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Adhoc Apparatus Quality Improvement Model: Recruitment And Selection System

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INFO ABSTRACT **Article History** The quality of human resources has an important role in the organization's Received: sustainability, so the recruitment and selection process is carried out according to 2023-10-03 existing procedures, especially supported by technology-based systems. This Revised: research aims to analyze the relationship between recruitment and selection in 2023-11-15 producing quality human resources using a model utilizing an online-based Accepted: system. Researchers used a mixed method approach to complete what had been 2023-12-05 formulated, reaching 114 samples employing simple random sampling. Data was obtained by distributing questionnaires and conducting interviews using the FGD method with the implementing committee and selected District Panwaslu members. Data from the questionnaire research were analyzed utilizing structural equation modeling (SEM), while data from interviews were analyzed using data triangulation. The results found that information and communication technology systems significantly influenced recruitment, selection, and quality of human resources. Meanwhile, the recruitment and selection process did not significantly influence the production quality of human resources since optimal recruitment and selection did not guarantee that the selected human resources were of good quality. However, the role of selection could mediate the relationship between technological systems in creating quality human resources, while recruitment cannot. (cc) BY-NC-ND This work is licensed under Attribution-**Keywords:** Technology systems; Recruitment; Selection; Quality of human NonCommercial-NoDerivatives 4.0 International resources

INTRODUCTION

The organization's success depends on an effective recruitment and selection system (Bhuiyan et al., 2021). Recruitment and selection are important implementations of human resource management that directly affect the organization's success. The recruitment quality depends on the organization's recruitment process, and its effectiveness is directly linked to the selection stage (Bakhashwain & Javed, 2021). Proper recruitment processes and selection methods enable organizations to recruit committed and talented employees, enhancing organizational performance. Also, several companies were challenged by many candidates who stated that the recruitment team lacked professionalism (Ntunga & Ogbe, 2022). The potential danger of bad recruitment and selection because bad recruitment can cause people who are accepted by applicants to be bad (Mustapha et al., 2013).

Recruitment has become an important process in a highly competitive labour market. Traditional recruiting methods have been revolutionized by utilizing the internet wave (Okolie & Irabor, 2017). Information systems for recruitment and selection of prospective employees using internet-based applications can facilitate the processing of this information and facilitate the system for recording the results of its implementation (Maulani & Safarina, 2022). Employees strongly believe electronic recruitment and selection processes can help organizations work effectively in electronic human resource management functions (Mamatha et al., 2022).

Companies with quality human resources begin with recruitment, selection, and training (Munaty et al., 2022). Several problems sometimes arise during the employee recruitment process, including decision-making that is not objective, especially if several prospective employees have competence and several other considerations that are comparable to likes and dislikes can lead to manipulation of test results (Gunawan et al., 2022). As was the case with the recruitment and selection process for the election supervisory apparatus at the sub-district level in 2022 at the written test stage, there were several allegations of fraud in the selection process.

As in Bone Regency, based on the report to DKPP RI number 01-25/SET-02/X/2022, the CAT test held by the committee still had many deficiencies, and it was strongly suspected a value set. Since the value of the test results is not announced in real time, test takers cannot see the ranking of the test results. Second, the test results were announced after 2 days, and before that, they were plenary at the commissioner level. Then, the results were announced without any description of the value. In addition, the Jeneponto Regency Bawaslu has been reported to the Police with a police report number LP/B/448/X/Res.124/2022/Sulsel/res Jeneponto, dated 18 October 2022 where the head of the Jeneponto Regency Bawaslu on behalf of Saiful allegedly threw a mobile phone belonging to journalists who wish to confirm regarding the announcement of the results of the CAT test selection for District Panwaslu candidates who are suspected of not being transparent and of nepotism.

Therefore, the importance of a selection and recruitment system that is transparent and accountable so that prematurely, the names of those elected may not be announced because of the potential for political agents to use coercion to elect incompetent candidates (Yaseen, 2016). Organizations often have difficulty finding qualified candidates for short-term project-based jobs (Alaybek et al., 2022). Therefore, implementing an application-based technology system in the process is important so that political agents do not intervene.

Several studies revealed that recruitment and selection did not impact employee quality (Etikawati & Udjang, 2016; Perkasa et al., 2020). In contrast Baruno and Permatasari (2020), Chong (2022), Fitri et al. (2021), Muna et al. (2022) and Onkoba (2022) stated that recruitment and selection positively affected work quality. There was also a high correlation between the quality of employee work and the recruitment/selection process (Rahmany, 2018).

The results also showed that recruitment by the electronic system was the most effective method (Pérez-Muñoz et al., 2022). Meanwhile, results related to the positive application of AI technology systems in the recruitment process are useful and easy to use (Horodyski, 2023a,

2023b). Previous research has deficiencies in applying technological systems using AI, lacks nuances in human judgment on processes, and the accuracy of technological maturity is still low. While this research model of technology systems focuses on certain stages such as registration, announcements, and written tests for the stages of interviews and due diligence, it still uses the traditional. The object of this research is the recruitment and selection process of ad hoc apparatus.

Related to several phenomena and previous research, this research aims to analyze the role of technology systems in implementing recruitment and selection in obtaining quality human resources. It will also show the extent of recruitment and selection's role in improving human resources quality and analyze the role of recruitment and selection as a mediator between technology systems and HR quality. The results will provide a model for implementing ad-hoc recruitment and selection of personnel/workforce because the model will be different if the workforce recruited is permanent.

LITERATURE REVIEW

Human Resources Development

Human resources development is part of a strategy to attract new human resources and develop, motivate, and retain employees to secure the success and survival of the organization (Al-Kazlah & Badkook, 2022). Human resources are the most important resources of the organization. Human Resource Development is one of the most important business and organizational management functions. Recruitment and selection of human resources is critical. Recruitment is best described as how an organization tries to find or attract people from whom it will ultimately choose. At the same time, selection attracts candidates with the necessary abilities, skills, and features for successful job performance and setting goals (Klepić, 2019). HRD will effectively enable it to increase employee competence and organizational productivity (Kareem, 2019).

The relationship between technology systems, recruitment and selection processes, and HR quality

Technology systems influence recruitment because validation functions to match data. The company requires the accuracy or validity of the data owned by prospective workers who have quality (Putri, 2019). Managing good employee recruitment means creating well-integrated technology systems (Iswanto & Muslim, 2018). Developing technological systems such as computerization can produce the information needed effectively and efficiently. Recruitment of employees makes it easier for the HR department to accept new employees. In addition, the system makes it easier to select employees (Febriyani et al., 2022). Information technology systems in human resource recruitment and selection procedures have produced important and beneficial results for companies (Lewaherilla & Huwae, 2023).

H1: There is an impact on the relationship between the Technology system and the recruitment process.

- H2: There is an impact on the relationship between the technology system and the selection process.
- H3: There is an impact on the relationship between the technology system and the quality of human resources.

The relationship between recruitment, selection, and quality of human resources

Recruitment and selection are objective and have selection criteria to determine the quality of human resources (Ekwoaba et al., 2015). Recruitment and selection of human resources are major parts of the organization's overall resources, identifying and securing qualified people to succeed. So good recruitment and selection procedures produce better people and more effective organizations (Stephen et al., 2019). Recruitment that is well programmed and supported by quality selection can select and obtain quality human resources (dos Santos et al., 2020).

- H4: There is an impact on the relationship between the recruitment process and the quality of human resources
- H5: There is an impact on the relationship between the selection process and the quality of human resources

The relationship between technology systems and HR quality is mediated by recruitment and selection.

System Technology believes that electronic-based recruitment and selection helps organizations to work effectively so that human resources can be well managed and qualified (Mamatha et al., 2022). Technology systems transform traditional recruiting into a modern recruiting and selection process free of time and space. Recruitment and selection strategies based on modern technology benefit from obtaining competent human resources (Sołek-Borowska & Wilczewska, 2018). Adopting IT systems in recruitment and selection will contribute to obtaining a talented workforce (Chen, 2023).

Technology systems have a major impact on the recruitment and selection process. Technology-based recruitment and selection processes will be more effective in collecting and analyzing data regarding various aspects of the process, such as hiring time, candidate engagement, and candidate quality (Nikolaou, 2021; Stone et al., 2015). The quality of human resources is one of the most important contributors to a company's success, and the recruitment and selection process must be planned and implemented carefully to achieve this (Hamza et al., 2021). Technology influences human resource management functions, especially recruitment and selection (Ali et al., 2023). So that recruitment and selection have a role in obtaining quality human resources. Of course, they require a technology system to simplify and make the evaluation process more effective.

- H6: Recruitment has the role of mediating the relationship between technology systems and HR quality.
- H7: Selection has the role of mediating the relationship between technology systems and HR quality.

Based on the hypothesis and existing literature, this study's conceptual framework is presents as Figure 1.

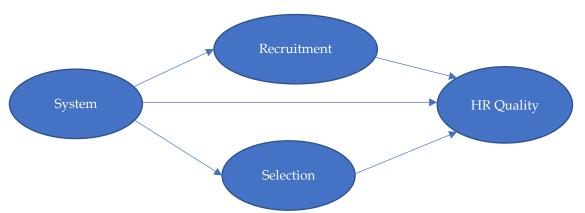


Figure 1. Research concept framework

RESEARCH METHOD

Research Approach

This research used mixed methods research. This research combined qualitative and quantitative research in answering a problem formulation and enabled a deeper and broader understanding of the phenomenon (Adu et al., 2022). The problem had been formulated regarding how an online-based recruitment and selection system would improve the quality of human resources, in this case, election supervisors, to obtain data on this matter using a quantitative approach by distributing questionnaires to the implementing committee and selected participants. Furthermore, information on problems in the recruitment and selection process could be answered with a qualitative approach by interviewing the implementing committee or the formation working group in Bone Regency and Jeneponto Regency, South Sulawesi Province, and several selected participants.

Data Source

The primary data source was obtained directly by asking questionnaires and interviews. In addition, secondary data was obtained by studying and understanding other media sources from literature, books, and documents, such as information related to cases of reports submitted by the public to the technical implementers of the recruitment.

Population and Sample

The population in this study was the formation working group and all members of Panwaslu District of Bone Regency and Jeneponto Regency who had been elected and inaugurated in 2022. The sampling technique in this research used simple random sampling. That is, each individual has an equal opportunity to be selected as a sample from the population because the population of this study is classified as homogeneous (Noor et al., 2022). Furthermore, for the interview process, those who became research informants were taken from some of these samples, while the researchers determined those who became informants as Table 1.

Table 1. Research informants

No.	Source of	Total	Information
	informant	(people)	
1	Policy Maker	1	Chairperson of the Working Group for the Formation of District Panwaslu Members in 2022.
2	Implementor	2	Secretary and staff of the Pokja Formation of District Panwaslu Members in 2022
3	Group Targets	5	The elected District Supervisory Committee

Research Instrument

Research instruments, such as observation sheets, interview guidelines, questionnaires, and documentation, are used by researchers in collecting data so that work is easy and the results are good. This study used interview guidelines with questions related to (1) the main problems experienced during the formation of Sub-District Panwaslu Member candidates. (2) What is the role of the recruitment and selection system applied to the quality of human resources produced? Has the Panwaslu been elected as expected? Besides the interview guidelines mentioned above, researchers used research instruments by distributing questionnaires arranged in statements with alternative answers based on a Likert scale and determining weights from 1 to 5.

Data Collection Technique

Observation, interviews, documentation, or various activities are used to carry out data collection techniques. In this study, data collection was carried out by (1) The observations were classified as participatory. Participatory observation is where the observer plays a direct role and participates in the process of the activity being observed. (2) Interviews will be conducted using the Focus Group Discussion (FGD) method by presenting a team to form District Panwaslu members, namely the chairperson and secretary of the working group (pokja), as well as selected District Panwaslu Members. (3) Questionnaires containing questions related to research, namely systems, recruitment, selection, and quality of human resources. Questionnaires were distributed to respondents directly to all sub-district Panwaslu members through Bone and Jeneponto Regency Bawaslu staff.

Data Analysis Technique

In line with the mixed method research that the authors used in this study, the research data analysis technique consists of quantitative and qualitative data analysis techniques. (1) Quantitative data analysis techniques use testing by conducting validity and reliability tests and testing the hypothesis of the closeness of the relationship between variables using SEM (structural equation model) to examine the degree of closeness of the relationship between variable X and variable Y, with interval measurement levels. (2) Qualitative Data Analysis Techniques: the authors used triangulation techniques to complement and prove the results of previous data analysis. This triangulation technique combines data from sources related to the research process. The data collection technique for this triangulation technique uses interview techniques. The data expected to be obtained through interview techniques regarding responses

to the problem point process of recruitment and selection and how the relationship between HR quality and the recruitment and selection process has been carried out.

RESULTS AND DISCUSSION

Model testing to test the validity and reliability of indicators in each variable construct. Construct validity is done by looking at the loading factor. This test is declared valid when the loading factor value exceeds 0.5. Meanwhile, the reliability test was carried out by calculating the AVE and CR constructs, declared reliable when the AVE model was greater than 0.5 and CR was greater than 0.7. The results of testing the overall measurement model that has been analyzed using SEM can be seen in Table 2.

Variable **Indicator** Validity AVE CR Reliability λ System (X) 0.899 X.1 Valid X.2 0.881 Valid 0.72 0.87 Reliable X.5 0.757 Valid Recruitment (Y1) Y1.2 0.844 Valid Y1.3 0.895 Valid 0.77 0.87 Reliable Y1.4 0.899 Valid Selection (Y2) Y2.1 0.855 Valid Y2.2 0.930 Valid 0.77 0.87 Reliable Y2.4 0.841 Valid HR Quality (Z) Z.1Valid 0.920 **Z.4** 0.836 Valid 0.80 0.88 Reliable

Table 2. Construct reliability test results

Table	3. A	ssessment of normality

Valid

0.920

Z.5

Variable	min	max	skew	c.r.	kurtosis	c.r.
Y1.4	1.000	5.000	-1.698	-7.402	4.125	8.991
Y1.2	1.000	5.000	-2.680	-11.680	8.647	18.845
Y1.3	1.000	5.000	-1.721	-7.503	4.122	8.985
Y2.4	1.000	5.000	-1.475	-6.431	2.969	6.471
Y2.1	1.000	5.000	-1.867	-8.138	4.797	10.454
Y2.2	1.000	5.000	-2.091	-9.113	6.390	13.927
Z.5	1.000	5.000	-1.534	-6.685	3.230	7.039
Z.1	1.000	5.000	-1.693	-7.378	4.132	9.006
Z.4	1.000	5.000	-1.204	-5.247	2.756	6.006
X.5	1.000	5.000	967	-4.214	.655	1.427
X.1	1.000	5.000	-1.269	-5.530	1.852	4.036
X.2	1.000	5.000	-1.391	-6.065	2.337	5.094
Multivariate					64.363	18.745

Based on Table 2, all indicators in the construct have a loading factor value greater than 0.5. The indicators used are valid and accurate in supporting the variables. Furthermore, the AVE and CR values exceed the requirements for declared reliability. The indicators used in the construct are consistent. Furthermore, both univariate and multivariate data normality tests can be carried out by paying attention to the z statistical value for bias and kurtosis. The distribution

can be abnormal if the z value exceeds the critical value. The critical value being meant is \pm 2.58 and \pm 1.96. One way to detect multivariate outliers is to use the Mahalanobis distance test to see how far the data is from the centre of a certain point. Based on calculations using the CHINV formula (0.001;12), it is obtained that it is 32.909. So, the data is said to be an outlier if the Mahalanobis value exceeds the d-squared value above 32.909. The data test results from 114 respondents are seen in Table 3 and Table 4.

Observation number	Mahalanobis d-squared	p1	p2
71	40.847	.000	.000
75	39.041	.000	.000
91	33.418	.001	.000
88	32.611	.001	.000
59	30.163	.003	.000
93	29.425	.003	.000
50	28.329	.005	.000
41	27.103	.007	.000
7	25.899	.011	.000
72	24.324	.018	.000
10	23.370	.025	.000
58	23.287	.025	.000

Table 4. Observations farthest from the centroid (Mahalanobis distance)

The results of the research normality test were not normal, but it needs to be understood that researchers do not have the authority to force respondents into the filling process. Referring to the book Santoso (2018) there is no reason to delete or change data because it is an outlier to make the distribution normal, as long as it is real research data. This research did not change the data because the entire population was 114 samples, so additional data could no longer be done. The next test is testing the structural model to test the research hypothesis. Structural model specifications were built by making 12 (twelve) indicators as shown in Figure 2.

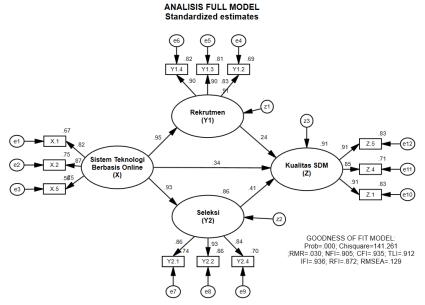


Figure 2. Estimated result of Structural model

The results of the structural model test using SEM by looking at several goodness-of-fit model criteria such as chi-square, probability, RMR, NFI, CFI, TLI, IFI, RFI, and RMSEA with the following details.

Table 5. Evaluation of the goodness of fit indices overall model criteria

Goodness of fit index	Cut-off Value	Computation Results	Information
Chi-square	Expected small	141.261	Marginal Fit
Probability	≥ 0.05	0.000	Marginal Fit
RMR	≤ 0.05	0.030	Fit
NFI	≥ 0.90	0.905	Fit
CFI	≥ 0.90	0.935	Fit
TLI	≥ 0.90	0.912	Fit
IFI	≥ 0.90	0.936	Fit
RFI	≥ 0.90	0.981	Fit
RMSEA	≤ 0.08	0.129	Marginal Fit

Table 5 shows that the probability and chi-square values are close to fit. Hence, the data in the model has the same covariance matrix as the population covariance, so the model is feasible to test the research hypothesis. Then, a significance test was carried out with a level of 0.05. If the value (P) < 0.05 and c.r < 1.96, H0 is rejected and Ha is accepted. Vice versa, when the value (P) > 0.05 and c.r < 1.96, H0 is accepted, and Ha is rejected. The significant test results in this study are as follows.

Table 6. Significance Test

			Estimate	S.E.	C.R.	P	Label
Recruitment	<	System	.923	.079	11.731	***	par_5
Selection	<	System	.873	.073	11.923	***	par_7
HR Quality	<	Recruitment	.208	.239	.868	.385	par_6
HR Quality	<	Selection	.287	.298	.964	.335	par_8
HR Quality	<	System	.370	.172	2.149	.032	par_9

Based on Table 6, the results are obtained; test data with details as follows:

- 1. The p-value between system variables on recruitment is (***) with a c.r. of 11,731. The system has a positive impact on recruitment. An optimally implemented system will be able to improve the recruitment process properly because the system is the pattern and the main basis for recruitment.
- 2. The p-value between system variables for selection is (***) with c.r. of 11,923. The system influences the selection process. A clear and precise system can optimize the executor's selection process because the system is a guide and a place for a selection process.
- 3. The p-value between the recruitment variable and HR quality is (0.385) with a c.r. of 0.868, showing that recruitment has no impact on the quality of human resources. Optimal recruitment does not guarantee quality human resources; recruitment is only a process of obtaining human resources. To ensure that these human resources are of high quality, it has not become a reference.
- 4. The p-value between the selection variable on HR quality is (0.335) with a c.r. of 0.964, showing that selection does not affect the quality of human resources. The selection process

- that is carried out does not necessarily produce quality human resources because the selection is a form of the process of selecting and sorting, not making sure.
- 5. The p-value between system variables on HR quality (0.032) with a c.r value of 2.149 indicates that the system significantly influences HR quality. A system that has been determined and well-organized will produce quality human resources. The system is governance, which is the main basis for completing work, so when the system is good, human resources can work optimally.

In this study, recruitment and selection are intervening variables, aiming to mediate system variables and HR quality as exogenous variables. Therefore, in testing the effect of the system on the quality of human resources through recruitment and selection using the Sobel test. The results of the Sobel test are as follows.

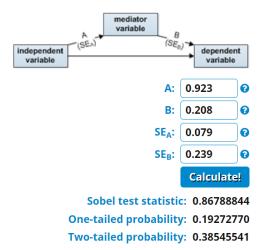


Figure 3. Sobel test results for System variables - Recruitment - HR Quality

Based on Figure 3, a p-value of 0.385 is obtained. The recruitment variable has not been significantly able to mediate the effect of the system on HR quality.

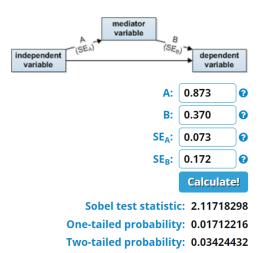


Figure 4. Sobel test results for system variables - selection - HR quality

Based on Figure 4, a p-value of 0.0342 is obtained. The selection variable significantly mediates the effect of the system on HR quality.

 Table 7. Results of the implementation of the focus group discussion

Variable	Response
System	Panwascam members were by the regulated standards, although there were still several interpretations during the fieldwork, especially regarding the extension of the registration period. Participants from the women's element did not fulfil the 30% representation of women, so an extension was made in that area.
	The technology system at the time of formation was still predominantly manual, receipt of files was still in the form of hardcopy, registration still used a form system filled in directly and submitted in person, and the announcement was still announced on the Institution's website media. Confirmation for those who met the requirements was still by personal telephone. Participants' files in the form of hardcopy documents became archives and piled up, causing certain rooms to contain these documents and the use of workspaces to be ineffective. An online-based system using the Socrative website is used only during the written test stage. However, it
Recruitment	has many potential drawbacks, namely the potential for participants to fill in answers remotely. There are still many obstacles to the implementation, such as the internet network when carrying out the written test using CAT Socrative, which is still loading and slow because servers for all regions throughout Indonesia are centralized. At the same time, South Sulawesi alone has 24 locations. In addition, the process of responding and input from the community to the participants needed to be extended because it was too short, so some members of the public had not yet had the opportunity to see the participants who took part to provide input or feedback. The interview was also considered too short, only one day, so the ability to explore and assess the candidate's character and knowledge was not optimal.
	Technically, the implementation has been carried out according to the regulated instructions or SOPs, but there are still family principles in this recruitment process. The participants or candidates are inseparable from having a family relationship with the recruitment organizer. Even though there is a family relationship, they must meet administrative and competency requirements.
Selection	In choosing a candidate, some indicators must be owned, and that becomes a measuring tool in the selection. Candidates must have experience that suits their needs, experience in the electoral field, and, of course, having been a direct organizer or contributing to the electoral process by being a writer, activist, or observer. Apart from that, have integrity. The candidates must possess because the value of integrity is an embodiment so that the implementation of elections follows the rules. Do not let it not be neutral, influenced by political interests, and easily intervened by other parties. In addition to being competent, being Panwas/election supervisors working full time, making reports, coordinating, and training/fostering the ranks under them is not easy if you do not have competence.
	In the communication pattern, an election supervisor is a public figure who will be in the spotlight of society. The ability to establish communication with all elements of society is needed. Communication can inform the media about performance, negotiation, and mediation results when the parties participating in the election have a dispute. In addition to the ability to lead an organization, an election supervisor will become a leader in supervision. It is necessary to have a leadership spirit to be able to protect the community and to be able to direct and guide the resources they have.
HR Quality	Currently, the election supervisors at the sub-district level have gone through a lengthy process and are, of course, qualified people. A warning letter was issued to several sub-district election supervisors some time ago because they were considered unable to develop their knowledge and skills even though they had been elected. The hope is that even though they have received previous guidance, they will continue to learn independently to develop their abilities because the election stages are already underway. But compared to the election supervisors in the 2019 elections, the current supervisors are much better.
	The vision and mission of election supervisors have been instilled and conveyed; 95% can carry them out. It is not optimally believed because it is oriented towards the previous election period. Election supervisors are inseparable from the region. These relatives may be the winning team/election participants, so the potential for not being neutral exists. In addition, due to limited human resources, carrying out the vision and mission is not optimal.

In supporting the data from the research results, the researcher conducted in-depth information through interviews with several samples, the working group committee implementing the formation of District Panwaslu candidates, and several participants selected and appointed. The interviews were carried out for 5 (five) days using the focus group discussion method, presenting informants and then requesting information regarding the process and implementation of the election supervisory apparatus at the sub-district level. As for the results of information retrieval, they can be adjusted to the research variables. Based on the test results using SEM to show the relationship between variables with the structural model that has been formed and the results of conducting interviews using the focus group discussion method which presents in Table 7.

The relationship between information technology systems and recruitment

The results showed that the system can influence the implementation of recruitment because the system, especially since it is internet-based, is currently an important factor in completing work. One of the activities, such as the recruitment process, technology systems can increase the effectiveness of the recruitment process. Of course, completing the recruitment process much smarter and faster will save the organization a lot of money, time, and effort (Sehrawat & Brahma, 2018). The election supervisory apparatus carried out by the Bawaslu working group team has adjusted to predetermined operational standards. However, there are still deficiencies in the recruitment process. Based on the results of the interviews, the documents are still manual, both during the registration stage and the announcement. Sometimes, the document becomes a new problem after the formation process because it piles up and takes up several places in the office area, even though the government hopes the community will support minimizing paper use because it can save trees.

In addition, based on the results of the interviews, it was stated that the use of the online system socratively was carried out according to the provisions, even though the Internet was sometimes slow during implementation, so it was resolved by working on old questions. Therefore, the utilization of the technology system in completing work needs to be optimized, one of which is the recruitment process. The better the system used, the more optimal the process of all stages of recruitment will be.

The results of this study are supported by previous research, stating that information technology will be very beneficial in the recruitment process because it will provide better results than traditional/manual methods (Khadija & Omar, 2019). Technology systems have a major influence on the recruitment and selection process, making it increasingly important for technology systems to the recruitment process. In addition, today's companies are thirsty for information technology to reduce costs, improve services, and achieve effectiveness (Chauhan et al., 2021). Systems with the Internet affect the outcome variables of recruitment, namely time, cost, and quality of social media recruitment (Rehman et al., 2022). The difference between the results and the previous one is that it focuses on applying technology systems, which are carried out using data analysis methods using structural equation modelling, where recruitment is an intervening variable. In addition to deepening the information, this study interviewed informants who had direct contact with the recruitment process.

The relationship between technology systems and the selection process

The results showed that an online system influenced the selection process. Indeed, systems integrated with technology have a major impact throughout the selection cycle (Nikolaou, 2021). The committee carried out the selection of Sub-District Panwaslu apparatus candidates. The committee has criteria for selecting, sorting, and determining. Based on the results of interviews, these criteria are experience, integrity, knowledge and competence, communication skills, and leadership. The results of an online-based written test using socrative are a measure for selecting participants for their knowledge and competence. The value of the results of the socrative system is a form of transparency that there is no cheating because participants can directly see the value of each other's test results. It is generally not as sophisticated and accountable as using the CAT system for CPNS selection. The results of the online written test are one of the indicators for assessing and selecting candidates for the election supervisory apparatus. However, it is hoped that for the future implementation period, we will be able to use a much better system, such as the integrated system used by the KPU, namely the SIAKBA application. So, the better the technology system applied, the easier the selection implementation will be.

The results of this study are supported by previous research that technology systems have a relationship with the selection process (Husain et al., 2022; Shodiq, 2022). The results of this study and those of previous studies have differences in analytical research methods. This study used the structural equation modelling (SEM) method and, previously, the Simple Additive Weighting (SAW) method. The ease of using SEM is to see the relationship between variables simultaneously and take into account direct and indirect effects between variables and being able to solve cases with many variables, both exogenous and endogenous variables, compared to the SAW method is only used to make a more precise assessment because it is based on criteria values and predetermined preference weights.

The relationship between the recruitment and selection process and the quality of human resources

Based on the testing results, the data stated that recruitment and selection did not affect the quality of human resources. The interviews explained that even though one has been elected, it still does not guarantee that someone can remain neutral. Warning letters have been issued to several Sub-District Panwaslu members because they were deemed not to develop their knowledge after being elected. It is hoped that from the results of this selection, the apparatus will be able to increase literacy, maintain its quality, remain consistent with institutional rules, and participate in institutional development. No matter how well the recruitment and selection process is carried out, it is not a guarantee for the quality of employees because several factors influence the change in someone not becoming loyal, one of which is dissatisfaction (Haeruddin & Haeruddin, 2020; Syafarudin, 2021).

This research is different from previous research, stating that employee recruitment and selection influence employee quality (Kusumo et al., 2022; Mohan, 2021), but agrees with other studies which state that employee quality is not assessed from the results of selection and

recruitment implementation but of quality of hire (Khofifah & Ikhram, 2022). Implementing recruitment or selection that has been carried out administratively is by operational standards but does not guarantee the quality of an election supervisory apparatus. The interviews explained that several areas had registration extensions because they had not met standardization. Interest in some areas was lacking. So, in the selection later, it will be difficult to find and sort out human resources because of limited human resources according to needs.

The relationship between information technology systems and the quality of human resources

Based on the testing results, the data shows that the technology system influences the quality of human resources. Technology-based systems have a positive effect on the organization. The system is a personnel material to facilitate human resource work plans further, make decisions more quickly, define work clearly, evaluate performance, and provide cost-effective benefits (Zarqan, 2017). Based on interview results, the system used during formation was better than the previous process, and the current election supervisory apparatus is believed to be better than in 2019. The previous implementation was entirely traditional; none of the stages used a technological system, but the current formation has progressed because it already uses Socrative.

This research is in line with previous studies, stating that technology-based systems have a positive and significant effect on the quality of employees (Anual et al., 2020; Wijaya & Eppang, 2021). The results showed that the effect of the technology system on the quality of human resources directly is 94%, compared to previous research that the technology system affects the quality of employees by 86.2% (Wulandari & Syahrinullah, 2022).

CONCLUSION

Based on the research and discussion results, technology systems influenced the recruitment and selection process and could produce quality human resources. Of course, the role of technological systems is to be a tool to simplify and save costs and time for recruitment and selection so that when the system implemented becomes more sophisticated and precise, the results of recruitment and selection will be more optimal. Besides, technology systems are the main tool for measuring human resources. The quality of human resources produced is influenced by the system implemented. A system implemented has the potential to obtain talented and competent candidates. Although in this study, recruitment and selection do not impact the quality of human resources, selection plays a role in mediating the relationship between the system and the quality of human resources. In contrast, recruitment is not able to mediate it. Recruitment and selection require a technology system to strengthen the implementation process so that the human resources produced are of high quality.

The results recommend that implementing recruitment and selection for ad-hoc election organizers at the registration, announcement, and written test stages requires a technological system, one of which uses the help of artificial intelligence (AI) and the Internet of Things (IoT). Meanwhile, candidates must deepen their characters for other stages, such as interviews and

eligibility tests. Technological systems are needed in addition to transparency, and results are much more accountable for results, while in terms of cost and workforce, it is much more efficient. So that the formation committee team can focus more on assessing character at the interview and due diligence stages while other stages are entrusted to the technology system.

However, this research has limitations in the interview process in a focus group discussion. Some informants have not openly conveyed matters related to determining the selected selection. Apart from that, the sample population was very small. Several respondents filled out the questionnaire, which was repeatedly confirmed to be filled out because some respondents were busy with work. Therefore, future researchers must design well in data collection so there are no technical obstacles in the field.

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