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# The Influence of E-office Utilization on the Paperless Embodiment in the South Sulawesi Provincial General Election Supervisory Agency

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**ABSTRACT**

This study aims to find out the overview of the use of e-office the description of the realization of paperless, and the influence of the use of e-office on the Paperless Embodiment. This study uses a quantitative approach with an associative type of research. In order to achieve the objectives of this research, data collection techniques were used including observation, questionnaires, and documentation. The population in this study is 52 employees with a total population of 48 employees with a sampling technique, namely using the Issac and Michael tables. The research data collected was then processed using descriptive and inferential statistical analysis to determine the Utilization of E-office for the Realization of Paperless in the South Sulawesi Provincial General Election Supervisory Agency. The results of the study show that the indicators used in each variable are concluded that the influence of the use of e-office is in the very good category and the realization of paperless is in the very good category. Based on the results of the product moment correlation analysis, the relationship between variables is very strong. Based on the results of a simple linear regression analysis, it was concluded that there was a significant unidirectional influence between the use of e-office on the realization of paperless in the South Sulawesi Provincial General Election Supervisory Agency.

**Keywords**: Utilization, E-office, Paperless Embodiment

## INTRODUCTION

Activities that occur in an institution should be managed and carried out effectively and efficiently (Akib et al., 2024; Darwis et al., 2024; Jamaluddin et al., 2024; Rahman et al., 2024). However, there are still many companies that have not managed their corporate activities properly. One of the reasons is that the company still uses a manual system in its company activities. So that there are many obstacles in its management. For example, company documents that pile up in the corner of the room, excessive use of paper, and many other obstacles arise. Thus, companies need a system that can support company activities by utilizing information technology. This system is expected to help and facilitate management in company activities so that they run effectively and efficiently. This system is then called an electronic office.

Office activities are directed to achieve previously set goals, by interacting and communicating with government agencies, non-governments, institutions and the community (Karpunin et al., 2022; Saleh et al., 2024; Sazwani et al., 2020; Sundar & Lee, 2022). Communication is the process of conveying and exchanging information with someone with another person who acts as a sender and receiver using various media (Awaru et al., 2021; Herman et al., 2022; Jamaluddin et al., 2021). An electronic office or better known as an electronic office (e-office) is an application service for office administration, official correspondence for every employee in a company/agency that is carried out electronically.

In an effort to realize a modern institution, the BAWASLU office manages mail archives in the form of digital archives. Each incoming letter is digitized to be stored in the Archives Management Information System application which will make it easier for employees to manage archives digitally. The SIPA application provides mail management and letter disposition features, the use of the SIPA application allows all office activities to be carried out automatically with a digital system. So, the office can more easily achieve the target of the

office's vision and mission with maximum results. Activities in the use of the SIPA application are adjusted to the conditions and needs of each office. Offices that use SIPA are certainly distinctive offices with advantages that they have as a result of using the application. The SIPA application also makes in-office activities easier and time-saving. The results of the work also become more accurate when compared to manual activities.

Along with the development of technology that makes it easier for people to print a document lately, for example, laser printers and laser copiers have become a new problem that has led to a drastic increase in physical document products. People became easier to print documents and as a result the use of paper increased drastically. Paperless Office is a reduction in the use of paper in the office. In other words, Paperless Office is a manifestation of a work environment where as much as possible eliminate or reduce the use of paper in daily life. This can be done by converting documents and other paper into digital form. Paperless Office has the opportunity to provide a role in more effective and efficient administrative services that can reduce the use of paper for correspondence needs in an office. The use of paperless is a very efficient thing in office administration activities. The paperless office system can also increase productivity with digital formats, so that the dissemination of information becomes easier and faster is not a system that reduces the use of paper in the office administration process.

Paperless office or can also be known as paper-free office, which is a system created to manage administration by reducing or eliminating the use of paper and switching to digital documents. Or more simply, paperless office is to use paper as little as possible by switching to document digitization. Based on the results of observations, on September 4, 2023 at the Office of the South Sulawesi Provincial General Election Supervisory Agency (BAWASLU), it showed that offices that have implemented electronic-based technology or better known as the SIPA application to facilitate the completion of the work process quickly and precisely. In addition to the implementation process and the benefits obtained, the use of the SIPA application is very helpful for employees in managing incoming mail but it is still not perfect. Although the SIPA application is applied to manage incoming and outgoing mail, it is undeniable that the use of paper has not decreased since the SIPA application existed, several problems related to the realization of paperless such as infrastructure limitations such as unstable internet access or inadequate hardware can be obstacles in implementing the realization of paperless, resource limitations, Such as the cost required to develop digital technology and cultural limitations such as hard-to-change habits that can be an obstacle in implementing the realization of paperless. Based on this description, the researcher is interested in conducting a study entitled The Effect of E-office Utilization on the Realization of Paperless in the South Sulawesi Provincial General Election Supervisory Agency.

## METHODS

The research method used is a quantitative approach, which aims to identify or know the relationship between two or more variables. This research involved all employees of BAWASLU South Sulawesi Province. With a population of 52 people, the researcher took a sample of 5%, which is 48 people. The Random Sampling method performs random sample collection without considering the population class.

This study involves two main variables, namely the Utilization of SIPA (X) as an independent variable (independent variable) and the Realization of Paperless (Y) as a dependent variable (bound variable). The independent variable is a variable that is believed to affect the bound variable. To collect data related to the problem to be studied, the study

used a questionnaire with the Likert scale. The research instrument is filled with predetermined samples and then tested for feasibility through validity and reliability tests.

The data analysis methods used include descriptive analysis and inferential statistical analysis. Descriptive analysis is used to provide an overview of the data collected, whereas inferential statistical analysis is used to draw deeper conclusions from the inferential research data is used to draw deeper conclusions from the data of this study.

## RESULT AND DISCUSSION

To identify the influence of the use of SIPA and the realization of paperless in the South Sulawesi Provincial General Election Supervisory Agency, the study was conducted by testing the hypothesis through questionnaire data analysis using the SPSS 25 application.

### Utilization of SIPA

To determine the influence of the use of SIPA, the data obtained from this study, the questionnaire scores given to 48 BAWASLU member employees who became a sample that answered the questionnaire where the variables of Information are more accurate, Information is more accurate, Service is easier and faster, and Ease of accessing documents. For a more detailed overview, see the following table:

**Table 1: Results of Descriptive Analysis Per Variable Indicator of SIPA Utilization**

| Utilization of E-Office (X) | Number of Items | Score Achieved | Ideal Score | Achievement % | Category |
|---|---|---|---|---|---|
| More accurate information | 3 | 603 | 720 | 83,75 | Excellent |
| Work is not limited by space and time | 2 | 417 | 480 | 86,88 | Excellent |
| Easier and faster service | 3 | 591 | 720 | 82,08 | Excellent |
| Ease of access to documents | 3 | 599 | 720 | 83,19 | Excellent |
| **Jumlah** | **11** | **2.210** | **2.640** | **83,71** | **Excellent** |

Source: Results of data processing using SPSS 25

The results of the descriptive analysis showed that each variable score was known to have a very good level of achievement of the percentage of *e-office* utilization (83.71 percent). Judging from the results of measuring the characteristics of *e-office utilization* through its indicators, it shows that all indicators support the quality of these variables.

More accurate information is information that is in accordance with existing facts and can be accounted for. To obtain more accurate information, the SIPA application has an important role in conveying information, communication activities, and office management efficiently. With the SIPA application, the incoming mail processing process can be done automatically so that the information arrives faster and more accurately. This is in line with the opinion Muniroh et al. (2020) That: The benefits obtained from technological developments are easy and fast to get information and process the data needed. With information technology, all processes regarding data processing can be managed accurately, precisely and quickly in various different places, so that the results obtained will be more effective and efficient.

Based on the results of the research obtained, it can be concluded that the SIPA application has an important role in managing incoming mail so that the dissemination of information is faster and easier. The information received by the heads of agencies and other fields is very accurate because incoming mail is directly scanned, which anticipates errors that can be detrimental. As for the aspect of more accurate information in its application, it has dominated, this can be seen through the percentage obtained, which is 83.75%, meaning that it is in the very good category. This percentage is supported by observations made that decision-making is faster because without the presence of the head of service at the incoming mail office, it can be seen in the SIPA application.

Work is not limited by space and time, the use of the SIPA application in the search for necessary documents is not limited by the dimension of space and time so that it makes it easier in administrative activities. SIPA applications help save space and time in a variety of ways, such as storing mail in a database to make it easier to search for and access mail. Tuzzahra & Rahmah (2020) explained that " the company's *e-office* application no longer needs to provide data storage space, the correspondence process can be automated, and the user can easily create, send, track, and manage important letters in one application".

Easier and faster service is one of the important aspects of excellent service. This includes providing services that are precise, fast, neat, and easy. Through the SIPA application, the quality of public services is improved and the importance of a faster and easier to understand service process is emphasized. Tohari et al. (2021) explained that "the implementation of *e-office* has the opportunity to provide a role in more effective and efficient administrative services".

Ease of accessing documents can include various things, such as ease of searching, storing, and managing documents. *E-office* provides various facilities for accessing documents, such as allowing quick and easy access to correspondence and disposition processes from anywhere. *E-office* is a digital correspondence system that aims to transform paper-based document processes into electronic ones, offering benefits such as easy access to documents. According to Fitriani & Pakpahan (2018). *E-office* with this system can make it easier for administrative employees to manage arisp more orderly and systematically, can produce the information needed quickly, can increase the efficiency and effectiveness of the work process, and can facilitate administrative activities in the organization such as can facilitate and speed up work in data storage, data input, and archive data search. To generate information quickly when needed.

With the SIPA application, starting from incoming letters, dispositions to outgoing letters are carried out digitally. Users can search for all information and reports related to correspondence activities easily. The SIPA app also allows users to access documents from anywhere and anytime. In addition, the SIPA application makes it easier for users to find the desired documents and dispose of them to other employees.

**Paperless Embodiment**

The results of data processing show that each indicator used in measuring the variable of paperless realization (Y) where for the cost efficiency indicator in the very good category with a percentage of 83.61 percent, the time and labor efficiency indicator in the very good category with a percentage of 84.44 percent, the indicator of reduced paper piles is in the very good category with a percentage of 85.42 percent, the document security indicator is in the very good category with a percentage of 86.94 persen.

**Table 2 Results of Descriptive Analysis Per Variable Indicator of Paperless Embodiment**

| Paperless Embodiment (Y) | Number of Items | Score Achieved | Ideal Score | Achievement % | Category |
|---|---|---|---|---|---|
| Cost efficiency | 3 | 602 | 720 | 83,61 | Excellent |
| Time and energy efficiency | 3 | 608 | 720 | 84,44 | Excellent |
| Reduced paper stacks | 2 | 410 | 480 | 85,42 | Excellent |
| Document security is guaranteed | 3 | 626 | 720 | 86,94 | Excellent |
| **Sum** | **11** | **2.246** | **2.640** | **85,08** | **Excellent** |

Source: Data processing results using SPSS 25

Based on the data in the variable score achievement table, it can be seen that the achievement rate of the percentage of the paperless realization variable (Y) is in the very good category (85.08 percent). Judging from the results of measuring the characteristics of the Y variable through the indicators, it shows that all indicators support the quality of the variable. In the table above, it can be seen that the average indicator is in the very good category.

Cost efficiency creates excess capacity for printing paper. The presence of email, internet and computer technology makes all work easier and faster. The result is to waste more time. While efficiency is useful for reducing costs and increasing profits, on the other hand efficiency can increase the capacity to do more work or repeat the same work more often. According to Ardita (2015) "A manifestation of a work environment where as much as possible eliminate or reduce the use of paper in daily work. The realization of paperless has benefits in cost efficiency because it reduces the amount of paper used and also the procurement of filling cabinets".

Based on the results obtained, it can be concluded that with the realization of paperless can reduce the use of paper and also the procurement of filling cabinets, the influence given leads to cost efficiency. This can be seen through the percentage obtained, which is 83.61%, meaning that it is in the very good category.

Time and energy efficiency refers to the ability to carry out an activity or effort by using a small amount of time and effort to achieve maximum results. Efficiency of time and effort in distributing and searching for documents can make it easier for employees when searching for the necessary documents, with the use of a paperless office system, the office management process and correspondence process can immediately become faster and more timely.

Based on the results of the research conducted, it can be concluded that the realization of paperless affects employee productivity because in the correspondence process it can be done faster without taking a long time and in accordance with the specified time. This can be seen through the percentage obtained, which is 84.44%, meaning that it is in the very good category.

Reduced paper stacks can refer to a reduction in the amount of paper piled up somewhere, such as in a cabinet or storage area of paper documents that are constantly printed over time. In terms of storage alone, it has taken up space. However, when using a paperless office system it can reduce the pile of paper. In line with the theory Ardita (2015) that the use of e-office for the realization of paperless can reduce the pile of paper that disturbs the neatness of an office and interferes with the comfort of work".

Document security is guaranteed, one of the benefits of a paperless office system. For example, when carrying out correspondence activities using paper media, sometimes it will be easily lost and damaged. However, when using a paperless office system, this can be avoided. Correspondence activities can be done online faster and safer because a document can only be accessed by certain people according to the options specified by the data distributor.

**The Influence of E-office Utilization on the Paperless Embodiment**

This study utilizes the Kolmogorov Smirnov normality test for each variable. This is done with the SPSS version 25 program, as follows:

**Table 3: Results of the Normality Test**

**One-Sample Kolmogorov-Smirnov Test**

| | | Unstandardized Residual |
|---|---|---|
| N | | 48 |
| Normal Parameters[a,b] | Mean | .0000000 |
| | Std. Deviation | 2.90465489 |
| Most Extreme Differences | Absolute | .125 |
| | Positive | .119 |
| | Negative | -.125 |
| Test Statistic | | .125 |
| Asymp. Sig. (2-tailed) | | .057[c] |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
Source: Processed by researchers using the SPSS 25 application

From the test results, the significance value was 0.057, which means that the significance was greater than 0.05. Based on this data, it can be said that the data is normally distributed.

**Table 4: Correlation Analysis of Product Moment**

**Correlations**

| | | Utilization of E-Office | Paperless Embodiment |
|---|---|---|---|
| Utilization of E-Office | Pearson Correlation | 1 | .871** |
| | Sig. (2-tailed) | | .000 |
| | N | 48 | 48 |
| Paperless Embodiment | Pearson Correlation | .871** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 48 | 48 |

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Processed by researchers using the SPSS 25 application

From table 4, a pearson correlation of 0.871 was obtained. This means that there is a significant relationship between Variable X and Variable Y. Based on the guidelines for interpreting the correlation coefficient, 0.871 is in a very strong position, namely with a value interval of 0.80 – 0.100, so it can be said that the variable X has a very strong relationship with Variable Y.

The t-test is used to find out whether the independent variable (Utilization of SIPA) has an effect on the dependent variable (Paperless Manifestation). The following are the results of the t-test using the SPSS 25 application

**Table 5: Hypothesis Test (T-Test)**

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 10.093 | 3.087 | | 3.269 | .002 |
| | Utilization of E-Office | .797 | .066 | .871 | 12.000 | .000 |

a. Dependent Variable: Paperless Embodiment

Source: Results of Statistical Analysis through the SPSS 25 Program

The results of the analysis of the T Test through the SPSS program obtained the results of the analysis of the significance value, which is 0.000 less than 0.05, meaning that it has a partial influence on X and Y. So indirectly the results of data management in this study with the hypothesis that "There is an influence of the use of SIPA e-office on the realization of paperless in the Bawaslu of South Sulawesi Province." was declared accepted.

The use of SIPA and the realization of paperless are two things that are interrelated and have a mutual relationship of profit to support the achievement of office activities. The SIPA application makes in-office activities easier and time-saving. The results of the work also become more accurate when compared to manual activities. This is in line with the opinion Ardita (2015) Paperless office is in the spotlight in various activities in the world of work because it is considered profitable in terms of cost and time efficiency. In addition to decreasing the number of paper uses, another benefit that is felt is the faster disposition of incoming mail so that the work carried out is more efficient and effective, with the e-office application the employees become more enjoyable at work. This research was conducted on 48 employee respondents at the South Sulawesi Provincial General Election Supervisory Agency.

## CONCLUSION

By considering the formulation of the problem and the findings of the data analysis collected regarding the Influence of the Utilization of E-office on the Realization of Paperless in the South Sulawesi Provincial General Election Supervisory Agency, conclusions were obtained as the following indicators: The Utilization of E-office at the South Sulawesi Provincial General Election Supervisory Agency is in the very good category with a percentage of 83.71 percent which is measured using four indicators, namely, Information is more accurate, work is not limited by space and time, services are easier and faster, and it is easy to access documents. The realization of Paperless in the South Sulawesi Provincial General Election Supervisory Agency is in the very good category with a percentage of 85.08 percent which is measured using four indicators, namely, cost efficiency, time and energy efficiency,

reduced paper piles, and guaranteed document security. There is a significant unidirectional influence between the use of e-office on the realization of paperless in the South Sulawesi Provincial General Election Supervisory Agency.

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