behavioral Intention to Use and the Actual System Use; 4) There is a positive and significant influence between the Perception of Ease of Use and the Behavioral Intention to Use; 5) There is a positive and significant influence between the Perception of Usefulness on the Behavioral Intention to Use; 6) There is a positive and insignificant influence between the Perception of Ease of Use and Actual System Use through the Behavioral Intention to Use; and 7) There is a positive and insignificant

influence between Perceived Usefulness and Real Use through Behavioral Intention to Use.

This research is still limited to Pako Group employees who are automotive component manufacturing companies so that the conclusions of the study are limited to apply only to the population of this study. A wider scope is needed so that the results of this study have a much wider impact, for example expanding the population coverage area or adding respondents from non-automotive component manufacturing companies and automotive manufacturing companies.

The HRIS-Pakoku application, which is actually used for managing employee data and information related to employee time and facility management, seems to be unsatisfactory to its users and has an unpleasant impact on its users. The number of complaints causes user dissatisfaction with the performance of the Pakoku HRIS Application, causing compulsion in using the application and only aborting obligations. This needs to be observed by Management by improving the performance of the HRIS-Pakoku Application so that the use of the Application increases. What needs to be built and prepared is a reputable HRIS-Pakoku application system. The absence of overlap with existing rules. Then the need for better support from the IT team must be adequate and periodic system reviews related to the obstacles faced and complaints from the user must be followed up quickly and properly from the HRIS user.

Based on the results of this study, the results of previous research and theory. It is evident that the perceived ease of use contributes significantly to increasing the actual use of the HRIS-Pakoku application. The better the perception of ease of use of the HRIS-Pakoku Application, the actual use of the HRIS-Pakoku Application is predicted to also increase. Vice versa, the lower the perception of ease of use of the HRIS-Pakoku Application, it is predicted that it will also decrease. The implication in the future is to monitor and improve continuously related to the strongest indicator that has a significant contribution to the perception of ease of use, namely the existence of a system that is easy to operate.

The need for efforts to improve the ease of operation of the HRIS-Pakoku Application in Pako Group companies so that complaints do not arise from HRIS-Pakoku users regarding the approval of personnel transactions. In addition, it is necessary to provide regular refreshment related to explanations and updates on how to operate the HRIS-Pakoku application properly, true, massive and structured so that users feel that the HRIS-Pakoku Application is easy to learn, the System can do easily what the user wants, the System is easy to remember and the most important thing is that the system can be easily operated.

Based on the results of this study, it is proven that usability perception contributes significantly in increasing the real use of HRIS-Pakoku applications. The better the perception of usability, the actual system use of the HRIS-Pakoku Application is predicted to also increase. Vice versa, the lower the perception of usefulness hence the actual system use of the HRIS-Pakoku Application is predicted to also decline. The implication in the future is to monitor and improve continuously related to the strongest indicators that have a significant contribution to the perception of usefulness, namely: The HRIS-Pakoku application is able to increase productivity.

The need for monitoring related to satisfaction from users in using the HRIS-Pakoku Application related to employee transaction approvals include.

Based on the results of this study, the results of previous research and theory. It is therefore evident that the behavioral intention to use does not make a significant direct contribution in increasing the actual system use of the HRIS-Pakoku application. The higher the behavioral intention of using the HRIS-Pakoku application, the actual system use of the HRIS-Pakoku application is predicted not to increase. Vice versa, the lower the behavioral intention to use the HRIS-Pakoku application, the actual system use of the HRIS-Pakoku application is predicted to also not necessarily decrease. Behavioral intention to use is also incapable of mediating perceptions of ease of use and perceptions of usefulness To cultivate a direct intention to use the HRIS-Pakoku Application requires tremendous effort, moreover the use of the HRIS-Pakoku Application is mandatory in Pako Group companies.

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