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# Analysis of the E-Master Application as an Effort of Employment Data Processing

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# **Article History**

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#### Keywords

Data Processing; E-Master Application; Staffing

#### **Abstract**

This study aimed to analyze the E-Master application as an effort to process personnel data. This research type was descriptive qualitative. The research subjects were 5 people consisting of 2 OTKP teachers and 3 administrative employees at SMKN 10 Surabaya, while 2 administrative employees and 1 Head of Study Program as source triangulation. Data collection techniques were questionnaires and interviews, while data analysis techniques used data condensation, data presentation, drawing conclusions. The results of the study showed: (1) mapping indicators were able to map Civil servant; (2) SKP indicators, could be used as a medium for monitoring the performance of each Civil servant; (3) training analysis indicators, Civil servant could take part in training activities; (4) promotion indicators, making it easier for Civil servant during the promotion process; (5) pension indicator, providing a sufficient period of time in managing pension files; (6) periodic salary indicators, facilitating the finance department in processing periodic salary calculations; (7) Taspen indicator, making it easier for staffing department to process data on retired personnel; (8) Leave indicators, it was easier for staffing officers to print Civil servant attendance lists; (9) Study permit indicator, helping Civil servant if they wanted to continue their education again.

#### How to Cite

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#### INTRODUCTION

The government reform agenda echoed by the Government of Indonesia through Presidential Regulation No. 81 of 2010 concerning Bureaucratic Reform 201025 has had an impact on the government's situation today. As we know that there are 8 areas of change that were initiated to make changes as large as possible in order to realize good governance. One of the many factors that influence an effective reform process is to change the face of current government employees who are clean and serving and efficient. The reform process carried out goes hand in hand with the use of ICT which characterizes the Industrial Revolution 4.0 era. With the application of technology-based sophistication, it will build a condition that is expected from its employees. The reform activities carried out by utilizing the sophistication of ICT are marked by the development of various applications for the implementation of public services. As is known, public service is one of the areas of change that underlies to encourage quality and effective public service organizations. Public services are a series of activities provided by public organizations in order to meet the administrative needs of goods, services and/or services for every citizen in accordance with the provisions of Law no. 25 of 2009 which discusses public services. Therefore, the presence of the state is very vital to fulfill the obligation to serve every citizen within the framework of public services as mandated in the 1945 Constitution of the Republic of Indonesia.

In connection with the era of the Industrial Revolution 4.0, ASN (Civil Servants) as public servants are certainly required to work more optimally so that people's expectations of ASN are increasingly achieved. The Industrial Revolution 4.0 has fundamentally changed the mindset of ASN, the way ASN responds to the progress of the times, and the way ASN interacts with one another. Change is something that must be done. In terms of changing mindsets, ASN no longer thinks

about routines, but thinks outside the box, if necessary, thinks outside the box. Mindset as a public servant, ASN no longer has to be served mentally but must serve mentality. Insights and knowledge must also be global, not being in a narrow and not open mind, and allergic to the opinions of others. Skills also need to be improved, and mental attitudes must be changed. Likewise, knowledge about government competence must be deepened (Didin, 2019). In responding to the times, civil servants in the era of the Industrial Revolution 4.0, must be dynamic, not afraid of technological advances but must be smart in using, regulating and even controlling technology, especially information technology. Information technology is an indicator of the rise of the Industrial Revolution 4.0. Society has used information technology massively. The progress of information technology which is the driving force of the Industrial Revolution 4.0, can be seen from the existence of information technology which is manifested in various application facilities and the use of the internet network.

The development of applications to assist the implementation of public services, as happened in Indonesia, is an affirmation that people's lives have changed fundamentally. This shows that all must be ready for the Industrial Revolution 4.0, including ASN as state administrative apparatus. In the era of the Industrial Revolution 4.0, ASN is also required to be able to create and innovate, especially with regard to public service innovation based on technological developments. Government work units both at the central and regional levels are continuously encouraged to improve service quality by applying the advantages of information and communication technology in order to realize good governance. Through ICT in government or more familiarly called e-government in the public service process, the performance of ASN is expected to increase and be able to meet the needs and expectations of the community and have reflected the principles of public services which include transparency, responsiveness and participatory (Suaedi & Wardiyanto, 2010). The application of e-government is now easy to find because it has been widely adapted by government offices, both central and regional.

The implementation of public services through e-government in East Java Province can be recognized as having been widely applied. By applying technology in public service matters, it will certainly facilitate access and delivery of information between users and service providers. One of the Regional Apparatus Organizations (OPD) that has implemented egovernment in East Java Province is the Regional Personnel Agency (BKD) of East Java Province. BKD of East Java Province is one of the local government organizations that has the task of carrying out affairs in the field of personnel. To provide quality public services, the BKD of East Java Province implements e-government in its services such as creating a website-based application to facilitate the affairs of staffing services so that they can be more effective and efficient. The innovation in question is Electronic Integrated ASN Management (E-Master). E-Master is an innovation made to improve the SIMPEG application which was previously used to serve personnel affairs. E-Master is an application designed one for all, namely an application that can be used to serve all personnel services such as employment information, automatic retirement, promotion, taspen, transfer, career management and study permits, SKP, employee competency maps, and promotions. employee needs planning (bezzeting). The purpose of the development of the E-Master application is to process data entry, update data periodically and continuously so that it can validate employee data so that employee data is really high quality, namely reliable, accurate, complete and accountable. (Solicha, 2019).

The E-Master application uses an employee self-service service system, namely users who in this context are the civil servants concerned are required to enter personal data regularly and up to date according to the original documents ranging from educational history, position history, personal history, to supporting documents. regarding education and training and awards or sanctions that have been received. Each ASN can access personally to update data so that if one day they want to take care of employment matters such as promotion, transfer, leave or study permit, it will be easier. This application contains an online staffing service menu and completeness in the form of employee data within the East Java Provincial government which consists of: (1) personal data, namely data relating to the personal identity of ASN employees (State Civil Apparatus), (2) qualification data, namely data relating to history of formal and non-formal education of ASN employees, (3) competency data, namely data relating to the history of government, managerial and socio-cultural competencies of ASN employees, (4) performance data, namely data relating to work performance and behavior of ASN employees, (5) supporting data namely data relating to information relating to personal ASN.

Before implementing the E-Master, SIMPEG was still used to manage personnel data but in this application there was a weakness, namely it only contained personnel data so that every civil servant who wanted to take care of personnel problems had to send physical files to the BKD so that personnel services could be processed. This shows that the implementation of SIMPEG has not been effective and efficient because it takes a long time and is less practical in terms of storing data and documents. After the existence of a website-based application, namely E-Master, every East Java Provincial Government ASN employee data processing activity is carried out through the application. The advantages offered by the E-Master application are that it is designed to be able to store personnel data and documents in the application so that it is possible to be paperless in personnel services. In addition, there is no need for data filing cabinets for employee files which usually can take up a large space and take a long time to search one by one. In implementing the E-Master, each government agency including schools will be prepared by a facilitator to facilitate staffing services. As expressed by

Widyastuti (2019) which stated that the barriers to personnel data management include: (1) employee data storage in the form of paper archives is increasingly taking up space, (2) collecting employee file requirements is done onsite so it takes time, (3) the process of making letters still has the potential to cause duplication of letter files, (4) searching one by one employee data on the shelf so that it takes time, (5) making employee reports must summarize employee data first. There are several obstacles at SMKN 10 Surabaya, including: (1) still implementing manual data storage of personnel; (2) when the promotion process still requires supporting files; and (3) the more files collected the less storage space available.

Based on UU no 23, 2014 concerning Regional Government, there is a delegation of authority from the Regency/City government to the Province related to the arrangement of regional affairs and apparatus, one of which is the staffing service for high school teachers or the equivalent throughout East Java. At that time in 2016, the E-Master application was used as a data repository and document file for high school teacher staffing or equivalent in East Java, totaling 30,000 people. With the enactment of these regulations, senior high school teachers in East Java are required to enter data and upload staffing files through the E-Master website. SMKN (State Vocational High School) 10 Surabaya is one of the vocational schools owned by the government of East Java Province. In 2019, SMKN 10 Surabaya was appointed by the government as a reference school, namely a school fostered by the Directorate General of Primary and Secondary Education of the Ministry of Education and Culture. This school is a reference school for other schools in the vicinity in the implementation of education quality assurance independently to meet the National Education Standards. Vocational areas of expertise offered include Multimedia, Travel Business, Accounting and Institutional Finance, Banking and Microfinance, Islamic Banking, Office Automation and Governance, Online Business and Marketing, Clinical Pharmacy

and Community. E-Master is used to manage employee data at SMKN 10 Surabaya so that it can run more practically, effectively and efficiently in terms of time and place, especially now is the era of the Industrial Revolution 4.0 which positions ASN to be able to adapt to the times.

An application is a design that is intentionally made by humans, commonly known as software that can help work on office tasks, such as Microsoft Word, Microsoft Excel, and Microsoft Power Point. (Asropudin, 2013). Meanwhile, according to Sujatmiko (2012) applications are man-made computer programs that can help ease daily office tasks. From this it can be concluded that the existence of an application that is used in an agency or company will have a very positive impact on the completion of daily office tasks so that it becomes lighter. By using an application, it is expected that all work programs and office tasks can be neatly organized and controlled by a system called the application. In addition, it is also more effective and efficient in its application. Applications are man-made software as a form of technological developments that exist today. With the advancement of existing technology, it can be developed in something that is positive and useful for everyday human life.

E-Master is commonly referred to as Master (Integrated ASN Management) which is directly under the auspices of the Regional Personnel Agency of East Java Province. E-Master is a system specifically designed by the BKD of East Java Province, with the hope that this system will become a master data in an effort to manage integrated ASN data processing within the East Java Provincial Government. It is hoped that this application can facilitate the process of staffing services. This system has a website address: https://master.bkd.jatimprov.go.id.

The objectives of the design of the E-Master application are: (1) realizing a complete, accurate, valid, up-to-date, and integrated employee data master; (2) supporting a rational ASN management system and human

resource development; and (3) providing various personnel services for leaders, facilitators, and ASN. In addition to these objectives, there are also various benefits from the E-Master BKD application in East Java Province, including: (1) simplifying the process of making personnel reports; (2) finding out the data information of an employee easily and quickly; and (3) seeking individual online staffing services by ASN. Indicators of the E-Master, among others: (1) employee mapping; (2) SKP; (3) training and education analysis; (4) promotion; (5) pensions; (6) regular salary; (7) taspen; (8) leave; and (9) study permit (documentation of SMKN 10 Surabaya).

A stand-alone data without doing a data processing process then the data has no meaningful meaning. Manual data processing is done by using computer hardware. Data processing is the time or period required in the process of processing data into information that can be used (Landjamudin, 2013). according to Sutabri (2013), the activity of manipulating data into a form that is more useful in the form of information used by people who need it. Data processing is raw data that is processed so that it becomes useful information for its users, in other words the data obtained must be known whether it is accurate or not. Based on the understanding of some of these experts, it can be concluded that data processing is a period or time needed to receive and issue data into another form called useful and meaningful information as needed.

An employee is every person who works by selling his hands both physically and mentally to the company and gets remuneration in accordance with the agreement (Hasibuan, 2007). Basically, employees are valuable gems for the agency or company where the employee works. Without their participation, office work activities will never happen. Employees have an important role for the agency or company to play an active role in the planning process, system, process and a goal to be achieved by the agency or company. Siagian (2015) also said that employees bear a great responsibility for the development of a reward system

for an agency or company that is applied simultaneously at all levels of the organization. Based on the principles of justice, fairness and equality are important things in achieving a goal. So, it can be concluded that what is meant by employees are quality human resources (Human Resources) and have extraordinary potential that agencies and companies should provide for the welfare of their employees so that employees feel happy because they get attention from the agencies and companies where they work.

Personnel data processing is administrative and managerial. In personnel data processing activities are always related to data in physical or electronic form. Personnel data processing activities will affect the condition of employee personal data and employee data as a whole. according to Sutabri (2005), employee data processing consists of 3 main stages, namely: 1) a process of receiving data (input), 2) a data processing process (processing), and 3) using a certain program as a data processing effort, resulting in a data process called information (information processing) (outputs). according to Djawa & Puspasari (2015), Staffing data processing is very important. Data processing is carried out online and offline related to files or documents in printed or electronic form. Personnel data processing activities relate to the condition of an employee as a whole which is important. according to Suranto (2017), There are six stages of how to handle the maintenance of personnel administration documents, including: collecting, recording, processing, duplicating, sending, and storing.

# **METHODS**

This research is descriptive qualitative research with the research approach used is a qualitative approach. Qualitative research is a research procedure that produces descriptive oral and written data from the behavior of the people being observed. Through this qualitative method, data is needed in the form of words, pictures, notes, or memos and other

official documents (Moleong, 2011). Qualitative data were obtained by means of in-depth interviews, observations and secondary information from the informants and then sharpened, sorted, focused and rearranged so that they can be studied as conclusions. So qualitative descriptive research is research conducted as an effort to collect data or information that occurs in the field and then described into a clear sentence based on the theory used. This research was conducted at SMKN 10 Surabaya.

The researcher used a structured interview type in which the researcher had prepared questions that would be asked to the informants based on the indicators of the E-Master application. Interviews were conducted to 5 people as research subjects consisting of 2 OTKP teachers and 3 administrative employees at SMKN 10 Surabaya.

The indicators of this research questionnaire are: (1) Employee mapping (Pemetaan pegawai); (2) Employee Performance Goals (SKP); (3) Training Analysis (Analisa Diklat); (4) Promotion (Kenaikan Pangkat); (5) Pension (Pensiun); (6) Regulary salary (Gaji Berkala); (7) Savings Fund and Civil Servant Insurance (Taspen); (8) Leave (Cuti); and (9) Study permit (Izin Belajar).

This study used data analysis techniques according to Miles, Huberman, & Saldana (2014) which consist of: (1) data condensation is the process of selecting, focusing, simplifying, and transforming data that emerges from written field notes, recorded interviews and then transcribed so that it is in written form. Condensation is carried out so that the data obtained becomes sharper, and discards various information that does not match the topics discussed; (2) the presentation of data is carried out in various types such as charts, graphs, and tables to make it easier for researchers to read and carry out further analysis activities. Data presentation activities are carried out by providing narrative answers to each chart, graph, and table to clarify; (3) drawing conclusions, starting from the data condensation process, qualitative analysis interpreting what is considered meaningful by providing patterns, explanations and causal paths. Then the data and information that have been interpreted by the researcher in the early stages of the analysis will draw conclusions to answer the formulation of the problem in the study. The conclusions in this study are presented in a succinct manner but still contain the essence of the discussion.

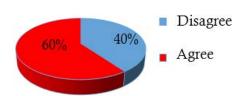
At the stage of testing the validity of the data in this study, researchers used source triangulation. Source triangulation means reviewing the authenticity of data or information obtained by comparing the data from indepth interviews with the data from the distribution of questionnaires and comparing them again with written data. (Moleong, 2011). Triangulation of sources in this study was 3 people consisting of 2 administrative employees and 1 Head of OTKP Study Program. Because the 2 TU employees are composed of the E-Master application facilitator and the head of the TU, Ms. Henny and Mr. Dewantoro thoroughly know how the personnel administration activities at SMKN 10 Surabaya in accordance with the SOP from the BKD of East Java Province. Meanwhile, Mrs. Elizabeth as the Head of OTKP Study Program is taken into consideration whether the stages or processes of each indicator are based on the E-Master application with theory in office administration.

#### **RESULTS AND DISCUSSION**

This study will discuss the E-Master application as an effort to process personnel data at SMKN 10 Surabaya which will be described as follows:

Mapping is one of the features in the E-Master application which is commonly used in the personnel department in mapping employees at SMKN 10 Surabaya. Employee mapping is carried out based on the competencies possessed by each ASN. Teacher Manpower Analysis (AGTK) is a supporting application that is used to assist the process of mapping employees in the entire Education Office wit-

# **Employee Mapping**

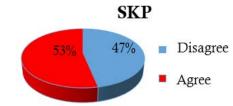


**Figure 1.** Employee Mapping Source: Primary data processed, 2021

hin the province of East Java. Based on the questionnaire distributed through the google form, 40% stated strongly agree and 60% agree that the existence of the E-Master can facilitate the staffing department in each agency to map employees based on the ability and educational background of each ASN. This is in accordance with the results of interviews and triangulation of sources which state that with the employee mapping feature, it is hoped that it can provide appropriate results based on the ability and educational background of a teacher in accordance with the position that will later be carried out. Usually if a teacher is placed in a position that is not in accordance with his abilities and educational background, it will cause a gap in the future, causing discrepancies and less than the maximum ability and potential possessed by the teacher.

This research is supported by the results of research conducted by Mufidah (2013), the effectiveness of employees' work can run smoothly if in the process of using a supporting application system such as AGTK, it is able to map employees based on their educational background so that the results are maximized. Mediaswati & Sidik (2013) also argued that an employee who is given the authority to handle an application or what we usually call a facilitator is a human resource who is indeed competent and has adequate personal skills and knowledge of a website-based application.

Employee Performance Goals (SKP) are commonly referred to as ASN report cards. SKP planning is made at the beginning of the current year and an assessment is carried out at the end of each year in December.

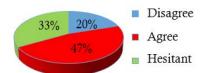


**Figure 2.** Employee Performance Goals Source: Primary data processed, 2021

There is a guideline that is used as the basis for this annual SKP assessment. In addition, the assessment is based on the results of the acquisition of SKP points in the previous period. If the points obtained by the ASN do not reach the predetermined limit, then the SKP assessment does not pass, then the SKP must be fulfilled first so that it can be sent to the head or principal directly. This is reinforced by the results of interviews and triangulation of sources which stated that the existence of this SKP can be used to monitor ASN who is active both in academic learning activities and improving soft skills which are followed for one year. By that way the principal can find out who is entitled to be given an award as a form of appreciation for their efforts and hard work.

Based on the questionnaire distributed via google form, the results obtained 47% strongly agree and 53% agree that the existence of E-Master can help users in managing ASN personal data to be more practical and economical. This is also supported by the results of interviews and triangulation of sources which stated that the personal data in question, such as certificates, decrees, and certificates of appreciation obtained by each ASN in one period must be entered in order to obtain points based on the provisions. So from the points that have been obtained, they will be the basis of assessment for leaders in monitoring activities that are participated in by all ASN in one period. In the SKP process, the facilitator said that there were several obstacles he experienced, such as: a) the lack of discipline among ASNs during the data entry process; b) lack of patience in fulfilling each stage; and c) some senior civil servants need special assistance when accessing applications. This research is supported by the results of research by Wahyuni & Puspasari (2015) which explained that by utilizing an application for processing personnel data, it can optimize the performance of an employee in terms of handling personnel-related files. Research conducted by Abdurahman (2018) also explained that a personnel application system is deliberately designed with the aim of facilitating the performance of an administrator or staffing facilitator at an agency in processing employee data effectively and efficiently.

# **Training Analysis**



**Figure 3.** Training Analysis Source: Primary data processed, 2021

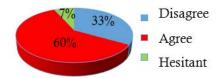
As an ASN, you are usually required to develop your soft skills and hard skills in order to be able to develop along with the changing times. This is related to one of the training analysis features contained in the E-Master application which is used as a means of collecting data or information on any training activities followed by ASN as a supporter in the process of teaching and learning activities in order to add insight and skills of a teacher. Training activities can be followed independently by ASN or based on recommendations from the MGMP (Subject Teacher Conference).

Based on the questionnaire distributed via google form, the results obtained 20% stated strongly agree, 47% agree, and 33% expressed doubt that the training analysis feature contained in the E-Master application can be used as a means of collecting data or information on training activities which has been followed by ASN. This is in accordance with the results of interviews and triangulation of sources which stated that the analysis of training and education can be used as an effort to develop the capabilities and insights provided to ASN. With the E-Master application, school leaders/principals can monitor the

activities of ASN properly, so that ASN employee development planning is in accordance with competence as evidenced by increased productivity of ASN performance. By participating in training activities, either in the form of seminars, talk shows, workshops, or in other forms, it is hoped that it can increase the abilities and insights of ASN as a provision when teaching in class later.

This research is supported by the results of research conducted Ramadhan & Cahyana (2016) which stated that every ASN certainly has the opportunity to conduct training as a form of self-development to improve ASN competence. After participating in various kinds of training activities both personally and from the MGMP (Subject Teacher Conference) of course they will get a certificate as a form of appreciation for ASN who have participated in the training. With the E-Master application, it can make it easier for the personnel department to collect personnel data, especially training certificates, easily, quickly, and accurately. Rosmalina (2018) also stated that other staffing data on the training and education analysis indicators are also integrated with the Central Java Provincial BKD system, so that the numbers or points received from each certificate entry process have been computerized.

## Promotion



**Figure 4.** Promotion

Source: Primary data processed, 2021

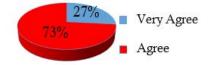
Promotion is one of the features found in the E-Master application. Promotion is an effort made by ASN for one period by participating in various kinds of activities in the form of seminars, training, and other training activities. With the points that have been obtained if they meet the conditions, then an ASN has the right to get a promotion to one level higher than the previous rank or group. The promo-

tion process certainly takes a long time because you have to prepare supporting files such as a civil servant decree, hardfile in the form of photocopies of all certificates, letters of assignment, and SK owned by ASN.

Based on the questionnaire distributed via google form, 33% stated strongly agree, 60% agree, and 7% expressed doubt that the upgrade feature in the E-Master application is used as a means of collecting data or information related to upgrades for structural or functional positions. This is in accordance with the results of interviews and triangulation of sources which explained that if an employee is diligent and disciplined in processing his employment files, his promotion will be in accordance with his time. This is also supported by the level of craftsmanship of employees in the process of filling out the files needed during promotion. In contrast to ASN who tend to be less disciplined in processing their personnel files, the promotion process tends to take longer than employees who are more disciplined. The processing of employee files is now more modern because it can be done online and computerized.

This research is supported by research results Sari, Retnosari, & Astuti (2018) which explained that the implementation of the current personnel data processing system has been computerized with a personnel data processing system so that it is expected to provide convenience in the process of monitoring data and employee performance in an agency. Cahyani, Pradana, & Jonemaro (2019) also stated that the period of promotion of an ASN usually has a provision every few years. Such regular promotions are usually carried out once every four years. If an ASN in the promotion process is carried out for more than four years, it will affect the productivity of an

# Pension



**Figure 5.** Pension Source: Primary data processed, 2021

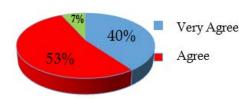
employee's performance.

Retirement is one of the features found in the E-Master application. This feature is used by ASN who have entered retirement period in less than 1-2 years from retirement. There are several requirements that must be met by ASN in order to get a Pension Decree issued by the BKD of East Java Province. After getting the pension decree, it can be uploaded to the TASPEN feature which will later get a pensioner as salary income received every month.

Based on the questionnaire distributed via google form, 27% stated that they strongly agreed and 73% agreed that the pensioner feature in the E-Master application could facilitate the management of files and the requirements needed when retirement arrived. This research is supported by the results of research conducted by Wahyuni & Puspasari (2015) who explained that several years ago before the design of the E-Master application system, pension filing was still done manually, both in terms of filing and processing data. But now with the E-Master, it can make it easier for the staffing department to accommodate information related to retirees or updating their data. It can be said that an application system like this is a solution for the personnel department, especially those dealing with the problem of retired employees.

Based on the results of interviews and triangulation of sources, it is stated that there are benefits from the application system for handling personnel files related to retirees. At least give a little leeway for ASN who have entered retirement to make it easier to manage their files. However, there are also obstacles if the ASN is not able to operate it independently; in this case the facilitator continues to provide assistance to the ASN in accessing it so that it continues to run smoothly. This is in accordance with research conducted by Setyawan & Prabawati (2021) which explained that with the existence of a virtual and flexible employee retirement service, employees indirectly participate in existing public services so that the level of awareness and knowledge of employees will increase.

# Regular Salary

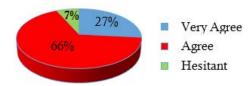


**Figure 6.** Regular Salary Source: Primary data processed, 2021

Regular salary is one of the features found in the E-Master application. Periodic salary increases apply to all ASN without exception. Periodic salaries are given based on the year listed on the PNS SK owned by each ASN when initially declared to have passed as ASN. The decree contains odd or even years which are the basis for giving periodic salary increases. Salaries are given regularly every two years, alternating between odd and even years. Based on the questionnaire distributed via google form, 40% stated strongly agree, 53% agree, and 7% expressed doubt that the periodic salary feature is used as a form of monitoring the gradual salary distribution based on rank and class based on the previous salary slip.

This is in accordance with the results of interviews and triangulation of sources which stated that the process of periodic salary increases is usually carried out manually by the finance department in each agency. Each ASN employee submits proof of salary slip and then manual data processing is carried out with calculator calculations and other calculating tools. It is now easier with the E-Master application as a means of automatically collecting data related to periodic salaries. This research is also supported by the results of research Sari, Retnosari, & Astuti (2018) which explained that the current staffing data processing system is already computerized as a whole and makes it easier for recording and reporting needs not to be done using existing books or archives. Everything is done automatically through a computerized system. Abdurahman (2018) also explained that the online system service would make it easier for the staffing department to process staffing data online and be organized so that one day if you need the data again, it can be found easily and can be used as a medium of information regarding salary receipts for ASN.

## Taspen



**Figure 7.** Savings Fund and Civil Servant Insurance (TASPEN)

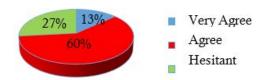
Source: Primary data processed, 2021

Taspen is one of the features in the E-Master application. Taspen usually relates to the retirement period of ASN. When retirement comes, ASN get a salary from Taspen. The submission of the pension file has been done before the retirement period arrives about 1-2 years in advance. So that when the pensioner's file is approved, each ASN will get a Pension Decree which will be uploaded to this Taspen feature. For ASN employees who work at SMKN 10 Surabaya, the head office for managing pension files is located at the Taspen office located on Jalan Diponegoro. Based on a questionnaire distributed via google form, the results obtained 27% strongly agree, 66% agree, and 7% expressed doubt that the Taspen feature contained in the E-Master application can be used as a means of managing sources of income in old age when ASN has retired from his term of office.

This research is supported by the research of Sufi & Herlinda (2017) which stated that the application systems such as E-Master, especially in terms of handling pension files, has been carried out well every year. It is possible if the user (system user) or human resources who operate the application are not able to adjust to the maximum use and utilization. The reason could be due to the age factor and the ability to adapt to existing technological developments which tend to have begun to decrease. Meanwhile, according to Ramad-

han & Cahyana (2016), the E-Master application which has been designed by the BKD of East Java Province has been well received and used by ASN, because the existing display is made very simple and easy to understand. This is also in accordance with the results of interviews and triangulation of sources which stated that the E-Master application is a very simple application in appearance, so that the display that appears from the dashboard to the sub-menu display is also easy to understand when operating it.

#### Leave



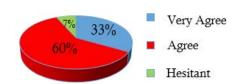
**Figure 8.** Leave Percentage Source: Primary data processed, 2021

Leave is one of the features found in the E-Master application. Every ASN who works certainly has the right to leave which has been stated in the employment law. Leave can be used by all ASN if under certain conditions it causes the ASN to be unable to come to work. the leave can be used. There are terms and conditions on how the leave can be taken. This leave is usually taken when ASN is sick, gives birth, or performs the Hajj or Umrah pilgrimage. Based on the questionnaire distributed via google form, 13% stated strongly agree, 60% agree, and 27% expressed doubt that the leave feature is used as a means to monitor leave or permission to not work for ASN in each term of office and still apply hardfile file as a form of validation.

This is in accordance with the results of interviews and triangulation of sources which stated that applying for leave can be done online anywhere and anytime. This research is supported by the results of research conducted by Syaripudin & Cahyana (2015) which stated that the process of applying for leave can be done anywhere and anytime as long as it is connected to the internet network, because

the data processing has been done online. Meanwhile, according to Rosmalina (2018), in addition to handling problems, the process of presenting employee leave data has also been presented quickly, clearly, and validly based on existing conditions without being able to be changed by anyone.

# **Study Permit**



**Figure 9.** Study Permit Percentage Source: Primary data processed, 2021

Study permit is one of the features found in the E-Master application. Study permits are used by ASN if they want to continue their education to a higher level. In addition, ASN who will continue their education must also obtain permission from the leadership. In this case, if the ASN wants to continue their education, they must obtain permission from the Principal where the ASN teaches. Based on the questionnaire distributed via google form, 33% stated strongly agree, 60% agree, and 7% expressed doubt that the study permit feature in the E-Master application is used as a means for ASN who is given the opportunity to continue their education to support his career. This is in accordance with the results of interviews and triangulation of sources which stated that not all ASN students can continue their education as career support. This is also influenced by several aspects such as: the economic condition of the ASN, the desire or interest of the ASN, as well as the ability to adjust teaching hours and the educational process when it takes place simultaneously.

This research is supported by the results of research conducted by Firmansyah & Niswah (2018) which explained that the E-Master application system is a website-based application system or commonly referred to as Web Based Application. The point is that this application system can be accessed wherever and

whenever we need to access it as long as it is connected to a supporting internet network and without the need to do the installation process on a PC. Meanwhile, according to Widyastuti (2019), the staffing data needed during the study permit process is certainly very large, starting from diplomas, personal identities, and other supporting letters needed. All these files must be stored neatly and connected to an online network.

#### **CONCLUSION**

Based on the results of the research and discussion, it can be concluded that: (1) for mapping indicators, ASN employees have been able to map based on their abilities and competencies so that the work produced can be maximized; (2) for the SKP indicator, it can be used as a medium for monitoring the performance of each ASN objectively based on its capabilities, performance, and achievements; (3) for training analysis indicators, ASN can take part in training activities based on their competence as a form of developing ASN soft skills and hard skills; (4) for promotion indicators, it can make it easier for ASN when the promotion process becomes more effective and efficient; (5) for the pension indicator, it can provide a sufficient period of time in the management of pension files until later retirement; (6) for periodic salary indicators, it can facilitate the finance department in an agency in the process of calculating the periodic salaries of ASN based on the appointment decree and salary slips received by ASN; (7) for the taspen indicator, it can provide convenience to the staffing department in processing the data of retired personnel; (8) for leave indicators, it will be easier for the staffing officer to print the ASN attendance list every month because the data for ASN who are on leave or vacation has been recorded in it; (9) for the study permit indicator, it is very helpful and makes it easier for ASN if they want to continue their education as career support in the future in accordance with the approval given by the leader or principal.

Based on these conclusions, suggestions that can be given include: (1) there is a need for technical guidance in the form of seminars, workshops, or training that must be followed by ASN in each period; (2) the school needs to improve the ability of ASN, especially those who are elderly, to be able to adapt to increasingly rapid technological developments by providing assistance when operating the E-Master application.

Limitations in this study, among others: (1) this research was conducted only in the scope of ASN in SMKN 10 Surabaya; (2) the focus of this research is only on the stages of the process of handling personnel data maintenance in the E-Master application

#### REFERENCES

Abdurahman, M. (2018). Sistem Informasi Data Pegawai Berbasis Web pada Kementerian Kelautan dan Perikanan Kota Ternate. *Jurnal Ilmiah ILKOMINFO-Jurnal Ilmu Komputer dan Informatika*. 1(2): 70-78. https://doi.org/10.47324/ilkominfo.v1i2.10.

Asropudin, P. (2013). *Kamus Teknologi Informasi Komunikasi*. Bandung: CV Titian Ilmu.

Cahyani, A.P., Pradana, F., & Jonemaro, E.M.A. (2019). Pengembangan Sistem Aplikasi Kepegawaian (Studi Kasus: Badan Pengelolaan Keuangan dan Aset Daerah di Kabupaten Blitar). *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer.* 3(5): 4979-4988. https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/5391.

Didin, A. (2019). ASN dan Revolusi Industri 4.0. (https://disdukcapil.pontianakkota.go.id/asn-dan-revolusi-industri-40-ditulis-oleh-didih-abidin, diakses pada 4 Mei 2021).

Djawa, M.K. & Puspasari, D. (2015). Implementasi Aplikasi Sistem Informasi Manajemen Kepegawaian (SIMPEG) untuk Mendukung E-Goverment pada Badan Kepegawaian Daerah (BKD) Provinsi Jawa Timur. *Jurnal Administrasi Perkantoran*. 3(3): 1-15. https://jurnalmahasiswa.unesa.ac.id/index.php/jpap/article/view/12522/11560.

Firmansyah, R.R. & Niswah, F. (2018). Inovasi

- Pelayanan E-Master di Badan Kepegawaian Daerah Provinsi Jawa Timur. *Jurnal Mahasiswa Unesa*. 6(3): 1-7. https://jurnalmahasiswa.unesa.ac.id/index.php/publika/article/view/22856.
- Haryono, A.A. (2012). Pengembangan Sistem Informasi Pengolahan Data Pegawai Sekolah Menengah Pertama Negeri (SMPN) 4 Pacitan. *Journal Speed-Sentra Penelitian Engineering dan Edukasi.* 4(3): 1-9.
- Hasibuan, M.S.P. (2007). *Organisasi dan Motivasi Dasar Peningkatan Produktivitas*. Jakarta: PT

  Bumi Aksara.
- Landjamudin, A.B. (2013). Analisa dan Desain Sistem Informasi. Yogyakarta: Graha Ilmu.
- Mediaswati, R. & Sidik, F. (2013). Analisa Penerapan Aplikasi Pelaporan Kepegawaian Berbasis Web pada Badan Kepegawaian Daerah Kabupaten Cilacap. *JKAP (Jurnal Kebijakan dan Administrasi Publik)*. 17(1): 4-14. https://doi.org/10.22146/jkap.6845.
- Miles, M.B., Huberman, A.M., & Saldana, J. (2014). *Qualitative Data Analysis: a Methods Sourcebook*. United State of America: Sage.
- Moleong, L.J. (2011). *Metodologi Penelitian Kualitatif.* Bandung: PT Rosda Karya.
- Mufidah, Y.A. (2013). Efektivitas Kerja Pegawai dalam Penggunaan Sistem Kearsipan Elektronik di Kantor Badan Arsip dan Perpustakaan Kota Surabaya. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*. 1(3): 1-16. https://jurnalmahasiswa.unesa.ac.id/index.php/jpap/article/view/4031.
- Ramadhan, T. & Cahyana, R. (2016). Pengembangan Sistem Informasi Kepegawaian pada Dinas Perindustrian Perdagangan dan Pengelolaan Pasar Kabupaten Garut. *Jurnal Algoritma Sekolah Tinggi Teknologi Garut*. 13(1): 164-169. https://jurnal.sttgarut.ac.id/index.php/algoritma/article/view/320/297.
- Rosmalina. (2018). Analisis Aplikasi Kepegawaian pada Sistem Informasi Manajemen Kejaksaan Republik Indonesia (SIMKARI) di Kejaksaan Negeri Bale Bandung. *Jurnal PETIK-Jurnal Pendidikan Teknologi Informasi dan Komunikasi.* 4(2): 173-178. https://jour-

- nal.institutpendidikan.ac.id/index.php/petik/article/view/364.
- Sari, D.P., Retnosari, D.A., & Astuti, N. (2018). Aplikasi Sistem Pengolahan Data Pegawai pada Kantor Kelurahan Sukamulya Kabupaten Tangerang. *Seminar Nasional Teknologi Informasi dan Multimedia 201*8, 13-18, Universitas Amikom Yogyakarta. https://jurnal.sttgarut.ac.id/index.php/algoritma/article/view/320/297.
- Setyawan, Z.D. & Prabawati, I. (2021). I mplementasi Program Berbasis Inovasi Pelayanan Kepegawaian Sistem Aplikasi Pelayanan Kepegawaian (SAPK) (Studi pada Aplikasi Layanan Pensiun Pegawai di Badan Kepegawaian Daerah Provinsi Jawa Timur). *Publika Jurnal Administrasi Negara*. 9(2): 159-169. https://ejournal.unesa.ac.id/index. php/publika/article/view/38179.
- Siagian, S.P. (2015). *Manajemen Sumber Daya Manusia*. Jakarta: PT Bumi Aksara.
- Solicha, W. (2019). Penerapan E-Government melalui E-Master (Studi tentang Pelaksanaan Manajemen Aparatur Sipil Negara Terpadu Elektronik di Badan Kepegawaian Daerah Provinsi Jawa Timur). (http://repository.unair.ac.id/id/eprint/89841, diaskse pada 4 Mei 2021).
- Suaedi, F & Wardiyanto, B. (2010). Revitalisasi Administrasi Publik (Reformasi Birokrasi dan E-Governance). Yogyakarta: Graha Ilmu.
- Sufi, W. & Herlinda, D. (2017). Penerapan Sistem Aplikasi Pelayanan Kepegawaian (SAPK) Berbasis Online pada Bagian Kepegawaian Daerah Kota Pekanbaru. *Jurnal Niara*. 9(2): 91-99.
- Sugiyono. (2017). *Metode Penelitian*. Bandung: Alfabeta.
- Sujatmiko, E. (2012). *Kamus Teknologi Informasi* dan Komunikasi. Surakarta: PT Aksara Sinergi Media.
- Suranto. (2017). Administrasi Kepegawaian. Yogya-karta: Andi.
- Sutabri, T. (2005). *Sistem Informasi Manajemen*. Yogyakarta: Andi.
- Sutabri, T. (2013). Analisis Sistem Informasi. Yogya-

- karta: Andi.
- Syaripudin, G.A. & Cahyana, L. (2015). Pengembangan Aplikasi Web untuk Pengajuan Cuti Pegawai Secara Online. Jurnal Sekolah Tinggi Garut. 12(2): 526-533. https://jurnal.sttgarut.ac.id/index.php/algoritma/article/view/246.
- Wahyuni, T. & Puspasari, D. (2015). Efektivitas Sistem Aplikasi Pelayanan Kepegawaian (SAPK) sebagai Kelancaran Penanganan Usulan Berkas Masuk pada Badan Kepegawaian Negara (BKN) Regional II Surabaya
- Jawa Timur. *Jurnal Pendidikan Administrasi Perkantoran (JPAP).* 3(3): 1-15. https://jurnalmahasiswa.unesa.ac.id/index.php/jpap/article/view/12539.
- Widyastuti, A., Rosely, E., & Wijaya, P.W. (2019). Aplikasi Sistem Pengolahan Data Kepegawaian Sekretariat DPRD Kabupaten Tulungagung. *E-Proceeding of Applied Science*, 2268-2274, Telkom University. https://openlibrarypublications.telkomuniversity.ac.id/index.php/appliedscience/article/view/11400/11257