# ANALYSIS OF OLDER WORKERS ABILITY IN USING INFORMATION TECHNOLOGY AT DINAS PANGAN DAERAH SULUT IN INCREASING WORK PERFORMANCE

ANALISIS KEMAMPUAN PEKERJA BERUMUR DALAM MENGGUNAKAN TEKNOLOGI INFORMASI DI DINAS PANGAN DAERAH SULUT DALAM MENINGKATKAN KINERJA KERJA

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Abstract: The purpose of this study is to examine the daily experience of the ability in using information technology (IT) by older workers at Dinas Pangan Daerah Sulut, to identify the factors that affect the ability of older workers in the usage of IT at Dinas Pangan Daerah Sulut, and also to identify ways in which Dinas Pangan Daerah Sulut needs to implement strategies that will contribute to work performance and overall effectiveness for older workers in using and developing Information Technology. This study uses a qualitative approach with data collection using interviews with 10 civil servants at Dinas Pangan Daerah Sulut who are over 50 years old or classified as older workers. Results found that daily experience of older workers' ability in using information technology still has difficulties in using software that has a high complexity of use. On the positive side, information technology is a tool that can help them increase their work performance. The ability in using IT of older workers IT influenced by age, intention, educational background, and also financial factors that support IT facilities for older workers. Older workers need good management innovations such as direct and indirect training as well as good work synergy between generations in the workplace.

**Keywords:** older workers, work ability, information technology, work performance

Abstrak: Tujuan dari penelitian ini adalah untuk mengkaji pengalaman sehari-hari terhadap kemampuan penggunaan TI oleh pekerja yang lebih tua, untuk mengidentifikasi faktor-faktor yang mempengaruhi kemampuan pekerja yang lebih tua dalam penggunaan TI, dan juga untuk mengidentifikasi cara-cara di mana Dinas Pangan Daerah Sulut perlu menerapkan strategi yang akan berkontribusi pada kinerja dan efektivitas keseluruhan untuk pekerja yang lebih tua dalam menggunakan dan mengembangkan Teknologi Informasi. Penelitian ini menggunakan pendekatan kualitatif dengan pengumpulan data menggunakan wawancara dengan 10 pegawai negeri sipil di Dinas Pangan Daerah Sulut yang berusia di atas 50 tahun atau tergolong pekerja yang lebih tua. Hasil penelitian menemukan bahwa pengalaman sehari-hari kemampuan pekerja lanjut usia dalam menggunakan teknologi informasi masih mengalami kesulitan dalam menggunakan perangkat lunak yang memiliki kompleksitas penggunaan yang tinggi. Sisi positifnya, teknologi informasi merupakan alat yang dapat membantu mereka meningkatkan kinerja kerja. Kemampuan dalam menggunakan TI oleh pekerja yang lebih tua dipengaruhi oleh usia, niat, latar belakang pendidikan, serta faktor keuangan yang mendukung tersedianya fasilitas TI. Pekerja yang lebih tua membutuhkan inovasi manajemen yang baik seperti pelatihan langsung dan tidak langsung serta sinergi kerja yang baik antar generasi di tempat kerja.

Kata Kunci: pekerja lanjut usia, kemampuan kerja, teknologi informasi, kinerja kerja

#### INTRODUCTION

#### Research Background

In a workplace Information technology is a component that has a positive impact on companies/agencies. However, the advantages that information technology offers are not equally beneficial to all members of society. This phenomenon is called the digital divide, it refers to older workers ability, where they face some obstacles

and difficulties in implementing information technology (Hill, Beynon-Davies, and Williams, 2008). In today's era, in the context of increasingly developing information technology, it is required that employees need to have good information technology skills. There are challenges of technological innovation that are always evolving and how older workers face the technological systems used in the agency is the main concern in this research.

Work ability achieved by a person in carrying out a task is a result of the work assigned to him based on skills, experience, and sincerity and time (Hasibuan, 2019). In general, ability can be measured by two things, first is intellectual ability which refers to various mental activities (thinking and solving problems), and physical ability which refers to tasks that are requires stamina, skill, strength, and similar characteristics. What is happening in the field today is not a few of the older workers who tend to find it difficult to fulfill the use of information technology in companies/agencies. Many of the older workers are confused when they are asked to use IT to help them do the given work tasks, for example in terms of installing, operating, even doing data management and some tasks through software applications. This certainly raises awareness of the ability of older workers to use information technology.

As time goes by, technology changes over time. In today's world, technological progress is too fast and its development is inevitable. The development of technology is not only felt by each individual, but also by an agency or organization. Facilities information technology helping companies achieve its goals. So, with the improvement of technology, it is expected that the company's operational efficiency will improve. With the existence of information technology in the workplace, it will facilitate the work of every employee, especially it is expected to help older workers. This is because information technology has a certain role to play in reducing operational errors or human errors that can harm and hinder companies/agencies productivity. In general, information technology is an important science that must be developed and used effectively, information technology can support work in companies / agencies. Information technology is realized through software and hardware, companies/agencies can take advantage of computer application platforms such as network management, databases, operating systems, etc. Information technology also provides basic applications that are used in all the resource basics of a company or organization. When an organization decides to use information technology to improve its performance, the human resource factor becomes an important element to develop.

Work performance is the level of a person's proficiency in tasks that include his work, understanding the weight of an individual's ability to fulfill the provisions in the job (Bernardin and Russell, 1993). The development of the digital era makes demands for the use of IT in the workplace, and cannot be separated from problems regarding work performance. Therefore, with the demands that are constantly changing along with the times in this case regarding the usage of information technology for older workers, it is important to pay attention to improving the quality of work in the use of IT in increasing work performance, as well as being ready to accept all the challenges that exist by learning what that need to be learned, also improving IT skills so that they can adapt to the demands of the times where the abilities of older workers must be seen in the use of IT in the company to increase work performance.

Dinas Pangan Daerah Sulut is a government agency which is a public organization that has the task of carrying out government affairs which are the regional authority and assistance tasks given by the regional head in the food sector. The agency has a technology information system that is developing rapidly due to the corona virus pandemic which makes the agency have to implement the WFH (Work From Home) system to carry out the duties and responsibilities of the agency, also some of task that the agency implements a technology of information system in the form of software applications such as ePegawai Mobile, e-Kinerja, MS Office, and software from Google such as Google Doc, and also from provided devices such as computers, printers, internet, etc. In 2022, the agency has 39.74% of civil servants are still categorize as older workers, out of 78 civil servants in the agency around 31 people are 50 years old above.

## **Research Objectives**

The purpose of this research is as follows:

- 1. To examine the daily experience of the ability in using information technology (IT) by older workers at Dinas Pangan Daerah Sulut.
- 2. To identify the factors that affect the ability of older workers in the usage of IT at Dinas Pangan Daerah Sulut.
- 3. To identify ways in which Dinas Pangan Daerah Sulut needs to implement strategies that will contribute to work performance and overall effectiveness for older workers in using and developing Information Technology.

#### THEORETICAL FRAMEWORK

### **Human Resource Management**

Human resource management is a science or method of how to regulate the relationship and role of resources (labor) owned by individuals efficiently and effectively and can be used optimally so that achieve the common goals of the company, employees and society to be maximized (Bintoro and Daryanto, 2017). This includes in every activity or operational function of human resources. Starting from the process of selection, training and development, placement which includes promotions, termination of employment and other activities. It is aimed at increasing the productive contribution of the organization's human resources towards achieving organizational goals more effectively and efficiently.

## **Work Ability**

Ability comes from the word capable which means being able to do something, while ability basically means skill and strength. ability is a trait that is innate or learned that allows a person to complete his work, either mentally or physically (Winardi, 2016). Employees in an organization, although well motivated but not all have the ability to work well. Abilities and skills play a major role in individual behavior and performance. Skills are skills related to tasks that are owned and used by someone at the right time. Ability as the potential possessed by a person to do work or tasks so that the results achieved are as expected (Gibson et al., 2012). If the results of a job will be determined by the abilities of an employee. In other words, the level of individual performance will be very high and depends on the individual's own ability factors such as education level, knowledge, experience where with an increasing level of ability higher will have higher performance. In ability, there are three elements, namely: elements of skill, physical elements, mental elements. So that, these elements support each other, so the three are combined harmoniously produce something in accordance with job requirements.

## The Older Workers in The Workplace

The notion of "aging" refers to the decline in an individual's physical and physiological competence. When defining older workers, the concept of age varies greatly between contexts and cultures. Cultural differences can factor into who is considered "older". Older workers as broadly defined are workers between the ages of 52 and 65 years (McCarthy et al., 2014). McIntosh (2020) stated that there are several descriptions that can define older workers in the workplace, there are 6 things, including:

- 1. Unable to learn new processes or applications,
- 2. Unproductive or less productive than their younger counterparts,
- 3. Are known to take more sick leave off from work,
- 4. Slow to learn or unable to keep up with changing technology,
- 5. Will, at some point, leave the organization with a pension, and
- 6. Resistant to change.

#### **Usage of Information Technology**

In general, technology can be interpreted as the result of human work to help solve problems faced or facilitate human activities and is expected to improve human performance (Sunarminto, 2015). Information technology is a powerful weapon for accelerating performance, knowing the position inside, knowing the challenges outside, and being the basis for decision making and policy making based on accurate data obtained through the sophistication of information technology. From here, the application of information technology in an agency becomes a benchmark for the progress of the agency and has an influence on performance. The application of information technology in each company or organization certainly has a different purpose because the application of IT in an organization is to support its business interests. Information technology plays an important role in improving the quality of information and also as a tool and a formidable strategy to integrate and process data quickly and accurately and as a competitive advantage to face the competition. Information Technology also serves to assist employees in a company to improve performance to increase productivity in the company. Employees are led to use information technology to make work more effective and efficient. In addition, information technology also plays an important role for companies to streamline time and costs which in the long term will provide very high economic benefits.

#### Work Performance

Work performance is the result of a process that refers to and measured over a certain period of time based on the provisions or pre-determined agreement (Edison, Anwar, dan Komariyah, 2016). Performance is defined as an expression of ability based on knowledge, attitudes, skills and motivation in producing something. Performance issues always get attention in management because it is closely related to productivity institution or organization. "Performance = Ability x Motivation".

## **Previous Research**

Pettway and Sulene (2019) aimed to gain a deeper understanding of the day-to-day experiences of older workers when adopting and adapting information and communication technologies in a technology-laden workplace. This study is framed by, first, selection optimization compensation framework for successful aging and, second, age-spanning training design framework. Semi-structured interview with 8 participants, field observation records, and archival data provide data about specific technology experiences among older workers at work. The results of this study found that by recording the experience of older workers in technology impregnated workplace, insights are provided based on whether their experience and relationships with other workers differ significantly from the experiences of others workers in environments that are perceived to be tech savvy. In addition, exploring interactions of individuals across generations in one workplace and how ageism can be affect the productivity of older workers in a technological work environment infused this Multiple case studies reveal behaviors, activities, and characteristics that emerged from the analysis of data associated with emerging themes and related patterns from raw data collected from interviews. The results found that, Lifestyle changes to maintain health and wellness since ICT means a longer, sedentary workday, Older workers are strong in employer loyalty and job retention, ICTs keep the older worker feeling energized, Camaraderie with younger workers keeps older workers more energized, Older workers are recognized as valuable only when they can adapt to the speed of ICTs.

Bianco (2021) aimed to understand what the bottlenecks are for ageing workers in relation to technological innovation and how to help them in overcoming it. The result of this research Technological innovation is sure a challenge for older workers, but it can also be an opportunity. In fact, for older workers with good professional experience and good qualifications, ageing seems to be not so relevant concerning their professional life. Particularly, the high-skilled older workers are ready to attend training programs. In so doing, they could develop their skills, avoid the risk to be fired or forced to retirement. The resulting situation reflects the traditional regional differences across Europe. The Northern European countries are in digital skills among the local population more advanced than the Mediterranean ones. The digital divides are then confirmed in Europe considering the following, traditional variables: gender, age and education level, i.e., women, older and low educated workers have got lower digital skills.

Daantje (2018) seek to answer is if older employees have difficulties adapting to new information technology. There are different factors that can lead to difficulties when it comes to learning about new systems and acquiring technological skills. Older employees face many barriers that can influence their thoughts about technology. These employees are often faced with negative stereotypes because they are deemed as incapable of functioning with new technology. The sub-questions that were answered for this paper seek to find out more about the employees' willingness for the use of technology, their attitudes on technology, and the barriers that they face.

#### RESEARCH METHOD

### Research Approach

Qualitative research is data that is not in the form of numbers so that it is only in the form of statements or sentences (Suliyanto, 2018). Research subjects in qualitative research are referred to as informants, namely people who provide information about the data that the researcher wants related to the research being carried out. This information can be in the form of research background situations and conditions.

## Population, Sample and Sampling Technique

The population in this study are 31 civil servants ranging in age from 50 years above at Dinas Pangan Daerah Sulawesi Utara. The sampling technique in this study using purposive sampling technique. Purposive sampling is a sampling technique with consideration of in (Sugiyono, 2019) for example, the person is considered know best about what we expect. The researcher uses purposive sampling technique because the researcher feels

that the sample taken knows the most about the problem which will be investigated by the researcher. The sample size in this study are 10 informants from the total population of 31 older workers at Dinas Pangan Daerah Sulawesi Utara.

#### **Data Collection Method**

The method used in data collection is the method of interviews on primary data sources, as well as documentation (Through existing journals and literature) on secondary data sources.

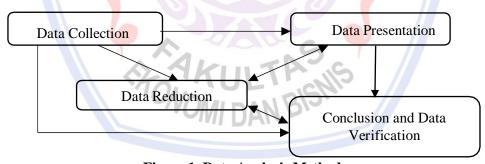
## **Operational Definition of Research Variables**

**Table 1. Operational Definition of Research Variables** 

Variable	Definition	Indicators
Work Ability	Work ability is something that can be achieved by inborn	1. Skills
	or learned skills that enable a person to complete his work	, 2. Knowledge
	both mentally and physically.	3. Work Experience
		(Winardi, 2016)
Information	Information technology is a system of procedures that are	1. Hardware
Technology	interrelated and work together to form a network to	2. Software
	achieve certain goals or objectives	3. Data
	TEKNULUGI MAL	4. Procedure
	CANANDA	5. Humans
	SCY NS DAM BY	(Muslihudin and Oktafianto, 2016)
Work	Work performance is a result achieved by employees in	1. Work quality
Performance	their work according to certain criteria that apply to a job.	2. Quantity
	7 P	3. Punctuality
	The second of th	4. Effectiveness
	77	5. Independence
		(Robbins, 2016)

Source: Data Processed (2022)

# Data Analysis Method Oualitative Method



**Figure 1. Data Analysis Method** *Sources: Miles and Huberman (1992)* 

### RESULT AND DISCUSSION

## Result

The researcher used 9 categories along with 21 themes that were asked to 10 civil servants who were categorized as older workers in Dinas Pangan Daerah Sulut. The selected category is in accordance with the indicators of various research variables, which are work ability, information technology, and also work performance and also older workers response about ability in using IT. And the themes selected are in accordance with the categories that are in accordance with the research objectives, which is to examine the daily experience of the ability to use information technology (IT) by older workers, to identify factors that contribute to the ability of older workers in the use of IT, and to identify ways in which the agency needs to implement strategies that will

contribute to overall performance and effectiveness for older workers in using and developing information technology.

**Table 2. Coding Categorization** 

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Categories		Themes	Description	Informants		
Response about ability in Using IT	2.	workers in using IT.  Main problems that impact the most to the ability of older workers in IT usage.	The ability to remember things declines due to age. The main problem in using IT is the ability to remember things, for example, the steps for using the application. Young workers are superior to older workers.	I1, I2, I7, I8, I10		
Ability (Skills in using IT)	2.	workers. Response when experiencing difficulties in using Information Technology.	IT needs to be developed, because this technology has become the current era we are currently facing. Although it may be close to retirement age, it is necessary for older workers to continue to know and update skills in using technology. Ask for help from friends who are young who understand better to solve this IT problem. In addition, by searching on google.	I9		
Ability (Knowledge about IT)	2.	Technology, Especially IT system that applied in Dinas Pangan Daerah Sulut. Response about knowledge of IT (in terms of education, experience, and the environment).	There are still many complex systems which can still be developed to be simpler. The educational background that only reached high school was influenced older workers in terms of knowledge of IT. If the education is more supportive, say up to a bachelor's degree, they can easily blend in and have more knowledge of IT."	I10		
Ability (Work Experience)	2.	the help of information technology or the traditional way.  Older workers satisfaction with their work (Seeing from job satisfaction through work situations, cooperation between employees, rewards given and things related to job satisfaction).	It's more comfortable to use the manual method, but IT can really help us to speed up our time to work. Older workers quite satisfied, there are friends who are young and more familiar with IT often help them when they have problems.	I8, I9, I10		
Information Technology (Hardware, Software, Data, Procedure)		implementation of information systems (Hardware, Software, Internet, Data Management) at Dinas Pangan Prov Sulut that can increase work performance. Procedures for the IT system as	performance, it is quite helpful to alleviate but it is still a bit complex and needs improvement. The procedures provided by the agency are also good, there was socialization before the system was implemented in the	11, 12, 13, 14, 15, 16, 17, 19, 110		

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Older workers readiness to face IT (Humans)	2.	face information technology. Response to the training and development to update current job skills by the agency. Response to the application update system carried out for	Keep trying to find out about IT developments because of the demands of work. There is training provided in this agency, but the training is given to young workers because they are still competent to do everything. It is sometimes difficult, because yesterday's example has display A, while tomorrow already has display B. So, it needs to be readjusted with that.	11, 14, 18, 110
Work Performance (Quality, Quantity, Punctuality)	2.	increase the quality of work tasks (by realizing work motivation and work ability in increasing work performance). Response to demands of agency's achievement targets or many work tasks to be completed with the usage of information technology.	The motivation to study IT has decreased because it is approaching retirement that influenced the intention, so quality work may increase or may decrease. Because the agency also has a time limit for each job, so it has become a must for us to complete our duties and responsibilities. It is very certain, in terms of time efficiency it is very possible, which becomes an obstacle	11, 12, 14, 16, 17, 18, 19, 110
Work Performance (Effectiveness)		the agency in placing their job duties.  The use of agency resources (Technology, Capital,	Older workers feel that they have fit in, placed with colleagues who understand IT, so there is help from them to work hand in hand to help those who can't. The facilities can't be used optimally, for example, computer facilities are still lacking, as well as an inadequate network for work. In addition, there is also a feeling of fear to use computers and laptops for fear of damage that can interfere and hinder performance.	11, I4, I6, I7, I8, I9, I10
Work Performance (Independence)		independence when carrying out work activities that require the use of information technology. Response and initiative steps regarding the assistance of young workers that should always be needed by older	Learning from the environment, seeing how they deal with IT is not only from the office but from the environment where they live and even at home. It is very much needed, the guidance of friends who are still young can help older workers, because as previously stated, old workers already have an age factor, so the way they capture the information is different.	11, I2, I3, I4, I5, I6, I7, I8, I9, I10

#### **Discussion**

## The Daily Experience of Older Workers' Ability in Using Information Technology (IT)

Based on the research findings that the researcher found, there are still older workers who have problems with their daily experience in using IT. They answered that the difficulty and complexity of using IT was the reason for these obstacles. Some of the answers from informants complained about the complexity of using complicated software. In terms of the mechanism of use, if the use of IT is not complicated in the sense that there are not too many items to click on, then older workers will still be able to understand or be able to do it, but if the mechanism is too complicated it will make them confused. Also, another obstacle from IT is in terms of using languages that are not familiar to older workers, such as software that uses English. Therefore, they tend to be confused when

dealing with the use of software that has a high level of complexity, but if the use of the software has an uncomplicated mechanism, it makes older workers not experience difficulties.

Older workers tend to ask for help from their co-workers when they have difficulty in using IT, such as consulting with workers who are young and workers who more understand about the usage of IT, as well as by taking advantage of the use of IT such as looking for tips and knowledge that can help them to increase their IT skills, because it has become a demand for them in accordance with the current digital era which requires them to work using IT. The readiness of older workers is also quite good in dealing with information technology at this time and in the future. According to them, readiness in dealing with information technology has become an absolute thing because in addition to the demands of work, the demands of the transformed era in the digital era are also their reason to be ready to face IT.

In addition, the positive side of information technology has a good impact on older workers. From the findings through 10 interviews with 10 older workers, when asked about comfort in working, most of the informants responded that the use of IT was still dominant and much needed for them compared to the traditional way. Older workers need and demanding this usage information technology with assistance such as software and hardware and adequate internet, because the work assignments given becomes easier to solve with the use of IT. The performance of working in a modern way is something that will be very helpful for older workers than the traditional way. However, on the other hand, there are also those who feel pessimistic about their ability to use IT because they feel that their abilities are not very competent in doing work in a modern way.

## Factors That Affect Ability of Older Workers to The Usage of IT

The existence of a digital gap that occurs in the ability of older workers, of course, there are several factors that influence this, researcher found that the factors that most affect the ability of older workers to use IT are the aging factor and involve physical and mental health as older workers. Among them are brain performance that has begun to decline, factors that decrease physical health such as eye health, stamina, and the ability to remember things so that they become obstacles in learning or adopting something new such as IT.

Intention is also a factor in the ability of older workers, researcher can understand from the answers of interviewed informants, the majority of them mention their intentions in learning IT. Older workers are quite satisfied with their work, there are friends who are younger and more IT-savvy who often help them when they have a problem. But as it is nearing retirement age, the intention to upgrade IT skills is a bit less. Therefore, the key lies in high self-intention or motivation, so that older workers feel that having the intention and motivation to improve their ability to IT will help them improve the quality of their performance.

The next factor is in terms of the education of the older workers, whether they have enough experience and knowledge about IT or vice versa. For some of the older workers interviewed, they thought that the education factor was an influence that had to be concern more than the age factor. If the education of older workers is above high school, it will be faster and easier to understand the use of IT than those who only reach high school or below. Older workers tend to be less satisfied with what they got in the past about IT because of the education factor that only reached high school. They think that if they have a more supportive education, say up to a bachelor's degree, they can easily blend in and have more knowledge of IT. On the other side, 4 out of 10 older workers who have a bachelor's degree or even master's degree, do not have difficulty using IT from the education factor, the reason is because those who have education above high school have more experience about IT.

The education factor is also supported by the financial ability factor that facilitates them in improving their IT skills, The younger generation is more familiar with IT than the older generation, because young people like generations Y and Z live in the digital era, in contrast to generation X and even boomers, only families who are financially capable can have adequate digital technology. Apart from physical facilities such as technology, facilities such as knowledge investment to improve IT skills such as education can be achieved from good financial capabilities.

# Strategies That will Contribute to Overall Performance and Effectiveness for Older Workers in Using and Developing Information Technology

In increasing work performance and encouraging the ability of older workers to use IT, it requires awareness of effective and efficient strategies to make older workers comfortable and not pressured to face the use of IT in the agency. To minimize barriers and maximize the potential of using IT for older workers to contribute positively to them, it can be increased along with the training and development provided by the agency, but it needs to be seen from the side of the older workers themselves about what they really need.

The researcher found that the majority of the informants complained about the facilities provided, one

example being the inadequate network. They say that improving work performance depends on the readiness of the agency to provide IT, interference with the internet network provided is the problem. Researcher see that the facilities provided have an influence on the intention of older workers to improve their IT skills. The opportunities given to older workers to use IT are still lacking. Other IT facilities such as hardware (computers, printers, etc.) still have to be the main concern in improving skills in using IT. Facilities such as software also need to be a concern in creating effective and efficient conditions to help older workers to be active and routinely use IT. This can be seen from the confusion about the use of software to be used in completing work tasks.

Along with the development of facilities that must be the concern of the agency, in helping older workers there must be an effective and efficient way so that they can accept the use of IT as well as possible and comfortably. This is supported by the findings of researcher who found that there are still older workers who tend to be uncomfortable with the use of hardware facilities in the agency. This can be seen from the presence of older workers who are afraid to use computers and laptops for fear of being damaged or errors so that they can interfere with or hinder work performance with limited use of hardware for older workers. Both direct and indirect training carried out with the right approach are actually needed for them to have good experience in using IT. Also, what is needed by older workers is a good work synergy that is maintained between older workers and younger workers, to work hand in hand to create good work performance.

The training provided by local governments and agencies to civil servants is not enough to improve the skills of older workers in using IT, the reason being that IT is a dynamic science that can develop rapidly. Individual training such as capital to take part in computer courses to improve skills is also a need for older workers. The main concern is the equality of the training provided, meaning that all employees without exception must receive the training, including older workers. This can be seen from the complaints from several older workers about the provision of training. Older workers assess that the training provided by the agency is more likely to be given to young workers because they are still competent to do everything and not necessarily workers who receive training are willing to share their knowledge with other workers, as felt by some of the older workers interviewed.

## CONCLUSION AND RECCOMENDATION

#### Conclusion

From the results of the study, researcher can summarize several things such as:

- 1. The difficulty of using software that has a high complexity of use is the obstacle. Older workers are more likely to ask for help from their younger coworkers because they think that those who are classified as young employees were born in an era where digital has started to develop, so in terms of daily experience, younger workers are more knowledgeable in IT than older workers. The use of IT can also help older workers in finding solutions when experiencing problems using IT, by utilizing websites such as Google search and so on. Older workers show the readiness in dealing with information technology applied in the workplace, this is because information technology has become an absolute thing to be developed due to the era of digital transformation. Although constrained by several factors that interfere with their ability to use IT, information technology can help and make it easier for them to complete their work.
- 2. There are several factors that can affect the ability of older workers to use IT. The biggest factor is the age factor which involves physical health such as eye health as well as stamina and mental as older workers. The second factor is the intention of the older workers to learn and develop their IT skills. This is supported by the level of job satisfaction and work motivation as older workers, such as the thought that they are approaching retirement age or working period. The third factor is the educational background of the older workers. Older workers who have an educational background above high school have higher IT skills and skills than those who only graduated from high school. This is because they have more opportunities for experience and learning about IT. Also, financial factor in facilitating them to improve their IT skills. Good finances will also encourage better abilities.
- 3. In creating and selecting strategies that will contribute to the overall performance and effectiveness of older workers in using and developing IT, it is necessary to be aware of the needs of these older workers. Seeing from what the needs of the older workers are, then it is possible for the company/agencies to choose or create the right strategy. From the results of the study, researcher can conclude that the first thing needed by older workers is adequate facilities such as (Hardware, Software, Internet), because these adequate facilities have an influence on the intentions of older workers in improving their IT skills. The second is, older workers need management handling such as direct and indirect training as well as effective and efficient work synergies

between generations so that they can accept the use of IT properly and comfortably. Older workers need more and more specific training on the use of IT so that they can better master the use of IT.

#### Recommendation

From the conclusions the researcher obtained in this study. suggestions that researcher can give from the results of this study are as follows:

- 1. For agency, it is necessary for agencies to realize that innovative human resource management is the key to success for the agency and for older workers in facing the digital era and the use of information technology in the workplace. Agencies can use 2 views of training methods such as "Training to use technology" or the best way to train older workers to use emerging innovations. Also, the second is "Using technology to train" or the issue of how best to use emerging innovations to teach new skills to older workers. Both views will be useful for older workers to stay productive and increasing work performance in today's increasingly technology-driven era.
- 2. For further researchers, to be able to use the results of this study as reference for further research by considering more about the analysis of technology adoption on older workers in the future which will certainly be more developed than the current period. It is also possible to analyze this research with different methods such as using a quantitative approach with more respondents and also different methods to obtain varied information.

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