# ANALYSIS OF THE APPLICATION OF INFORMATION TECHNOLOGY SYSTEMS AND EMPLOYEE PERFORMANCE

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## **Abstract**

The development of information technology requires an apparatus that is always fast and responsive in anticipating changes. Moreover, technology is also one of the keys to boosting the competitiveness of human resources in the instrument, which is currently getting tighter. The purpose of this study is to determine the influence of talent management and the quality of resources on employee performance the application of information technology systems. The research approach used in this study is quantitatively based on the study of empirical rational principles. The data collection techniques used are questionnaires. The sample consisted of 93 respondents. Data analysis used is descriptive analysis, data quality test, and hypothesis testing. The results of research on the influence of talent management and the quality of human resources on employee performance through the application of information technology systems at the BP PAUD and Dikmas offices of South Sulawesi Province show that talent management, human resource quality, and the application of information technology systems have a direct effect on performance. Of course, suppose the BP PAUD and Dikmas offices consistently apply talent management that has been done so far and pay attention to the quality of each employee they have and increasingly utilize information technology systems as work aids.

**Keywords:** Talent Management, Quality of Human Resources, Employee Performance, Implementation of Information Technology Systems

**Authors' individual contribution:** Conceptualizations — D.M., A.A., and R.N.; Methodology — D.M., R.N., and S.H.A.; Software — S.H.A.; Validation — D.M. and R.N.; Formal Analysis — A.A. and S.H.A.; Investigations — D.M. and A.A.; Resources — D.M. and R.N.; Data Curation — R.N.; Writing — Original Draft — R.N.; Writing — Review & Editing — D.M., R.N., and S.H.A.; Visualizations — A.A. and R.N.; Supervision — D.M.; Project Administration — S.H.A. and R.N.

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## 1. INTRODUCTION

The quality of human resources (HR) is one of the factors that improve the yields of the performance of an institution or organization. Therefore, human resources who have high competence are necessary because high skills or competence will be able to support the improvement of employee performance (Rozi & Sunarsi, 2019). Employee performance is work accomplished both in terms of quality and quantity accomplished by an employee in implementing the functions and duties imposed by the organization.

The state civil apparatus is essential in implementing governance and development the unitary state of the Republic of Indonesia. The state civil apparatus is also a bureaucratic "machine" that moves the available resources to realize the purpose and target of the government. On the other hand, the state apparatus is a pioneer in the success of development to achieve justice and public welfare, as aspired by the entire Indonesian nation. The role of the state apparatus is becoming increasingly strategic in line with the building of science and information technology today. This role is essential to carry out deal with anticipating the dynamics strategy of the environment so rapidly, namely the demands of the community for quality services in terms of information and communication Technology, which has now begun to be implemented, such as e- and changes in relations between countries at the regional level towards community Asian economy.

Based on the Instruction of the President of the Republic of Indonesia No. 3/2003 concerning national policies and strategies for e-Government development, the use of communication and information technology in government processes (e-government) will increase efficiency, effectiveness, transparency and accountability in government administration. The government also issued Law of the Republic of Indonesia No. 5/2014 concerning the state civil apparatus which regulates the state civil apparatus in which there is a state civil apparatus.

Performance assessment and competence development of civil servants and government employees with employment agreements and is added to Government Regulation of the Republic of Indonesia No. 30/2019 concerning performance appraisal of civil servants (Pemerintah Pusat, 2019). Furthermore, in addition to the Presidential Instruction and the Constitution, the Minister of Administrative and Bureaucratic Reform has issued Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform the Republic of Indonesia No. 3/2020 concerning talent management of the state civil apparatus Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi, 2020).

The annual performance achievement of BP PAUD and Dikmas for the number of models/programs developed, validated, and implemented from 2018 to 2019 has increased in number. However, from 2019 to 2020, there has been a decrease and lower than in 2018; the number of institutions/units prepared to meet the National Education Standards also fluctuates yearly. In

addition, the number of human resources whose competence has increased each year has decreased.

Based on the performance accountability report of government agencies, BP PAUD, and Dikmas for the last three years, which fluctuated from year to year, the authors saw that there were obstacles that resulted in the achievement of the number of performances not increasing every year.

Human resources who sufficiently the ability to create and produce ideas, have creativity, take initiative, have the ability to solve problems, and have forward insight, skills and expertise are manifestations of potential and quality human beings, which must be owned the organization in order to realize the organizational goals that have been set. Employees are the determining factor in achieving the goals of government agencies effectively and efficiently. Employees are the drivers of activities in an organization/agency. In carrying out duties as an employee, what must be considered is the quality of human resources so that in its implementation it is in accordance with the planning of related agencies so as to create good work effectiveness. Therefore, it is necessary to make the maximum possible efforts to utilize the human resources it has to obtain good quality Human Resources as a form of achieving work effectiveness in an organization.

The results of Nurlina et al.'s (2020) research show that the human resources quality variable has the greatest influence on the work performance of Maluku Province transportation service employees. Nuskiya's (2018) research results show that information technology has a crucial influence on employee performance. Many employees agree that this reduces error rates and Master of Work and increases employee satisfaction and drive. Organizations use IT applications as competitive tools to enjoy competitive advantages and they try to adopt new ones. Furthermore, the results of Keshavarz and Jamshidi's (2018) research quoted by Pula (2022) show that banks that boast products and services without taking to account customer thoughts and fomentation have the chance to remain focused on the bank and not succeed. From the three studies above we can conclude that the quality of human resources and the application of information technology have a direct effect on performance, but in this research what we want to see is the influence of the quality of human resources on performance. Employee performance is mediated by the application of information technology systems and the author has not received previous research that uses the same variables.

This research can be used as a comparison with previous research that has existed by discussing the same thing. This study also adds references to the application of information technology systems and employee performance.

The rest of the paper is structured as follows. Section 2 reviews the relevant literature. Section 3 analyzes the methodology that has been used to conduct empirical research. Section 4 contains the results of data processing and analysis of research power, as well as links to relevant research results. Section 5 contains conclusions from the research results.

## 2. LITERATURE REVIEW

According to Dessler (2016), human resource management is based on the practices and policies that a person needs to carry out the "people" or human resources aspect of a management position, including recruitment, screening, training, reward, and appraisal. Management also has a basic role in conducting position analysis, planning labor needs and recruiting prospective workers, selecting prospective workers, providing an introduction and placement to new employees, setting wages, salaries and compensation, providing incentives and welfare, conducting performance evaluations, communicating, provide counselling and uphold work discipline, provide education, training and development and build work commitments.

Human resource management is oriented towards improving performance and developing a company culture that advocates innovation and flexibility which means the company's capabilities to reach its goals (Belias et al., 2022; Mustafa et al., 2022). The overall HR strategy leads to building a faithful workforce, preferably in a environment and not a union (Veeraraghavan, 2017). The goal of this HR strategy is to establish healthy two-way communication, giving highly emulation compensated and performance payment incentives, guarantee as widely as possible the fair treatment and safety of employees for all workers. institutionalize assorted promotional activity from within that are directed at providing employees with every opportunity to fully utilize skills and talents when working.

to Armstrong (2006), According management is an integrated series of activities to ensure that an organization attracts, retains, motivates, and develops the potential and talented people it needs now and in the future. employees who have talents should be run by the corporation properly with a good management system as well. A talent management system that is carried out in an integrated method and in correlation with more management functions will give a real improvement business achievements and employee performance. An accomplishment company is one that invents a culture of talent development well (Ben Moussa & El Arbi, 2020; Kadochnikov & Fedyunina, 2017). Employee talent development culture is composed of programs that are specifically composed of the company's strategy in selecting the right employees, occupancy employees appropriate to their proficiency and expertise, offering training and employee development so as to increase performance at work and defending employees by offering compensation.

Talent management in an organization has two important roles. The first role is to create value and the next role is to maintain value. In creating value, the task of each division and leader in a company is to recruit people who have value. The value creation model creates high value for each individual in the company who then spreads that value in a series of measures in all directions to generate momentum for large-scale change. As a value protector, it means that the company does everything it can to protect individuals with high-value talents from being lost in the temptations of other organizations. Talent management is a process done with the aim of

ensuring key standing in a company that can be filled internally, previously by forming a talent development centre group consisting of company resources that have high-quality work (talent pool).

Employees who have high qualifications and skills are selected and included in a talent pool program (Andi, 2019; Pratiwi et al., 2019). This program aims to ensure that these potential employees are given the best treatment in the form of education, training and so on to optimize their competencies so that they can make the maximum contribution to achieving the organizational goals that have been set.

Sufficient human resources have the ability to create and produce ideas, have creativity, take initiative, are able to solve problems, have foresight, skills and expertise are manifestations of potential and qualified human beings, which must be possessed by the organization in order to realize the organizational goals that have been set. Employees are a determining factor in achieving the goals of government agencies effectively and efficiently. Employees are the drivers of activities in an organization/agency. In carrying out duties as an employee, what must be considered is the quality of human resources.

Implementation of national and institutional state civil apparatus talent management as referred to in Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform of the Republic of Indonesia No. 3/2020 concerning talent management of the state civil apparatus Article 6, letter b includes: 1) talent acquisition; 2) talent development; 3) talent retention; 4) talent placement; and 5) monitoring and evaluation (Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi, 2020).

Sedarmayanti (2017) believes that quality is the success of a result obtained from various specifications of needs, and expectations have been fulfilled properly. Indicators of the quality of human resources according to Sedarmayanti (2017) are as follows: 1) physical ability (health), 2) non-physical ability, which includes intellectual ability (intelligence), and psychological ability (mental).

Information technology is a section technology that can be utilized to process data, such processing, getting, divised, saving, and manipulating data, in a variety how to yield quality information, namely related, accurate, appropriate information, which is utilized for individuals, businesses, and government which is strategic information for decision making. This technology uses a set of computers to process data and a network system to connect one computer to another according to needs and communication; technology is used so that it can be spread and accessed in general.

According to Susanto (2013), the components of an accounting information system can be grouped as follows: 1) Hardware is physical appliances that can be used to gather, insert, process, save and remove the yield of data processing in the form of information; 2) Software is a collection of programs utilized to run specific apps on a computer, while the program is a collection of computer commands arranged systematically. The software can be grouped into two, namely system software and application software; 3) Human (Brainware)

resources are the essential part of information system components in the business world well known as bookkeeping information systems. This HR part is an inseparable part of other components in an information system as a result of arrangements, analysis, design, and implementation strategies based on communication between human resources involved in an organization; 4) Procedure is a series of activities or activities that are carried out repeatedly in the same way. While the activity is doing an activity based on the incoming information and perceptions held about the information; 5) Database is a collection of data stored in storage media in a company (broad sense) or on a computer (narrow sense).

In this study, the indicators used are:
1) Brainware is a person who uses, uses, or operates a computer device. Examples of brainware are programmers, *netters* (a term for people who are surfing the internet), and people who are using computer devices. Alternatively, the definition of brainware, namely humans involved in operating or using, and managing systems in computer devices.
2) *Digital attitude* is an aspect of behavior in the context of humans as users (brainware). Therefore, it becomes a critical determining factor for everyone who runs IT.

According to Mangkunegara (2000), performance or work performance outcome from the quality and quantity of work an employee does in executing his tasks following the duties given to him. Meanwhile, according to Gibson (Akil et al., 2020) employee performance is a dimension that can be utilized to compare the outcome of the exercise of duty and accountability administered by the organization in a specific period. Therefore, it can be utilised to gauge work or organizational performance.

Bernardin and Russel (2013) suggest several dimensions of performance, namely: 1) quality is the extent at which the process or result of completing an activity is close to perfect; 2) quantity is the amount shown in currency units, the number of units, or the number of cycles of activities completed; 3) timeliness is the degree to which an activity can be completed at the desired time by showing the coordination of the output of others and the time available for other activities; 4) cost-effectiveness is the level at which human resources can be maximized to obtain greater profits or reduce losses arising from using existing between individuals resources: 5) relationships (interpersonal impact) are the degree to which an employee can develop feelings of mutual respect and cooperation between employees.

Based on the background of the problem, the hypotheses are formulated as follows:

H1: Talent management has a positive and significant effect on the implementation of information technology systems.

The existence of talent management in the operation of computers will make it easier for agencies to apply information technology. This is with the management of talents for employees, it will create development or increase competence, especially the use of information technology.

H2: The quality of human resources has a positive and significant effect on the application of information technology systems.

The use of technology cannot be automatically used, but it needs to be supported by the presence of human resources. The quality of resources that are able to keep up with the times will cause agencies to be able to compete, especially in the current technological era.

H3: Talent management has a positive and significant effect on employee performance.

Talent management is important for all organizations to create resources that have the appropriate skills and capacities to increase competitive excellence

H4: The quality of human resources has a positive and significant effect on employee performance.

Resources that have the ability, able to create and generate ideas, to realize quality potential human beings. Employees are the determining factor for achieving organizational goals effectively. The maximum possible effort to improve skills can create resources that have good performance.

H5: The application of information technology systems has a positive and significant effect on employee performance.

The use of technology can make it easier for employees to manage data, access data, and increase efficiency. The use of information technology systems if carried out by people who are experts in their fields, of course, this improves the performance of the organization in general, and employees in particular.

H6: Talent management has a positive and significant effect on employee performance through the application of information technology systems.

The use of information technology cannot be done by ordinary people, so efforts are needed to manage the talents of employees initiated by the leadership. With good talent management and supported by information systems and technology, this will have an impact on employee performance.

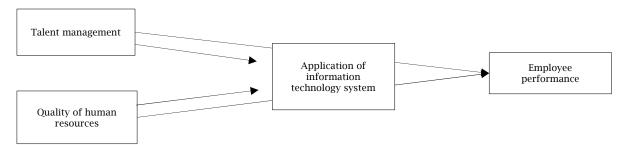
H7: The quality of human resources has a positive and significant effect on employee performance through the application of information technology systems.

Employees are the drivers of activities in an organization. Public employees are servants to the community so they are required to have good quality. Therefore, the maximum possible effort in its utilization will produce quality resources that are able to create work effectiveness and efficiency.

## 3. METHODS

The research approach used in this study is quantitative to determine the relationship between the influence of talent management and information resource management on employee performance through the use of information technology in the office BP PAUD and Dikmas South Sulawesi Province. The research design is as Figure 1.

Figure 1. Research design



The population in this study was state civil apparatus employees within the scope of the BP PAUD and Dikmas office of South Sulawesi Province, totalling 120 employees. To representative research results, the sample unit contacted is adjusted to particular criteria that are applied based on the research objectives or research problems with the requirements of the employees, namely: 1) Gender consisting of male and female employees; 2) Age which is classified based on 25-29 years, 30-34 years, 35-39 years, 40-44 years, 45-49 years, 50-54 years, and 55 years and above; 3) Last education which are classified SMA/SMK/MA, Diploma (D3/D2/D1), Bachelor (S1)/Diploma IV (D4), and Postgraduate; 4) Years of service which are classified into 1-5 years, 6-10 years, 11-15 years, 16-20 years, 21-25 years, 26-30 years, and 30 years and above.

The number of samples selected was 93 respondents, using calculations according to the Slovin formula.

$$n = \frac{N}{1 + N \cdot e^2}$$

$$n = \frac{N}{1 + 120 (0.05)^2} = 92.3$$
(1)

collection method The data used a questionnaire. The questionnaire prepared consists of 23 questions to explore information about talent development, maintaining talents, talent sources, physical abilities, intellectual abilities, psychological abilities, brainware, digital attitudes, work quality, work quantity, punctuality, cost-effectiveness, and relationships individuals. The questionnaire that is distributed consists of five answer choices for each question item. Data analysis was carried out using the t-test, the Sobel test and determining the coefficient of determination. In addition to using this analysis, for similar cases, it can also be analyzed SEM using SmartPLS or analysis with SPSS AMOS.

## 4. RESULTS AND DISCUSSION

#### 4.1. Results

The t-test is used to test one of the hypotheses in a study that uses multiple linear regression analysis. The t-test is used to partially test each variable.

Model 1 regression analysis is used to determine the magnitude of the direct influence of the variables *talent management* ( $X_1$ ) and the *quality of human resources* ( $X_2$ ) on the variable of *application of the information technology systems* ( $Y_1$ ).

**Table 1.** Test results of  $X_1$  and  $X_2$  against  $Y_1$ 

Model 1	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
	В	Std. Error	Beta	]	-	Tolerance	VIF
Talent management	0.552	0.090	0.553	6.118	0.000	0.671	1.491
Quality of human resources	0.182	0.066	0.248	2.745	0.007	0.671	1.491

Note: Dependent variable is an application of information technology systems.

The t-count value for the *talent management*  $(X_i)$  for the *application of information technology systems*  $(Y_i)$  is 6.118 with a significance value of 0.000 indicating that the t-count value is greater than the t-table value of 1.988 and the significance value is less than 0.05 then the path coefficient value shows a positive sign of 0.553, it can be concluded that the *talent management* variable  $(X_i)$  has a positive and significant effect to the *application of the information technology system*  $(Y_i)$  to BP PAUD and Dikmas office employees of South Sulawesi Province. Based on this, HI is accepted.

The t-count value for the *quality of human* resources ( $X_2$ ) to the *application of the information* technology system ( $Y_1$ ) is 2.745 with a significance value of 0.007 indicating that the t-count value is greater than the t-table value of 1.988 and the significance value is smaller than 0.05 then

the path coefficient value shows a positive sign of 0.248, it can be concluded that the *quality of human resources* ( $X_2$ ) has an effect positive and significant to the *application of the information technology system* ( $Y_1$ ) to BP PAUD and Dikmas office employees of South Sulawesi Province. Based on this, H2 is accepted.

The t-count value for the *talent management*  $(X_i)$  to *employee performance*  $(Y_2)$  is 2.504 with a significance value of 0.014 indicating that the t-count value is greater than the t-table value of 1.988 and the significance value is less than 0.05 then the path coefficient value shows a positive sign of 0.239, it can be concluded that the *talent management*  $(X_i)$  has a positive and significant effect on *employee performance*  $(Y_2)$  in the office employees of BP PAUD and Dikmas of South Sulawesi Province. Based on this, H3 is accepted.

**Table 2.** Test results for  $X_1$ ,  $X_2$ ,  $Y_1$ , and  $Y_2$ 

Model 2	Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
	В	Std. error	Beta			Tolerance	VIF
Talent management	0.230	0.092	0.239	2.504	0.014	0.469	2.132
Quality of human resources	0.307	0.059	0.433	5.206	0.000	0.617	1.620
Application of information technology systems	0.242	0.091	0.251	2.651	0.010	0.476	2.101

Note: Dependent variable is employee performance.

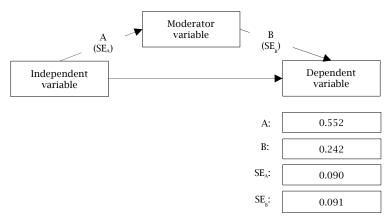
The t-count value for the *quality of human* resources ( $X_2$ ) to employee performance ( $Y_2$ ) is 5,206 with a significance value of 0.000 indicating that the t-count value is greater than the t-table value of 1,988 and the significance value is smaller than 0.05 then the path coefficient value shows a positive sign of 0.433, it can be concluded that the *quality of human resources* ( $X_2$ ) has a positive effect and significant to employee performance ( $Y_2$ ) in BP PAUD and Dikmas office employees of South Sulawesi Province. Based on this,  $H_2$  is accepted.

The t-count value for the application of the information technology system  $(Y_i)$  to employee

performance ( $Y_2$ ) is 2.651 with a significance value of 0.010 indicating that the t-count value is greater than the t-table value of 1.988 and the significance value is smaller than 0.05 then the path coefficient value shows a positive sign of 0.251, it can be concluded that the application of the information technology system ( $Y_1$ ) has a positive effect and significant to employee performance ( $Y_2$ ) in BP PAUD and Dikmas office employees of South Sulawesi Province. Based on this,  $H_2$  is accepted.

The results of the Sobel test calculation can be done using an online calculator which can be presented through the following Figure 2.

**Figure 2.** Sobel test  $X_1$  against  $Y_2$  through  $Y_1$ 



Sobel test statistics: 2.43986610 One-tailed probability: 0.00734635 Two-tailed probability: 0.01469271

Based on Figure 2, namely the results of calculating the Sobel test using an online calculator, a statistical table = 2.439 and a value = 0.007 were obtained. With a value of 0.007 < 0.05, it can be said that the *application of the information technology system*  $(Y_i)$  is a variable that can mediate the influence of *talent management*  $(X_i)$  on *employee performance*  $(Y_2)$ . This finding provides an indication that *talent management*  $(X_i)$  has a real effect on the *application of information technology systems*  $(Y_i)$  so that it has an impact on *employee performance*  $(Y_2)$  in BP PAUD and Dikmas office employees of South Sulawesi Province. Based on the results of the above analysis, H6 is accepted.

#### 4.2. Discussion

4.2.1. The influence of talent management in information technology application

Based on the testing results, the *H1* shows that talent management positively and significantly affects applying technology systems. This means

that if BP PAUD and Dikmas of South Sulawesi Province are increasingly implementing a talent pool, which is often conducting assessments to see the talents and potential of each employee, this will have an impact on increasing the ability of employees to apply information technology to carry out work as a measure of effectiveness and efficiency in the organization. Furthermore, vice versa, if the organization cannot utilize talent management properly, it will impact the lack of employees' ability to apply information technology at work.

The findings in this study are that the more often BP PAUD and Dikmas office of South Sulawesi Province conduct assessments to see the talents and potential of each employee, this will have a positive impact on the organization and the talent pool can also be used to group talented people in the organization to do this. Development of talent (talent development) that is owned by including training and, of course, training and development provided by BP PAUD and Dikmas office of South Sulawesi Province to employees following the talents they have, significantly increases the ability of

employees to operate information technology in the form of computers and systems that can be used to simplify or help speed up work. In addition, BP PAUD and Dikmas office of South Sulawesi Province must also pay attention to talent retention, consistently placing competent employees in strategic positions to improve performance, and organization work.

Talent is a key employee who has a keen strategic thinking, the ability to attract and inspire people, has instincts, functional skills and the ability to create results (Yeung, 2020). Talents are employees who are able to contribute above average through the achievement of high performance and ownership of potential that will affect the growth of the current and future organizations. The talent in question is not only limited to a certain level but applies to all functions and groups in the organization.

## 4.2.2. The influence of the quality of human resources on the information technology application

Based on the testing results, the *H2* shows that the quality of human resources has a positive and significant effect on the application of technology systems. That is, if BP PAUD and Dikmas office of South Sulawesi Province improve the quality of their human resources, it will increase the ability of employees to apply information technology in carrying out their work as a step for effectiveness and efficiency in the organization. Vice versa, if BP PAUD and Dikmas are unable to improve the quality of human resources, it will impact the lack of employees' ability to apply information technology at work.

The application of information technology systems at work is a necessity that cannot be denied because of the times that are followed by rapid technological developments.

The success of the organization in achieving its goals largely depends on the quality of its human resources. The role of human resources in the organization plays a decisive role because the life and death of a government organization depends solely on its employees. Sufficient human resources have the ability to create and produce ideas, have creativity, take initiative, are able to solve problems, have foresight, skills and expertise are manifestations of potential and qualified human beings, which must be possessed by the organization in order to realize the organizational goals that have been set. According to Nagalingam et al. (2022), the nature of carrying out duties as employees that must be considered is the quality of human resources.

## 4.2.3. The influence of talent management on employee performance

Based on the testing results, the H3 shows that talent management positively and significantly affects employee performance. If BP PAUD and Dikmas office of South Sulawesi Province implement talent management well, it will improve employees' quality of work, impacting organizational performance and vice versa. On the other hand, if

the organization cannot utilize talent management properly, it will impact individual employee performance. Therefore, it will increase and affect organizational performance. The results of this study strengthen the theory (Venkateswaran, 2012) which states that ideally, talent management should be carried out in conjunction with four other essential strategies that become basic needs and become profits for the company, namely talent management as a strategy to manage a series of plans, strategies to support company strategies, approaches to develop employees and strategies to retain employees. Likewise, Hersey et al. (2013, as cited in Suprianto & Arhas, 2022) helped formulate knowledge as part of the ability, which is one factor that affects employee performance.

The findings in this study are that talent management is critical in an organization because it can be used to group talented people and develop their talents using training funds or training. This aligns with the Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform of the Republic of Indonesia No. 3/2020 concerning talent management of the state civil apparatus regarding state civil apparatus talent management. Talents are state civil apparatus employees who meet specific requirements to be included in the succession plan group. In contrast, talent management is a state civil apparatus career management system that consists of the stages of acquisition, development, retention, and placement of talents prioritized to occupy target positions based on the highest level of potential and performance through specific mechanisms implemented effectively and sustainably to meet the needs of national government agencies in the context of accelerating national development Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform the Republic of Indonesia No. 3/2020 concerning state civil apparatus personnel management concerning state civil service management. This is supported by Notoatmodjo (2014); education and training can be seen as a form of investment. Therefore, every organization or agency that wants to develop education and training for its employees must receive excellent training because human resources or employees who occupy a specific position in the organization do not have full capabilities that follow the requirements needed in that position.

## 4.2.4. The influence of the quality of human resources on employee performance

Based on the results of testing the *H4*, the results show that the quality of human resources has a positive and significant effect on employee performance. Therefore, if BP PAUD and Dikmas office of South Sulawesi Province improve the quality of their human resources, it will enhance the individual performance of employees in the BP PAUD and Dikmas office of South Sulawesi Province, which will directly have an impact on organizational performance.

Nicolau and Foris (2018) said that the quality of human resources could be seen from the knowledge level, attitudes in carrying out work, and skills in carrying out work. Simamora (2018) states that HR capabilities significantly affect work effectiveness, where the higher the HR capabilities, the higher the work effectiveness. Therefore, the HR is one of the factors in increasing the productivity of the performance of an organization or agency. Therefore, HR which has high competence is needed because high expertise or competence will be able to support employee performance improvement (Arhas et al., 2022).

## 4.2.5. The effect of the application of information technology systems on employee performance

Based on the testing results, the *H5* shows that the application of information technology systems positively and significantly affects employee performance. That is, if BP PAUD and Dikmas employees of South Sulawesi Province apply information technology systems at work, there will be effectiveness and efficiency at work so that it will improve the individual performance of employees, which will directly have an impact on organizational performance.

The theory obtained in this study is that the more organizations use information technology in their work, the more effectiveness and efficiency will occur in terms of time and finances so that it will have a good impact on the organization. According to the Ministry of National Education (2010), technology is convenient in various fields. This technology is not only for business but is also helpful in health, education, and government matters. The use of software or software allows employees to process more information than manual methods. Therefore, even basic information technology can significantly impact employee performance. For example, using e-mail to send documents without the need to use document delivery services and not incur shipping costs will impact time effectiveness and organizational budget efficiency. Utilizing information technology (IT) to support various needs and development of organizations, individuals and companies undoubtedly bring something positive.

Nevertheless, remember that information technology can make us more meaningful people by using it for positive things. Furthermore, the importance of employee performance makes organizations selectively seek human resources who are highly competent and can adapt to an increasingly complex organizational environment. Therefore, increasingly advanced information technology is one of the main factors that affect organizational performance.

# 4.2.6. The influence of talent management on employee performance through information technology systems

Based on the testing results, the *H6* shows that talent management has a positive and significant effect on employee performance which is mediated by the application of information technology systems. That is, if talent management is carried out by BP PAUD and Dikmas office of South Sulawesi Province properly, for example, increasing

the competence of employees who have talent in the field of information technology and placing talented employees in strategic positions, this will improve organizational performance mediated by the use of information technology.

Based on the results of the path test that has been stated earlier, the calculation of the amount of indirect influence of talent management  $(X_1)$  on employee performance  $(Y_2)$  through the application of information technology systems  $(Y_1)$  is: influence = 0.239, indirect influence  $(0.553 \times 0.251) = 0.138$ . So the total influence is 0.377 or 37.7%. It means that 62.2% of other variables can mediate talent management by improving employee performance. If viewed in more detail, the effect is not directly talent management on employee performance judged by the application of information technology systems is only 13.8%. This should be a concern for the head of BP PAUD and Dikmas office of South Sulawesi Province to pay more attention to the indicators contained in talent management related to the ability of employees to utilize and implement information technology systems at work to improve individual performance, which will directly impact on employees' performance and organizational performance.

## 4.2.7. The influence of the quality of human resources on employee performance through the information technology application

The testing results of the *H7* show that one of the requirements theory to be accepted is not fulfilled, so the assumption is rejected. This is because the number of respondents' answers is neutral or in doubt, so the results of descriptive testing show that the hypothesis is rejected.

The previous hypothesis found that the quality of human resources had a positive and significant effect on the implementation of information technology systems. The quality of human resources had a positive and significant impact on employee performance, and the implementation of information technology systems had a positive and significant effect on employee performance. However, at the time of system implementation, Information technology is the link between the quality of human resources and employee performance, getting results that have no effect.

#### 5. CONCLUSION

Based on the research results on the influence of talent management and the quality of human resources on employee performance through the implementation of information technology systems in the BP PAUD and Dikmas offices of South Sulawesi Province, it can be seen that talent management, quality of human resources and the implementation of information technology systems have a direct impact.

The results show that talent management, human resource quality, and the application of information technology systems have a direct effect. However, suppose the BP PAUD and Dikmas office in South Sulawesi Province consistently implement talent management that has been done so far, pay

attention to the quality of each employee they have, and increasingly utilize information technology systems as work aids. In that case, it will have a tremendous impact on organizational performance. Then from the results of the mediation test, it was found that the application of information technology systems can mediate employee performance management. Still, the application of information technology systems cannot judge the quality of human resources on employee performance at the BP PAUD and Dikmas office in South Sulawesi Province. The suggestions that can be given to BP PAUD and Dikmas office of South Sulawesi Province in connection with the results of this research are as follows: 1) develop and prepare

special development programs for future leaders candidates according to the needs of the BP PAUD and Dikmas office of South Sulawesi Province; 2) need to pay attention to the employee's physical development program to have good health and fitness to do office work; 3) motivate employees to be able to follow developments that occur in the work environment, especially the development of information technology. This research can be used as a decision making to improve the use of information technology and employee performance, especially in the public sector, so that tools and employees are very decisive in service delivery. This research is limited to a public organization, and the next research can be carried out on a wider scope.

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