Analysis Usability System Web E-Office at PT Pelabuhan Indonesia II Using Heuristic Evaluation (Case Study of PT Pelabuhan Palembang)

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Abstract

PT Pelabuhan Indonesia II (Persero) is a State-Owned Enterprise engaged in logistics in port management and development. At PT Pelabuhan Indonesia II Palembang branch there is an E-OFFICE web that can be accessed through the website. The E-OFFICE is a website system that can only be accessed by employees and is used to facilitate correspondence activities within PT Pelabuhan Indonesia II Palembang branch. The purpose of this study was to determine the level usability system of the E-OFFICE web, whether it was easy to learn, efficient, when users interacted it was easy to remember procedures/steps without making many mistakes, and finally whether users felt comfortable operating the website. This study uses a heuristic evaluation method that contains ten variables, namely Visibility of system status, Match between system and the real world, User control and freedom, Consistency and standard, Error prevention, Recognition rather than recall, Flexibility and efficiency of use, Aesthetic and minimalist, Help users recognize, Diagnose and recover from errors,Help and documentation. The population of this research is employees, using questionnaire data collection techniques and interviews with samples. This research can be used as input for development in increasing the usability value.

I. Introduction

Letters are an important communication tool in a company. Every incoming letter received and outgoing letter sent by the company is not only a means of communication but also as authentic evidence. Letters are said to be pieces of paper written in the author's personal name, or on behalf of his position in a company, which is intended for a specific address in containing a communication material. Letter communication materials are information that includes decisions, statements, notifications, and requests.

Every institution, whether private or government, definitely needs a unit that manages everything related to administrative activities which will ultimately relate to archival activities such as archiving incoming and outgoing letters.

PT Pelabuhan Indonesia II (Persero) Palembang branch is one of the State-Owned Enterprises that utilizes the E-OFFICE web system as a correspondence management system.

Because before the existence of this web system the company experienced several problems, including the slow process of sending letters, difficulties in monitoring existing letters and dispositions, requiring a lot of budget for paper and printer ink, and requiring a lot of space for mail storage. The existence of the company can grow and be sustainable and the company gets a positive image from the wider community (Saleh, 2019).The increase in the value of the company's shares, the higher the company value, the higher it will be (Katharina, 2021). In the current economic development, manufacturing companies are required to be able to compete in the industrial world (Afiezan, 2020).

(E . The objectives of this research are as follows: 1) To evaluate the usability of the e-office web using heuristic evaluation. 2) Knowing the problems and difficulties of users in using the web e-office system. This research is expected to provide benefits for the company to be used as a reference in improving website services so that users are more comfortable using the website.

II. Research Method

This research uses descriptive quantitative methods. According to Arikunto (2019), the descriptive method is an investigation of a condition, situation, or other event, then the results will be presented in the form of a research report. support in data analysis. The location of the research conducted by the author was carried out at PT Pelabuhan Indonesia II (Persero) Palembang Branch having its address at JL Belinyu No. 1 New Boom Palembang. And the time of research in data collection is from December 2021 to January 2022.

III. Discussion

3.1 Respondents Results

From the total number of questionnaires distributed in the study, there were 79 questionnaires. The distribution of this questionnaire is carried out directly by meeting Pelindo employees and giving the questionnaire to be filled in by employees who use the *E-office web* at Pelindo after that waiting for respondents when filling out the questionnaire to collect the completed questionnaires.

The following is the number of questionnaire data distributed and can be seen in the following table.

Table 1. Details of Respondent's Questionnaire

Information	Number of
Questionnaires distributed	79
Questionnaires Returned	Questionnaires 79 Questionnaires
Disappointed Questionnaires	0 Questionnaires

Source: Data processed by yourself

In table 1. Details of the respondent's questionnaires can be seen, namely the questionnaires distributed and the number of returned questionnaires, namely 79 questionnaires. So, the number of questionnaires that can be processed is 79 questionnaires.

3.2 Characteristics of Respondents

To find out the usefulness of the E-office web system at PT Pelabuhan Indonesia II Palembang branch, that is by calculating the results of the questionnaire that has been distributed to Pelindo employees as many as 79 people. Respondents were asked to provide responses to the statements that the author had given to the questionnaire.

The author includes name, address, gender, position, and age.

Table 2. Characteristics of Respondents Based on Addresses

Addresses by sub	Total	Percentage
of Ilir Timur 1	2	2.5 %
Ilir Timur 2	18	22.8 %
Ilir Barat 1	12	15.2 %
Ilir Barat 2	3	3,8 %
Across Ulu	14	17,8 %
Plaju	3	3,8 %
Alang-Aalang Width	6	7,6 %
kalidoni	9	11.4 %
Sematang Borang	2	2, 5 %
Sukarami	3	3,8 %
Sako	5	6,3 %
KemunIng	2	2,5 %
Total	**79**	**100 %**

Source: Primary Data Processed, 2022

In Figure 2 the characteristics of respondents are based on addresses consisting of 99 samples and taken to be 79 respondents. In the table, it can be seen that employees who live in the sub-districts of Ilir Timur 1, Kemuning and Semtang Borang are 2 or 2.5% each, Ilir Timur 2 is 18 or 22.8%, Ilir Barat 1 is 12 or 15.2 Ilir Barat 2, Plaju, and Sukarami sub-districts each amounted to 3 or 3.8%, across Ulu amounted to 14 or 17.8%, wide reeds amounted to 6 or 7.6%, Kalidoni amounted to 9 or 11.4% , Sako amounted to 5 or 6.3%. The conclusion of the characteristic research based on this address is that it can be seen that the majority of employees living in the Ilir Timur 2 sub-district are far more numerous, while the employees living in the Ilir Timur1 sub-district, Kemuning and Semang Borang are the least.

a. Respondents Based on Gender

At PT Pelabuhan Indonesia II (Persero) Palembang branch in the questionnaire the authors include gender. From the research that has been done, the description of the characteristics of respondents based on gender in this study can be seen in the following table:

Table 3. Characteristics of Respondents Based on Gender

Gender	Total	Percentage
Male	63	79.7 %
Female	16	20.5%
Total	**79**	**100 %**

Based on table 3 above, it can be seen that the characteristics of respondents based on gender are gender the gender of male respondents was 63 or 79.7% while the sex of female respondents was 16 or 20.5%.

b. Respondents Based on Position

In the questionnaire that has been distributed to employees of PT Pelabuhan Indonesia II (Persero) Palembang branch in the questionnaire the author also includes the position of the employee. And based on the research that has been done, the description of the characteristics of respondents based on positions in this study can be seen in the following table:

Table 4. Characteristics of by Respondents

Position	Total	Percentage
of Public Relations Staff	1	1.3%
Input Data	1	1.3%
Officer	1	1,3 %
Tno Information System	1	1,3 %
General	1	1,3 %
Eos	2	2,5 %
Tno Budget And Accounting	1	1,3 %
Treasury Spv In Taxation	1	1,3 %
Commercial Spv	1	1,3 %
Public Relations And Customer Service	1	1,3 %
Property Spv	1	1,3 %
Administrator	1	1,3 %
General Manager	1	1,3 %
Information System Supervisor	1	1,3 %
Business Compliance Tno	8	10.1 %
Commercial	1	1, 3 %
Tno Commercial	3	3,8 %
Junior Assistant Officer Charges for Loading and Unloading Equipment	1	1,3 %

With Operations & Engineering	1	1,3 %
Pandu Bandar	6	7,6 %
With Finance & HR	1	1,3 %
Human Resources Supervisor	1	1,3 %
Department Head Pmo Cluster III	1	1,3 %
Pandu Laut	13	16,4 %
Junior Assistant Officer Planning, Peng. & General Operations	1	1,3 %
Commercial Manager	1	1,3 %
Property Manager	1	1,3 %
Senior Assistant Officer Planning & Operations Guidance	1	1,3 %
Junior Property Administrator	1	1,3 %
Planning, Control & General Operations Supervisor	1	1,3 %
Planning, Control & General Operations	1	1,3 %
Finance Manager	1	1,3 %
Budget & Accounting Supervisor	1	1,3 %
Senior Assistant Officer Budgeting & Accounting	1	1,3 %
Budget & Accounting Administrator	1	1, 3 %
Supervisor of Treasury & Taxation	1	1,3 %
Senior Assistant Officer of Treasury & Taxation	1	1,3 %
Junior Assistant Officer of Treasury & Taxation	2	2,5 %
Manager of Human Resources, General & KBL	1	1,3 %
Junior Assistant Officer General & Kbl+G91	1	1,3 %
General Supervisor & Kbl	1	1,3 %
General Administrator & Kbl	1	1,3 %
With Business Compliance	1	1,3 %
Legal & Insurance Claims Manager	1	1,3 %
Risk Management & Control Manager Quality	1	1,3 %
Risk Management & Quality Control Supervisor	1	1,3 %

Hsse Manager	1	1,3 %
Environmental Supervisor gan	1	1,3 %
Supervisor K3, Pmk & Pfso	1	1,3 %
Procurement Manager & Internal Control	1	1,3 %
Junior Procurement Officer	1	1,3 %
Total	**79**	**100 %**

Source: *Primary Data Processed, 2022*

According to table 4 Characteristics of respondents based on positions consisting of 79 respondents, employee positions at PT Pelabuhan Indonesia II Palembang Branch are divided into 51 sections, namely Public Relations Staff, Data Input, Officer, Information Systems Officer,Jao, Budget and Accounting, Treasury Spv in Taxation, Commercial Spv, Public Relations and Customer Service, Property Spv, Administrator, General Manager,Information Systems Supervisor General , Commercial Director, Junior Assistant Officer for Loading and Unloading,Operations & Engineering, Finance & HR, Department Head Pmo Cluster III, Junior Assistant Officer Planning, Peng. & General Operations, Commercial,Property Manager, Senior Assistant Officer Planning & Operations Guidance,Junior Property Administrator, Planning Supervisor, General Control & Operations, Planning Manager, General Operations & Control, Finance Manager,Budget & Accounting Supervisor, Senior Assistant Budget Officer & Accounting, Budget & Accounting Administrator,Treasury & Taxation Supervisor, Senior Assistant Officer Treasury & Taxation, Human Resources Manager, General & KBL, Junior Assistant Officer General & KBL+G91,General & KBL Supervisor , General &, Administrator KBL Compliance Business, Legal & Insurance Claims, Manager, Supervisor, Hsse Manager, Environmental, K3 Supervisor, Pmk & Pfso, Procurement Manager & Internal Control, Junior Officer Procurement each position is 1 people or 1.3% , Eos amounted to 2 people or 2.5% Tno K Business compliance as many as 8 people or 10.1%, Commercial Tno as many as 3 or 3.8%,Pandu Bandar as many as 6 people or 7.6%, Sea Pandu as many as 13 people or 16.4%, Junior Assistant Officer Treasury & Taxation totaling 2 people or 2.5%.

c. Respondents Based on Age

Respondents' Age was divided into several groups of 79 respondents, including 17-25 years, 26-35 years, 36-45 years and >45 years. From the research that has been done, the description of the characteristics of respondents based on age in this study can be seen in the following table:

Table 5. Characteristics of Respondents Based on Age

Age	Total	Percentage
17-25 Years	5	6.3%
26-35 years	50	63.3 %
36-45 years	15	18.10%
Over 45 years	9	11.4%
Total	**79**	**100 %**

Source: Processed Primary Data, 2022

Based on table 5 above, it can be seen that the characteristics of respondents are based on age, namely the number of employees of PT Pelabuhan Indonesia II (Persero)

Palembang Branch, the majority of which are employees aged 26-35 years or as much as 63.3%. While the number of employees of PT Pelabuhan Indonesia II (Persero) Palembang Branch, the majority of which are at least 17-25 years old or 6.3%.

3.3 Research Instrument Test
a. Test Validity

Test Validity is useful for measuring whether or not a questionnaire is valid. A questionnaire is declared valid if the acquisition value of R calculated is greater than R table and conversely a questionnaire is declared invalid if the acquisition value of R calculated is less than R table.

The following is a table for calculating the validity test using the spss application, namely:

Table 6. Validity Test

Variable	List Questions	R Count	R table (a = 5%)	Description
Visibility of system status	Question 1	0.890 0.221	Valid	Question
	2	0.908	0.221	Valid
Match between system and the real world	Question 3	0.899	0.221	Valid
	Question 4	0.910	0.221	Valid
User control and freedom	Question 5	0.883 0.221	Valid	Question
	6	0.849 0.221	Valid	Consistency
and standard (consistency and standards)	7	0.918 0.221	Valid	Question
	8	0.916	0.221	Valid
*Error prevention*Question	Question 9	0.888	0.221	Valid
	Question 10	0.857 0.221	Valid	Recognition
rather than recall (recognition rather than recall)	Question 11	0.833 0.221	Valid	Question
	12	0.872	0.221	Valid
Flexibility and efficiency of use	Question 13	0.938	0.221	Valid
	Question 14	0.924 0.221	Valid	Aesthetics

	Question 15	0.935	0.221	Valid
and minimalist design	Question 16	0.937	0.221	Valid
Help users recognize, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors)	Question 17	0.878	0.221	Valid
	Question 18	0.851 0.221	Valid	Help
and documentation	Question 19	0.892	0.221	Valid
	Question 20	0.855	0.221	Valid
Usability	Question 21	0.752 0.221	Processed	Valid
	Question 22	0.736 0.221	Valid	Question
	23	0.768	0.221	Valid
	Question 24	0.708 0.221 Valid Question 25 0.775 0.221	Valid	Source
	:	Primary	Based	Data

The table above to test the validity of the authors distributed questionnaires to 79 employees. The validity test was carried out by comparing the calculated r value with the r table using the *degree of freedom (df) formula.* Determining r table, that is with the formula: df = n-2

The value of the r table can be obtained through *Pearson's r product moment* with a significant level value of 5% or 0.05.

So df = 79 -2 = 77, then r table = 0.221.

Because it is known that the result of the r table value is 0.221 and seen in the table above the calculated r value is greater than r table, then each question used in each variable is declared valid.

b. Reliability

The *reliability* test is a test that uses the *Alphacronbach* to test the reliability of a questionnaire with the help of the SPSS program.

A questionnaire is said to be *reliable* if the total *Cronbach alpha* is greater than 0.60.

The following is a table for calculating the *reliability* using the SPSS application, namely:

Table 7. Reliabity Test

Variable	Cronbach Alpha	Value Alpha	Results
Visibility of system status (visibility of system status)	0.762	0.60	**Reliable**
Matching between the system and the real world (match between system and the real world)	0.777	0.60	**Reliable**
User control and freedom	0.663	0.60	**Reliable**
Consistency and standards	0.811	0.60	**Reliable**
Error prevention	0.683	0.60	**Reliable**
introduction rather than remembering (recognition rather than recall)	0.630	0.60	**Reliable**
Flexibility and efficiency of use	0.844	0.60	**Reliable**
Aesthetic and minimalist design (aesthetic and minimalist design)	0.863	0.60	**Reliable**
Helping users identify, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors)	0.669	0.60	**Reliable**
Help and documentation (Help and documentation)	0.696	0.60	**Reliable**
Usability	0.798	0.60	**Reliable**

Source: Processed Primary Data, 2022

Based on the table above, the results of the questionnaire data reliability test based on 79 employees are reliable because the *Cronbach alpha* is greater than 60.

3.4 Multiple Linear Analysis Multiple

Linear analysis is used to determine whether there is an influence/relationship of the independent variable (x) on the dependent variable (Y). The 10 variables in the *heuristic evaluation* are independent variables (free) while the usability level (Y) is used as the dependent variable (bound).

So multiple linear regression analysis is used to predict whether there is an effect of the visibility *of system status*(X1) variable, the match between the system and the real world (X2), user control and freedom (*usercontrol and freedom*)(X3), consistency and standards*(*X4), error prevention (X5),*recognition rather than recall* (X6), flexibility and efficiency of use (flexibility and efficiency of use)(X7), Aesthetics and minimalist design (*aesthetic and minimalist design*)(X8),help users recognize, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors)(X9), Help and documentation (Help and

documentation)(X10) on the usability level (Y) at PT Pelabuhan Indonesia II(Persero) Palembang Branch.

The results of multiple linear regression analysis can be seen in the following table:

Table 8. Test Results of Multiple Linear Analysis

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2,239	0.798		2.805	0.007
	Visibility of system status (X1)	-0.117	0.087	-0.067	-1.353	0.181
	Match between system and the real world (X2)	0.046	0.076	0.030	0.596	0.553
	User control and freedom (User control and freedom)(X3)	-0.034	-0.017	-0.338	0.737	0.101
	Consistency and standards (X4)	-0.116	0.116 - 0.044	-0.995	0.323	Error
	prevention (X5)	0.204	0.105	0.106	1.941	0.056
	Introduction compared to remembering (recognition rather than recall)(X6)	-0.084	0.094	-0.039	-0.890	0.377
	Flexibility and efficiency of use (X7)	-0.062	0.073	-0.044	-0.859	0.393
	Aesthetic and minimalist design)(X8)	0.918	0.075	0.536	12,181	0.000
	Help users recognize, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors)(X9)	0.994	Help	0.000	0.119 0.425 8,379	and
	documentation on)(X10)	0.397	0.088	0.000	0.204 4.507	a

. Dependent Variable: Usability(Y)

Source: Processed Primary Data, 2022

Based on the results of the table analysis of the questionnaire data above using SPSS, the following multiple linear regression formula can be obtained:

Y' = a + b1x1 + b2x2 + b3x3 + b4x4 + b5x5 + b6x6 + b7x7 + b8x8 + b9x9 + b10x10
Y' = 2,239 +(-0,117) X1 + (0.046) X2 + (-0.034)X3 + (-0.116)X4 + (0.204)X5 +(-0.084)X6 + (-0.062)X7 + (0.918)X8 + (0.994)X9 + (0.397)X10

From the multiple linear regression equation above it can be concluded as follows:
  a. The value of constant (a) is 2.239, meaning that if the independent variable (independent) is 0, then the dependent variable (bound) which is 2,239. So in this study if the variables are visibility of system status (*visibility of system status*), Match between system and the real world (*match between system and*

the real world), User control and freedom (*user control and freedom*), Consistency and standards (*consistency and standards*), Error prevention (*error prevention*), Pen recognition*rather than recall* , flexibility and efficiency of use (*flexibility and efficiency of use*), aesthetics and minimalist design (*aesthetic and minimalist design*), Help users recognize, diagnose, and correct errors (*Help user recognize, diagnose, and recover from errors*), Help and documentation (*Help and documentation*) is a constant value = 0, then the constant value for the website usability level at PT Pelabuhan Indonesia II (Persero) Palembang Branch is 2,239.

b. The value of the regression coefficient of the visibility of *the system is* -0.117 indicating a negative value so it means that if the value is .visibility of the system status variable (*visibility of system status*) is getting better, then the website usability level value at PT Pelabuhan Indonesia II (Persero) Palembang Branch will decrease.

c. The regression coefficient value of the matching variable between the system and the real world (*match between the system and the real world*) is 0.046 indicating a positive value so it means that if the value of the matching variable between the system and the real world (*match between system and the real world*) is getting better, then the value of the website usability level at PT Pelabuhan Indonesia II (Persero) Palembang Branch will increase.

d. The regression coefficient value of the user control and freedom variable (*control and freedom*) is -0.034 indicating a negative value so it means that if the value of the user control and freedom variable*User* is getting better, then the website usability level value at PT Pelabuhan Indonesia II (Persero) Palembang Branch will decline.

e. The regression coefficient value for the consistency and standards variable*is*-0.116, indicating a negative value so it means that if the consistency and standards variable value is getting better, then the website usability level value at PT Pelabuhan Indonesia II (Persero) The Palembang branch will decline.

f. The regression coefficient value of the error prevention variable (*error prevention*) is 0.204, indicating a positive value so it means that if the error *prevention value* is getting better, then the website usability level value at PT Pelabuhan Indonesia II (Persero) Palembang Branch will increase.

g. The regression coefficient value of the recognition *rather than recall* is -0.084 indicating a negative value so it means that if the recognition *rather than recall* value is getting better, then the website usability level value at PT Pelabuhan Indonesia II (Persero)) Palembang branch will decrease.

h. The regression coefficient value of the flexibility and efficiency *of use is* -0.062, indicating a negative value so it means that if the flexibility and efficiency *of use is* getting better, then the *website usability level* at PT Pelabuhan Indonesia II (Persero) Palembang Branch will decline.

i. The regression coefficient value of the aesthetic and minimalist design variable (*and minimalist design*) is 0.918 indicating a positive value so it means that if the aesthetic and minimalist design variable value aesthetic is getting better, then the *website usability* at PT Pelabuhan Indonesia II (Persero) Palembang branch will increase .

j. The value of the variable regression coefficient to help users recognize, diagnose, and correct errors (*Help user recognize, diagnose, and recover from errors*) is 0.994 indicating a positive value so it means that if the variable value helps users recognize, diagnose, and correct errors (*Help users recognize,*

diagnose, and recover from errors, the value of *the website usability level* at PT Pelabuhan Indonesia II (Persero) Palembang Branch will increase.

k. The regression coefficient value of the help and documentation variable (*Help and documentation*) is 0.397 indicating a positive value so it means that if the value of the assistance and documentation (*Help and documentation*) variable is getting better, then the website usability level value at PT Pelabuhan Indonesia II (Persero) Branch Palembang will increase.

3.5 Partial Test (T Test)

A variable has a partial/unknown effect if: t count > t table and the error probability/significant value is less than 0.05 then Ho is rejected and Ha is accepted, meaning that there is indeed a significant effect between the two tested variables. t count < t table and the probability value of error/significant is more than 0.05, then Ho is accepted and Ha is rejected, meaning that there is no significant effect between the two variables tested.

Determining the t table by using the formula:
t table = t (a/2 : n(amount of data)-k(number of independent variables) -1)
a = 5% = t (0.05/2: 79-10-1)
= 0.025 : 68
= 1.996.

The results of the analysis of the T Test (Partial) can be seen in the following table:

Table 9. T Test Results

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,239	0.798		2.805	0.007
	Visibility of system status (X1)	-0.117	0.087	-0.067	-1.353	0.181
	Match between system and the real world (X2)	0.046	0.076	0.030	0.596	0.553
	User control and freedom (User control and freedom)(X3)	-0.034	-0.017	-0.338	0.737	0.101
	Consistency and standards (X4)	-0.116	0.116 - 0.044	-0.995	0.323	Error
	prevention (X5)	0.204	0.105	0.106	1.941	0.056
	Introduction compared to remembering (recognition rather than recall)(X6)	-0.084	0.094	-0.039	-0.890	0.377
	Flexibility and efficiency of use (X7)	-0.062	0.073	-0.044	-0.859	0.393
	Aesthetic and minimalist design)(X8)	0.918	0.075	0.536	12,181	0.000

Help users recognize, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors)(X9)	0.994	Help	0.000	0.119 0.425 8,379		and
documentation on)(X10)	0.397	0.088	0.000	0.204 4.507		a

. Dependent Variable: Usability(Y)

Source: Primary Data Processed, 2022

Based on table 9 the results of the T test above can be concluded as follows:

1. **The effect of visibility** *of system status level usability*

According to table 4.9 above shows that the significance value of the visibility variable system status (*visibility of system status*)(X1) to usability level (Y) is 0.181 > 0.05 and the t value is -1.353 < t table value 1.996, then Ho1 is accepted and Ha1 is rejected, meaning there is no partial effect between visibility system status (*visibility of system status*) on *website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

2. **Effect of matching between the system and the real world (***match between system and the real world* **) on** *usability*

According to table 4.9 above, it shows that the significance value of the matching variable between the system and the real world (*match between system and the real world*) (X2) level *usability* (Y) is 0.553 > 0.05 and the t value is 0.596 < the t table value is 1.996, then Ho2 is accepted and Ha2 is rejected, meaning that there is no partial effect between the match between the system and the real world (*match between system and the real world*) on *the website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

1. **The effect of user control and freedom (***User control and freedom***) on the** *usability*

In table 4.9 above shows that the significance value of the user control and freedom variable (*User control and freedom*)((X3) on the *usability* (Y) is 0.737 > 0.05 and t value - 0.338 < t table value 1.996, then Ho3 is accepted and Ha3 is rejected, meaning that there is no partial influence of user control and freedom variables on website *usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch The

2. **effect of consistency and standards (***consistency and standards***) level** *usability*

According to table 4.9 above, it shows that the significance value of the consistency and standards variable*(X4)* to the *usability* (Y) is 0.323 > 0.05 and the t value - 0.995 < t table value 1.996, then Ho4 is accepted. and Ha4 is rejected, meaning that there is no partial effect between consistency and standards on *website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

3. **Effect of error prevention (***error prevention***) level** *usability*

prevention variable error(X5) to the *usability* (Y) is 0.056 > 0.05 and the t value is 1.941 < t table value is 1.996, then Ho5 is accepted and Ha5 is rejected. , meaning that there is no partial effect between error *prevention on website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

4. **The effect of recognition *rather than recall* level *usability***

    According to table 4.9 above, it shows that the significance value of the recognition *rather than recall* **)** (X6) to the *usability* (Y) is 0.377 > 0.05 and the t value is -0.890 < t table value 1.996, then Ho6 is accepted and Ha6 is rejected, meaning that there is no partial effect between recognition *rather than recall* **)** on *website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

5. **The effect of flexibility and efficiency of use (*flexibility and efficiency* of *use*) on *usability***

    According to table 4.9 above shows that the significance value of flexibility *and efficiency* of *use*(X7) variable on *usability* (Y) is 0.393 > 0.05 and the t value -0.859 < t table value 1.996, then Ho7 is accepted and Ha7 is rejected, meaning that there is no partial influence between the flexibility and efficiency of use variables on the *website usability significantly* at PT Pelabuhan Indonesia II (Persero).) Palembang Branch.

6. **The influence of aesthetics and minimalist design (*aesthetic and minimalist design*) on the *usability***

    According to table 4.9 above, it shows that the significance value of the aesthetic and *minimalist design*((X8) variable on the usability level *Y*) is 0.000 < 0.05 and the value t count 12,181 > t table value 1,996 then Ho8 is rejected and Ha8 is accepted, meaning that there is a partial influence between aesthetic and minimalist design variables (*aesthetic and minimalist design*) on *website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

7. **The effect of helping users recognize, diagnose, and correct errors (*Help user recognize, diagnose, and recover from errors*) on the *usability***

    According to table 4.9 above shows that the significance value of the variable helps users recognize, diagnose, and correct errors (*Help user recognize, diagnose, and recover from errors*) **(**X9) to the *usability* (Y) is 0.000 < 0.05 and the t value is 8.379 > the t table value is 1.996 then Ho9 is rejected and Ha9 is accepted, meaning that there is a partial influence between the variables helping users identify, diagnose, and fix errors (*Help user recognize, diagnose, and recover from errors*) on *the website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

8. **Influence Help and documentation (*Help and documentation*) on the *usability***

    According to table 4.9 above, it shows that the significance value of the help and documentation variable (*Help and documentation*) (X10) to the *usability* (Y) is 0.000 <0.05 and the t-count value is 4.507 > the t-table value is 1.996 then Ho10 is rejected and Ha10 is accepted, meaning there is a partial influence between the help and documentation variables (*Help and documentation*) on *the website usability* significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

3.6 Simultaneous Test (F test)

    The F (simultaneous) test is used to determine the relationship between the *independent* variable *dependent* together (*simultaneously*) which means whether there is a joint influence or not the independent variable (X), namely the visibility variable system status (visibility of system status), Match between system and the real world (match between system and the real world), User control and freedom (User control and freedom), Consistency and standards, Error prevention), Recognition rather than recall (recognition

rather than recall), Flexibility and efficiency of use (flexibility and efficiency of use), Aesthetics and minimalist design (aesthetic and minimalist design), Helping users recognize, diagnose, and correct errors (*help user recognize, diagnose , and recover from errors*), Help and documentation (*help and documentation*) on the dependent variable, namely usability level (Y) *webs item* at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

A variable has a simultaneous/no effect, it is known by means if:

F count > F table and the probability of error/significant value is less than 0.05 then Ho is rejected and Ha is accepted, meaning that there is a significant effect between the two variables being tested.

F count < F table and the probability value of error/significance is more than 0.05, then Ho is accepted and Ha is rejected, meaning that there is no significant effect between the two variables tested.

Determining F table with the formula:
df(n1) = k-1 and df(n2) = nk
Description:
n= number of respondents
k = number of independent and dependent variables

df(n1) = k-1 and df(n2) = nk
=(11-1) : (79-10)
= (10) : (69)
= (10 : 69)
= 1.97
F value table = 1.97

The results of the analysis of the F test (simultaneous) can be seen in the following table this:

Table 10. Results of F Test Analysis

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	501,095	10	50,110	97,198	000[b]
	Residual	35,057	68	0,516		
	Total	536,152	78			
a. Dependent Variable: Usability(Y)						
b. Predictors: (Constant), Help and documentation (Help and documentation)(X10), Flexibility and efficiency of use (X7), Aesthetics and minimalist design (X8), Recognition versus remembering (recognition rather than recall)(X6), X4.2, Help users recognize, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors)(X9), Visibility of system status (X1), Matching between the system and the real world (match between system and the real world)(X2), User control and freedom (User control and freedom)(X3), Error prevention (X5)						

Source: Primary data processed, 2022

Based on table 10 the results of the F test above can be concluded as follows:

According to table 4.10 above shows that the calculated F value is 97,198 with the F table value of 1.97 so the calculated F value > F table or 97.198 > 1.97, and the level of

significance variable l is 0.000 < 0.05, it can be concluded that the independent variable (free) is the variable Visibility of the system status (*visibility of system status*) (X1), Match between the system and the real world (*match between system and the real world*) (X2), User control and freedom (X3), Consistency and standards*(X4),Error prevention*(X5), Recognition*rather than recall* (X6), Flexibility and efficiency of use (*flexibility and efficiency of use*)(X7), Aesthetics and minimalist design (*aesthetic and minimalist design*)(X8), Helping users recognize, diagnose, and fix errors (*Help user recognize, diagnose, and recover from errors*)(X9), Help and documentation*(X10)*, simultaneously prove a significant effect on the dependent variable, namely the *usability* (Y) at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

IV. Conclusion

The results of research that have been carried out on the Usability Analysis of the E-Office Web System at Pt Pelabuhan Indonesia II Using the Heuristic Evaluation Method (Case Study of PT Pelabuhan Palembang). It can be concluded that:

1. Based on the results of the T test analysis, it can be seen that the visibility of system status variables, the matching between the system and the real world variables, the user control and freedom variables), consistency and standards variables (consistency and standards), error prevention variables (error prevention),recognition rather than recall), variablesefficiency of usenamely Ho is accepted and Ha is rejected, meaning that there is no partial effect on the website usability significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

4 While the aesthetic and minimalist design variables (aesthetic and minimalist design), the variables help users recognize, diagnose, and correct errors (Help user recognize, diagnose, and recover from errors), the help and documentation variables (Help and documentation) are Ho rejected and Ha accepted, meaning that there is a partial influence on the website usability significantly at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

2. Based on the results of the F test analysis, it can be seen that the calculated F value is 97.198 and the F table value is 1.97 so the calculated F value > F table or 97.198 > 1.97, and the variable significance level is 0.000 < 0.05, then it means that Ho is rejected. and Ha is accepted means simultaneously proving that there is a significant effect between the visibilityof, the match between the system and the real world (match between the system and the real world), user control and freedom (User control and freedom), consistency and standards (consistency and standards), error prevention (error prevention), recognition rather than recall (recognition rather than recall), flexibility and efficiency of use (flexibility and efficiency of use), aesthetics and minimalist design (aesthetic and minimalist design), helps users recognize, diagnose, and fix errors (Help user recognize, diagnose, and recover from errors), help and documentation (Help and documentation level variable usability (Y) at PT Pelabuhan Indonesia II (Persero) Palembang Branch.

3. This study aims to evaluate the usability of the e-office web and provide benefits for the company to be used as a reference in improving website services so that users are more comfortable using the website using the heuristic evaluation

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