



Strategy for Improving Employee Performance based on Organizational Structure Changes at the West Java Climatological Station

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ARTICLE INFO

Keywords: Bureaucracy Reform, Analytic Hierarchy Process, AHP, Performance Strategy

Received : 23, November

Revised : 24, December

Accepted: 25, January

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ABSTRACT

Bureaucratic reform aims to accelerating better governance, improve institutional performance to individual state civil apparatus (ASN) including by simplifying the organizational structure, one of which is at the West Java Climatology Station, This study aims to analyze and compile a priority scale of employee performance improvement strategies at the West Java Climatology Station using the Analytic Hierarchy Process method based on the opinions of climatology, organization management and HR experts, resulting in findings that indicators of variable factors set priorities 1. Employee discipline, 2. teamwork, 3. ease of public service, 4. use of information technology, 5.competence and expertise, 6.simple SOPs, 7.simplification of organizational structure, 8.work system adjustments and 9. work culture, The results of the study are expected to guide strategies to achieve performance targets in each BMKG UPT, further research is needed regarding performance improvement due to simplification of the new organizational structure which has been running since the beginning of 2023.

INTRODUCTION

The President of the Republic of Indonesia has taken many policies in human resource development in his second term of office during the period 2019 to 2024, where there are two important things that become the work priorities of the president and his deputy, namely human resource development and bureaucratic reform efforts, this is in accordance with the president's speech shortly after his second inauguration on October 20, 2019 (<https://money.kompas.com>, 2019). As a follow-up to the President of the Republic of Indonesia's speech in 2020, Government Regulation of the Republic of Indonesia number 17 was issued, this regulation regulates the management of civil servants (PNS), aiming to strengthen Indonesia's Human Resources, especially within the Government.

The president's work priorities that are no less important in efforts to realize good governance and have an impact on major and fundamental changes to business processes or government administration, especially regarding organizational or institutional aspects, human resources of the apparatus and management are bureaucratic reform policies, with the aim of increasing the speed and ease of service to the community, one of the follow-ups of bureaucratic reform is organizational simplification within the government. The Minister of State Apparatus Empowerment and Bureaucratic Reform (MENPAN RB), issued Minister of PAN RB Regulation Number 7 of 2022 which regulates the Work Procedure in Government Agencies in the context of Simplifying the Bureaucracy.

Bureaucratic Simplification is part of the bureaucratic structuring process in realizing a more efficient and effective governance system by focusing on three main objectives, namely work system adjustments, simplifying organizational structures, and equalizing positions. Meanwhile, the definition of Organizational Structure Simplification is streamlining or reducing the number of Administrative Position organizational units to reduce the level of organizational units in Government Agencies, (*Regulation of the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia Number 25 of 2021 concerning Simplification of Organizational Structures within Government Agencies in the Context of Simplifying the Bureaucracy, 2021*).

Simplification of the organizational structure Refers to (*Regulation of the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia Number 2 of 2023 concerning the Organization of the Implementing Unit*) the size of the organization in UPT is based on the workload and diversity of UPT's tasks and functions. Simplification of the bureaucratic structure based on theoretical views is still needed because currently the characteristics that are built are very bureaucratic and not in line with the concept of public service administration and renewable public sector governance reform, in addition to decentralization, based on what is in the field, simplification of the bureaucratic structure is needed because what is currently running creates obstacles in increasing the professionalism of the apparatus, this can be seen from the symptoms of Bluffocracy and Consultocracy. (Nurhestitunggal & Muhlisin, 2020)

The West Java Climatology Station has the main tasks and functions as a government representative in the field of Meteorology, Climatology and Geophysics in the West Java region, in carrying out its main tasks and functions the West Java Climatology Station has an important role in guarding development, especially in West Java Province by providing climate and weather information and services for various sectors such as agriculture, water resources (SDA), tourism, defense and security, transportation, education, and disaster.

The impact of government policies in terms of bureaucratic reform at the West Java Climatology Station is a change in the organizational structure which originally had four structural positions consisting of one Head position equivalent to echelon three (III.a) and three structural positions equivalent to echelon four (IV.a), namely the Head of the Administration Subdivision, the Head of the Data and Information Section then the Head of the Observation Section, The impact of organizational simplification, currently there are only two structural positions, namely one Head equivalent to echelon three (III.a) and one Head of the Administration Subdivision equivalent to echelon four (IV.a).

In the Regulation of the Minister of Administrative Reform and Bureaucratic Reform number 25 of 2021 which regulates the work mechanism in Government Agencies, it has not clearly regulated the strategy for achieving organizational performance targets, the preparation of performance strategies is fully given to the leaders of organizational units or institutions, so that if there is no clear strategy it will cause confusion for the leaders of organizational units, an academic approach is needed in developing strategies to improve the performance of organizational units, among the tools to carry out employee performance improvement strategies is to use the Analytic Hierarchy Process (AHP) method. AHP is a methodology in decision making by determining the level of priority among criteria and alternatives or strategies that are many and complex.

The use of AHP models can be implemented in various fields ranging from education (school selection), psychotherapy, choosing a job, choosing a vacation destination, conflict and planning applications, industrial site selection, even many researchers use this AHP model for other purposes such as energy rationing, and can be used for performance improvement management in the United States Navy, this has been proven and discussed directly by Thomas L Saaty as a pioneer in the use of the AHP method.

The AHP method can be used to solve the problem of employee performance improvement strategies, by considering various existing criteria so as to produce a measurable and optimal analysis that is able to carry out its function in improving performance at the West Java Climatology Station, this research will be a pilot project in developing performance achievement strategies for other Work Units within the Meteorology, Climatology and Geophysics Agency.

There are no journals that discuss performance improvement strategies in detail by proposing many related and in-depth variables, such as in journals

(Triemiaty et al., 2019), (Prayogi, et al., 2019), (Deni, 2018) most of the research conducted is only limited to significance, correlation between variables and performance, so this study also offers a study that discusses the relationship between bureaucratic reform which is the current government program and its relevance to improving employee performance within government organizational units.

In the journal (Rohayatin, 2017), *Local Government Bureaucratic Reform Strategies Welcoming the Era of Globalization*, which discusses the inhibiting factors of bureaucratic reform strategies, the discussion and research results only reach the level of factors, while in the research that will be discussed, will look for and analyze several indicator variables from each related factor that will be proposed as additional variables that support the strategy of improving employee performance, so that this research will be more in-depth than previous research. The results of this study as one of the supporting materials and data for the head of the technical implementation unit of the West Java Climatology Station, in carrying out the main tasks and functions of managing and providing information in the field of climatology for the West Java region.

In accordance with the AHP concept, the need for sources or informants is not needed in large numbers, but only a few informants who are feasible and professional in their fields are needed, in this study we will take professionals in the fields of Climatology, Management and Organization and Human Resources.

The formulation of the problem used as this research, is what are the supporting factors and appropriate strategies, in carrying out daily operations, to achieve improved employee performance, due to the implementation of simplifying the organizational structure in the Technical Implementation Unit of the West Java Climatology Station and what aspects need to be done by the leadership, in determining the right and measurable policies, based on the choice of priority scale to improve employee performance, in terms of carrying out the achievement of public service satisfaction.

The purpose of the research is to analyze and map what factors and strategies are related to efforts to develop performance improvement strategies and ongoing business processes at the West Java Climatology Station, then determine related matters that have been selected by looking for a priority scale in efforts to improve employee performance at the West Java Climatology Station. In addition, it is expected to add to the literature for future research related to bureaucratic reform, the effectiveness of simplifying the organizational structure on employee performance and management of the state apparatus.

LITERATURE REVIEW

Human Resource Management

Based on the results of research on organisations conducted by Peter F. Drucker has published a management book entitled *Concept of the Corporation* in 1946, for this work Peter F. Drucker was given the title as the Father of Management Science, (Ansory & Indrasari, 2018). Some of Peter F. Drucker's main concepts are that management consists of Objective management,

Knowledge management, Efficiency and Effectiveness management, Entrepreneurial Innovation management, Time management, Leadership management, Ethics management and Social Responsibility. In an organisation we will not be separated from human resources, where each individual who is incorporated and entered into the organisation will have different interests and desires, so the function of a management is to interrupt these differences of interest into a common interest and goal in activities that support the existence and development of an organisation.

Strategy Management

In the book Human Resource Management by Al Fadjar Ansori and Meithiana Indrasari (2018), provides an understanding of management summarised from various sources delivered from the opinions of management figures such as Lawrence A Appley and George R, Terry, Manullang, Jhon D. Millet. Harold Koontz, Cyrill O'Donnell and Stoner state that management is the art of organising a system so that it can run and work in various human activities and devices outside humans to achieve predetermined goals, management also implies planning, organising, controlling, leading various efforts using all resources to achieve predetermined goals.

The HRM book Ansory, A. F., & Indrasari, M. (2018) according to Henry Fayol there are at least fourteen (14) principles of management, namely: (1). Division of labour, (2). Authority and responsibility, (3). Discipline, (4). Organisational interests are more important than personal interests, (5). One direction, (6). One order, (7). Employee salary payment, (8). Centralised, (9). Hierarchy, (10). Honesty and Justice, (11). Orderliness, (12). Initiative, (13). Employee Stability, (14). Spirit of unity and integrity.

Human resources (HR) are a combination of several thinking, physical, behavioural and trait abilities that are influenced by inherited genes and the surrounding environment, HR is an asset related to the sustainability of an organisation, while all activities to facilitate employees to gain the skills, knowledge needed to support work both now and in the future is the definition of HR development, (Hill et al., 2021).

According to Edy Sutrisno (2012: 9-11) in (Bukit et al, 2021) providing an understanding of HRM, a human resource management at least has several activities, among others: (1). Workforce planning and organisational needs, (2). Organisation, preparation, determination, division, authority, coordination and work relations, (3). Employee procurement and work direction, (4). Employee control, (5). Employee development, (6). Providing compensation to employees, (7). Integrating organisational interests and employee needs, (8). Maintenance, maintaining employee performance and loyalty, (9). Discipline and (10). Employee dismissal.

Performance Improvement

Performance is closely related to the survival of an organisation or company, closely related to the advantages and disadvantages of a franchise organisation, performance is a term that is the main discussion in an

organisation, both franchise organisations and non-profit or non-profit organisations. So it can be said that performance is the benchmark of an organisation's goals.

Performance Improvement Strategy

A performance improvement strategy is a series of steps and methods designed to improve the results (quantity and quality) and achievement of individual, team or organisational goals or targets. There are many performance improvement strategy models that can be implemented in an organisation or team, the choice of model to be used depends on the objectives and scope of the performance improvement area to be achieved.

Analytical Hierarchy Process (AHP).

AHP, also called the problem solving model, is a decision support model that has been developed by Thomas I Saaty since 1971-1975 which has many advantages that can describe various multi-factor and multi-criteria problems (Sinaga, Fatolah, & Rahayu, 2020). AHP is a framework used to make effective decisions on complex problems by simplifying and accelerating the decision-making process by solving problems in a hierarchical arrangement (Harpad & Salmon, 2018).

Analysis using the AHP method must take several steps in the following order: First, determine and define the problem clearly what is desired, in detail what is related to the main problem and easy to understand. Second, compile or create a hierarchical structure starting from the main goal or goal, defining the main goal in solving the problem to be carried out. Third, compile or create a pairwise comparison matrix that must be able to describe the relative contribution or influence of elements on the objectives or criteria above it. Fourth, define pairwise comparisons in order to obtain a comprehensive number of judgements as many as $n \times [(n-1)/2]$ pieces. n is defined as the number of elements being compared. The result of the comparison can be a number from 1-9 that can describe the level of importance of the element. Fifth, calculate the eigenvalues and test for consistency. If it is inconsistent, the data collection must be repeated. The consistency value is confirmed by the provisions of the calculation value of Consistency index (CI) and Consistency Ratio (CR) with the following provisions:

If $CI = 0$, then the hierarchy is consistent

If $CR < 0.1$, then the hierarchy is fairly consistent

If $CR > 0.1$, then the hierarchy is highly inconsistent

The use of the AHP method greatly calculates the value of consistency with the opinions of sources or informants, how to calculate the magnitude of the *Consistency Index / CI* (consistency index), if the ratio value with the Random Index standard ≤ 0.10 then the conclusion is drawn that the level of consistency is satisfactory, meaning that the AHP model produces optimal answers or solutions. However, if the ratio with the Random Index standard > 0.10 , it is stated that there are inconsistencies in answers or inputs in

determining the comparison value which causes the AHP model not to produce meaningful answers or solutions, (Padmowati 2015).

The determination of the scale for the weighting of respondents or informants is based on the standard guidelines based on the table below:

Table 1. Basic Scale for Weighting

Intensity of importance	Definition	Explanation
1	Equal importance	Two activities contribute equally to the objective
2	Weak	
3	Moderate importance	Experience and judgment slightly favor one activity over another
4	Moderate plus	
5	Strong importance	Experience and judgment strongly favor one activity over another
6	Strong plus	
7	Very strong or demonstrated importance	An activity is favored very strongly over another; its dominance demonstrated in practice
8	Very, very strong	
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation
Reciprocals of above	If activity i has one of the above nonzero numbers assigned to it when compared with activity j, then j has the reciprocal value when compared with i	A reasonable assumption
Rationals	Ratios arising from the scale	If consistency were to be forced by obtaining n numerical values to span the matrix

Source : (Saaty & Vargas, 2013) in (Mahad et al., 2020)

The following is a figure of the research flow and framework of this research:

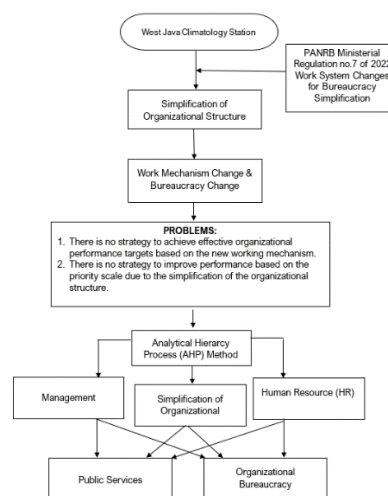


Figure 1. Framework of mind in employee performance improvement strategy research based on changes in organizational structure in West Java Climatology Station (Research Data, 2023)

METHODOLOGY

This research was conducted at the West Java Climatology Station which is a Technical Implementation Unit (UPT) under the Meteorology, Climatology and Geophysics Agency (BMKG) located on Jl. Alternatif IPB, Situ Gede, West Bogor, Bogor City, when the research was conducted in 2023. This research is qualitative research. Qualitative research is a type of research that is able to provide a description of the phenomenon based on the informant's perspective, find diverse realities, and develop a holistic understanding of a phenomenon in a particular context, (Helaluddin & Wijaya, 2019).

This research will take respondents based on several experts in the field of organisation and management, experts in the field of climatology within the Meteorology, Climatology and Geophysics Agency (BMKG), and experts in the field of human resource management (HRM). The target informant proposed in this research is at least one expert from each professional field, both internal and external work areas within the BMKG, experts from outside the BMKG with the aim of enriching the opinions of the experts provided, so that the results of this research can be used not only in the BMKG's internal environment but also outside the BMKG. Data Collection Methods, based on the target respondents that have been described, then several methods to obtain the desired data, data collection techniques through interviews and documentation.

In this research, the data processing tool used is using Microsoft Excel which is done manually and expert choice ver.11 software. The selection of variables to be used in this study is of course by exploring the relationship between variables and research objectives, where looking for variables that are proposed and will be used based on their relationship with performance improvement strategies related to simplifying the organisational structure in the bureaucratic reform program in government, especially those that occur at the Technical Implementation Unit level, There are several levels of variables that will be used in this study, the level of factors, factor indicators, strategies and strategy indicators, each selected factor variable will then be sought for its indicator variables, as well as strategies or alternatives, this is in accordance with the concept of the AHP model, later each selected variable will be given a priority weight of one to nine (1-9) in accordance with the concept of weighting in AHP, (Saaty & Vargas, 2013),

The processing stages using AHP can be described as follows: (Sahadi et al., 2020), (Umar et al., 2018), (Munthafa & Mubarok, 2017):

1. Define the problem and specify the desired solution.
2. Create a hierarchical structure that starts with the main goal.

The structure of the study can be shown below:

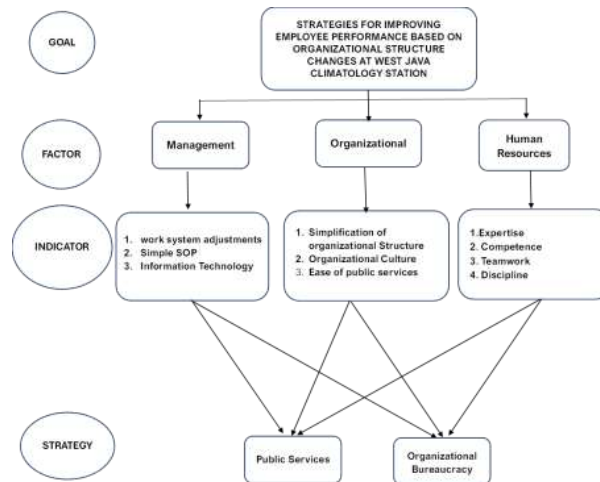


Figure 2. AHP Structure of Research

Source: Research Data, 2023

3. Create a pairwise comparison matrix that illustrates the relative contribution or influence of each element to the objective or factor level above.
4. Determining pairwise ratios results in a total of $n \times [(n-1)/2]$ judgements, where n is the number of elements being compared.

The research data is simplified in such a way that it is easy to process in accordance with the provisions used in the calculation of the AHP model, several steps can be taken:

- a. Calculation of priority weights, b. Division of each element of the result matrix (vector) by an element of the priority weight matrix, c. Calculation of Maximum Eigenvalue (ME), d. Consistency Index (CI), e. Consistent random index value, f. Consistency Ratio (CR), The calculation of the CR value can be declared or assessed as a consistent ratio if the result is less than 0.10 (<0.10), so that the results of the questionnaire ratio value of less than 0.1 can be used as a basis for conducting further analysis, but on the contrary, if it is more than 0.1, it can be considered that the respondent's answer is inconsistent so that the excess value is considered void and cannot be used as material for further analysis.

5. Geometric Mean Weight Calculation

The geometric mean calculation formula is as follows:

$$= \text{GEOMEAN} (\text{eigenvector1}; \text{eigenvector2}; \dots \dots \dots ; \text{eigenvector7}) \dots \dots \dots (1)$$

RESEARCH RESULTS

Based on previous studies and current laws and regulations in this study, several factors can be taken to develop a strategy for improving employee performance based on changes in organizational structure as below:

- 1) Management (business process)
For Management, several related indicators were taken, namely:
 - a. Work system adjustment, b. Simple Operational Procedure System (SOP), c. Information Technology or the use of information technology
- 2) Organizations
Organizational matters that are used as indicators in the study are:
 - a. Simplification of Organizational Structure, b. Organizational Culture, c. Ease of Public Service
- 3) Human Resources
Related to Human Resources which are indicators in the study, namely:
 - a. Expertise, b. Competence, c. Teamwork and d. Discipline,

In addition to determining factor variables in developing strategies to improve employee performance in this study, two strategies have also been determined to achieve it in the form of:

1) Public Service

Public service is one of the ways to build public trust in the government, and is an indicator that has been determined by the government in evaluating and assessing the performance of an organizational unit, agency, institution or ministry whether it is appropriate and the benefits are felt by the community or users, (*Law of the Republic of Indonesia Number 25 of 2009 concerning Public Services, 2009*) so it is very relevant if performance improvement is closely related to public services.

2) Organizational Bureaucracy

Organizational simplification is one of the main programs of bureaucratic reform activities and aims to create an efficient and effective governance in improving government performance and public services, so a process of simplifying the bureaucracy or bureaucratic organization is needed.

Based on the description of factor variables, indicators and strategies above with the main objective of finding alternatives in employee performance improvement strategies based on simplifying the organizational structure at the West Java Climatology Station, if arranged in a hierarchical form it can be described as shown below:

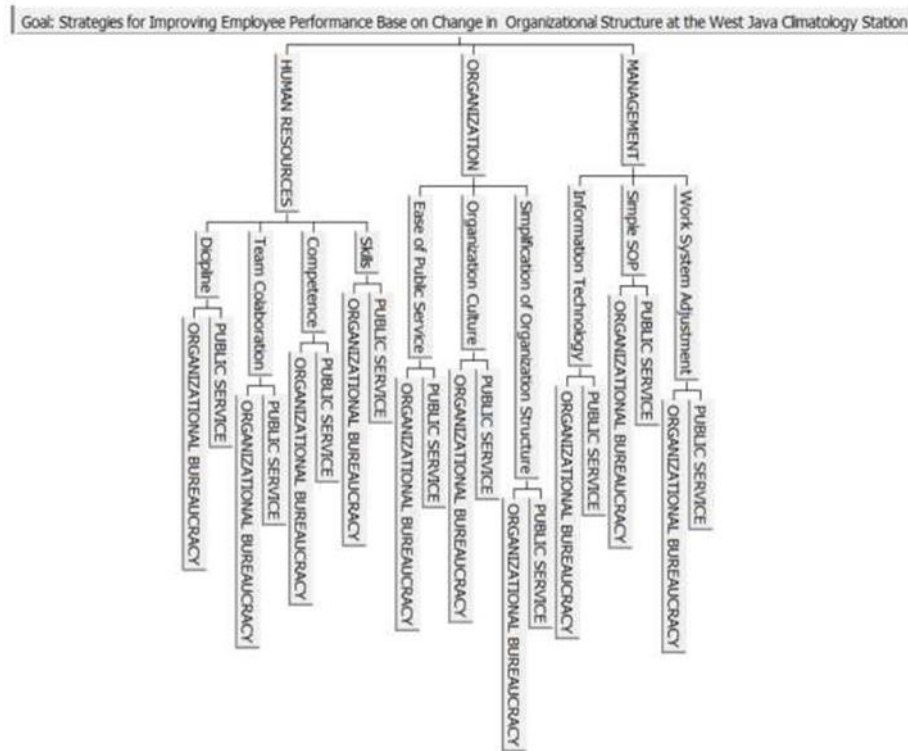


Figure 3. Hierarchical Structure of Employee Performance Improvement Strategy Based on Simplification of Organizational Structure at West Java Climatology Station
 Source: Research Data, 2023

Several stages must be carried out in processing data from the opinions of informants, namely making pairwise matrices with reference to the following calculations:

$$\begin{pmatrix} \frac{w_1}{w_1} & \frac{w_1}{w_2} & \dots & \frac{w_1}{w_n} \\ \frac{w_2}{w_1} & \frac{w_2}{w_2} & \dots & \frac{w_2}{w_n} \\ \frac{w_3}{w_1} & \frac{w_3}{w_2} & \dots & \frac{w_3}{w_n} \\ \vdots & \vdots & \ddots & \vdots \\ \frac{w_n}{w_1} & \frac{w_n}{w_2} & \dots & \frac{w_n}{w_n} \end{pmatrix} \begin{pmatrix} w_1 \\ w_2 \\ \vdots \\ w_n \end{pmatrix} = n \begin{pmatrix} w_1 \\ w_2 \\ \vdots \\ w_n \end{pmatrix}$$

Figure 3. Pairwise matrix calculation

Figure 4. Pairwise matrix calculation

Source: (Saaty & Vargas, 2013) in (Mahad et al., 2020)

1. Hierarchy factor aspect calculation

Based on data from informants, management is 3 times more important than organization, human resources are 3 times more important than management and human resources are 3 times more important than organization. The informant data, then processed into a table and a 3 x 3 paired

matrix as follows:

If A is a pairwise comparison matrix, then the weight vector of the form: $(A)(wT) = (n)(wT)$ can be approached in the following way:

Table 2. Pairwise Matrix Informant factor variable (P5)

	MGN	ORG	HR
MGN	1	0,333333	0,2000
ORG	3	1	0,3333
HR	5	3	1
TOT	9	4,333333	1,533333

Source: Research Data, 2023

Next normalize each column j in matrix A, such that:

$$\sum_{i=1}^n a(i,j) \text{ is referred to as } A'$$

Normalization of each matrix value or table content, by dividing each matrix value by the total number of matrices in one column, each matrix value in one column is divided by the total matrix value in that column.

Table 3. Normalization of pairwise matrices between factors

	MGN	ORG	HR
MGN	0,1111	0,0769	0,1304
ORG	0,3333	0,2308	0,2174
HR	0,5556	0,6923	0,6522
TOT	1,0000	1,0000	1,0000

Source: Research Data, 2023

The next step is to do the sum of each bar, and find the priority vector value

using the formula: $w_i = \frac{1}{n} \sum_i a(i,j)$ (2)

where W_i is the i-th goal weight of the weight vector, and the percentage of each priority vector value.

Calculating Priority Vector

$$= 1/3 (0,111+0,0769+0,1304) = 0,106156$$

$$= 1/3(0,333+0,2308+0,2174) = 0,260498$$

$$= 1/3 (0,5556+0,6923+0,6522) = 0.633348$$

To correct whether our calculations are correct, the sum of all priority vector values must be 1(one). Otherwise known as the *eigenvector*.

The next step is to check the consistency of the hierarchy, in AHP data processing the consistency assessment is carried out at the end of the calculation after the data from the informant is processed, If A is a pairwise

comparison matrix and W is a priority or weight vector, then the consistency value of the weight vector w can be tested as follows:

1). Calculate: $(A)(w^T)$

$$t = \frac{1}{n} \sum_{i=1}^n \left(\frac{\text{elemen ke-i pada } (A)(w^T)}{\text{elemen ke-i pada } w^T} \right) \dots\dots\dots(3)$$

Consistency of Priority or Weight Vectors

$$\begin{pmatrix} 1,000 & 0,333 & 0,200 \\ 3,000 & 1,000 & 0,333 \\ 5,000 & 3,000 & 1,000 \end{pmatrix} \times \begin{pmatrix} 0,1062 \\ 0,2605 \\ 0,6333 \end{pmatrix} = \begin{pmatrix} 0,3197 \\ 0,7901 \\ 1,9456 \end{pmatrix} / \begin{pmatrix} 0,1062 \\ 0,2605 \\ 0,6333 \end{pmatrix} = \begin{pmatrix} 3,0112 \\ 3,0330 \\ 3,0720 \end{pmatrix}$$

Then average the final results of the matrix, this result is often referred to as λ_{max} = so that the value = 3.0387 is obtained.

2) Calculate the consistency index using the formula:

$$CI = \frac{\lambda - n}{n - 1} \dots\dots\dots(4)$$

Consistency Index: so that we get a value of : $(3,0387 - 3)/(3-1) = 0,01936$

3) *Index random (RI_n)*

Next is to determine the value of the *random index* (RI) by looking at the table that has been determined based on the parameters used in the comparison matrix. the average number of randomly selected CIs in A and is given as:

Table 4. *Random Index* (RI) values

N	1	2	3	4	5	6	7	8	9
RI	0,00	0,00	0,58	0,90	1,24	1,32	1,41	1,49	1,51

Source: Thomas L, Saaty in (Mahad et al., 2020)

Based on the table above because the number of N is 3 then RI = 0.58 Determine the Consistency Ratio with the formula:

$$CR = \frac{CI}{RI_n} \dots\dots\dots(5)$$

So that the *Consistency Ratio* is obtained = $0.01936/0.58 = 0.0334$

The CR value is smaller than 0.1 (zero point one), the hierarchy is considered quite consistent. The above calculation process is carried out on all data from informants (7 data), the combined value is obtained by finding using the geometric mean of all processed informant data, and the results are as in the table below:

Table 5. Eigen Vector Value and Consistency Ratio for each informant data

INFOR MAN	VEKTOR PRIORITY			LAMDA MAK λ_{max}	CI	RI	C-RATIO
	MGN	ORG	HR				
P2	26,05%	10,62%	63,33%	3,0387	0,0194	0,58	0,03
P3	30,25%	6,09%	63,66%	3,1059	0,0530	0,58	0,09
P4	26,05%	10,62%	63,33%	3,0387	0,0194	0,58	0,03
P5	10,62%	26,05%	63,33%	3,0387	0,0194	0,58	0,03
P6	8,33%	19,32%	72,35%	3,0658	0,0329	0,58	0,06
P7	6,54%	19,94%	73,52%	3,0724	0,0362	0,58	0,06
P8	27,21%	11,99%	60,80%	3,0741	0,0371	0,58	0,06
COMBINE	20,45%	19,76%	59,78%	3,0075	0,0037	0,58	0,01

Source: Research Data, 2023

Based on the eigenvalue of the combined results, the HR factor has a greater value and is the first priority factor against other factors, then the CR value of all includes has a value of <0.1 so it is quite consistent and acceptable. Based on the priority percentage value for the factor level for the highest priority employee performance improvement strategy in order as follows, Human Resource Management with a percentage value of 59.78%, Management of 20.45% and finally organization of 19.76%.

Calculation results using Expert Choice ver.11 tools

There is a slight difference in the resulting value between the excel calculation and the AHP calculation application program, but it is not too significant, the results are as follows:

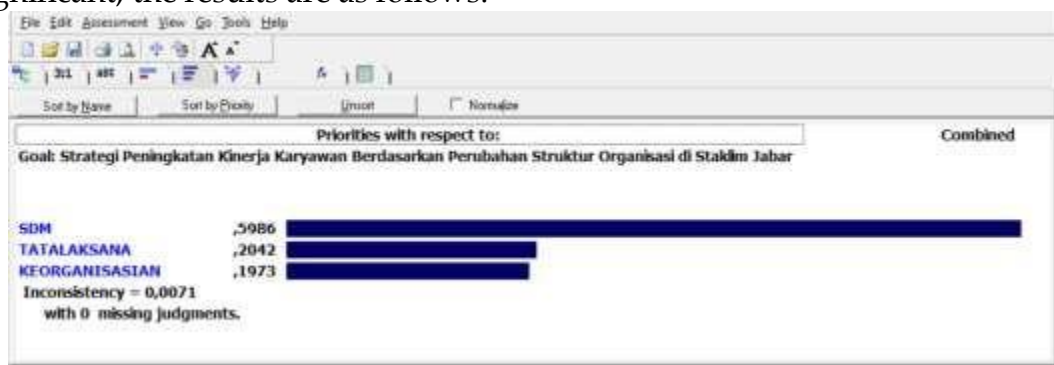


Figure 5. Results of factor calculation with expert choice

Source: Research Data, 2023

Based on the calculation of the order of priority results, it is the same as excel calculations but slightly different values are produced, Management gets a value of 0.2042 or 20.42%, Organization gets a value of 0.1973 or 19.73% and Human Resources gets a value of 0.5986 or 59.86%. The results between excel calculations and expert choice give the first priority to human resources, then management and finally organization.

Calculation of Indicator aspects of the factor hierarchy

After data Factors that become the next performance improvement strategy are processing informant data based on indicators of each factor. Based on the informant's opinion data that simple SOPs are more important than adjusting the work system with a scale of 3, then the use or utilization of Information Technology is more important than adjusting the worksystem with a scale of 7 and the use of information technology is more important than simplified SOPs with an importance scale of 5. then this information will be made into a pairwise matrix as below:

Table 6. Pairwise and Normalization matrix of Management Factor Indicators

MGN	PSK	SOP	ICT	Normalization =	MGN	PSK	SOP	ICT
PSK	1,000	0,333	0,143		PSK	0,091	0,053	0,106
SOP	3,000	1,000	0,200		SOP	0,273	0,158	0,149
ICT	7,000	5,000	1,000		ICT	0,636	0,789	0,745
TOT	11,000	6,3333	1,3429		TOT	1,000	1,000	1,000

Source: Research Data, 2023

MGN : Management

PSK : Work System Adjustment

SOP : Simplified *Standard Operating Procedure*

ICT : Use of Computer Information Technology

Next, add up horizontally or per line and calculate the eigenvalue of each indicator.

Table 7. Eigen Value of Management Factor Indicators

	TOTAL	EIGEN	PERSEN
PSK	0,2499	0,08331	8,33 %
SOP	0,5796	0,19319	19,32 %
ICT	2,1705	0,72351	72,35 %
TOT	3,0000	1,0000	100,00 %

Source: Research Data, 2023

The eigenvalue is the priority value of each indicator, it can be seen that the highest percentage as a policy priority selection for improving employee performance is the use of information technology (ICT) followed by simplified SOPs (SOP) and finally work system adjustments (PSK). After the priority value is known, then determine the consistency ratio (CR). With the following process:

$$\text{Lamda Mak} = 3,0658$$

$$\text{CI} = (3.0658 - 3)/(3-1) = 0,0329$$

$$\text{RI} (3) = 0,58$$

$$C \text{ Ratio (CR)} = 0,0329/0,58 = 0,0567$$

The result of $CR < 0.1$, the hierarchy is quite consistent for all indicators of the Management factor. Based on the total number of informants used in this study, as a result of processing all data, the researcher made a table of a collection of results and combined results from all data processing, presented in the table below:

Table 8. Vector priority and Consistency Ratio processing results indicator parameters of the Management factor

INFORMAN	VEKTOR PRIORITY			LAMDA MAK (λ_{max})	CI	RI	C-RATIO
	PSK	SOP	TIC				
P2	0,3333	0,3333	0,3333	3,0000	0,0000	0,58	0,0000
P3	0,0526	0,4737	0,4737	3,0000	0,0000	0,58	0,0000
P4	0,1062	0,6333	0,2605	3,0387	0,0194	0,58	0,0334
P5	0,0524	0,3685	0,5791	3,0540	0,0270	0,58	0,0465
P6	0,2519	0,1593	0,5889	3,0539	0,0270	0,58	0,0465
P7	0,0833	0,1932	0,7235	3,0658	0,0329	0,58	0,0567
P8	0,0594	0,4507	0,4899	3,0070	0,0035	0,58	0,0061
COMBINE	0,1120	0,3708	0,5172	3,0000	0,0000	0,58	0,0000

Source: Research Data, 2023

Based on the table above, the first priority of most respondents on the ICT indicator variable (Use of Computer Information Technology), then (SOP) simplified *Standard Operating Procedure* and finally (PSK) Work System Adjustment. If converted into percentages, it can be displayed as the table below:

Most of the resulting indicator parameters for the management factor in the employee performance improvement strategy are indicators of the use of information technology with a combined value of 0.5172 or 51.72%, then the secondorder simplified *Standard Operating Procedure* with a combined value of 0.3708 or 37.08% while the last is Work System Adjustment with a value of 0.1120 or 11.20%.

The results of the above calculations have the same results using the *expert choice ver.11* application as shown below:

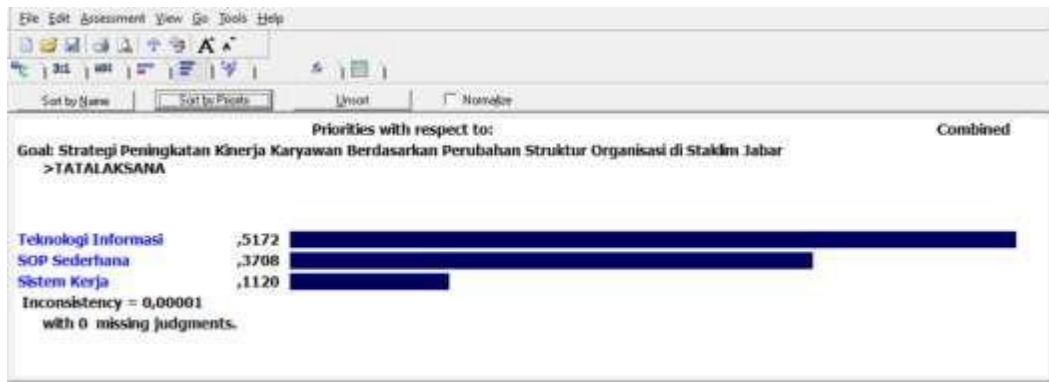


Figure 6. Bar graph of expert choice processing results

Source: Research Data, 2023

We continue processing data from informants to calculate parameter data for all indicators of organizational factors and Human Resources,

Table 9. Eigen Value/Vector *priority* and *Consistency Ratio*
Processing results indicator parameters of the Organizational factor

INFORMAN	VEKTOR PRIORITY			LAMDA MAK (λ_{max})	CI	RI	C-RATIO
	PSO	BDO	KLP				
P2	0,0784	0,0784	0,4013	3,0741	0,0000	0,58	0,0000
P3	0,1659	0,0698	0,7644	3,0544	0,0000	0,58	0,0000
P4	0,4160	0,1263	0,4577	3,0092	0,0046	0,58	0,0079
P5	0,6333	0,1062	0,2605	3,0387	0,0194	0,58	0,0334
P6	0,5094	0,0701	0,4205	3,0387	0,0193	0,58	0,0333
P7	0,1032	0,1079	0,7888	0,0000	0,0000	0,00	0,0000
P8	0,2431	0,0882	0,6687	3,0070	0,0035	0,58	0,0061
GABUNGAN	0,3454	0,0989	0,5557	3,0058	0,0029	0,58	0,0050

Source: Research Data, 2023

Based on the results of data processing, most of the resulting indicator parameters for organizational factors in the strategy to improve employee performance are Ease of Public Service, almost all of which are the first priority except for the results of data processing from informant P5 which prioritizes Simplification of Organizational Structure, Based on the combined processing value of all informants, it is found that the highest priority in the strategy to improve employee performance is Ease of Public Service with a value of 0.5567 or 55.67%, while in second priority is Simplification of Organizational Structure with a value of 0.3454 or 34.54% and finally organizational culture with a value of 0.0989 or 9.89%.

Calculation with expert choice ver.11 application

The calculation results show relatively the same value as the calculation results using excel. The calculation results are as shown in the bar graph below:

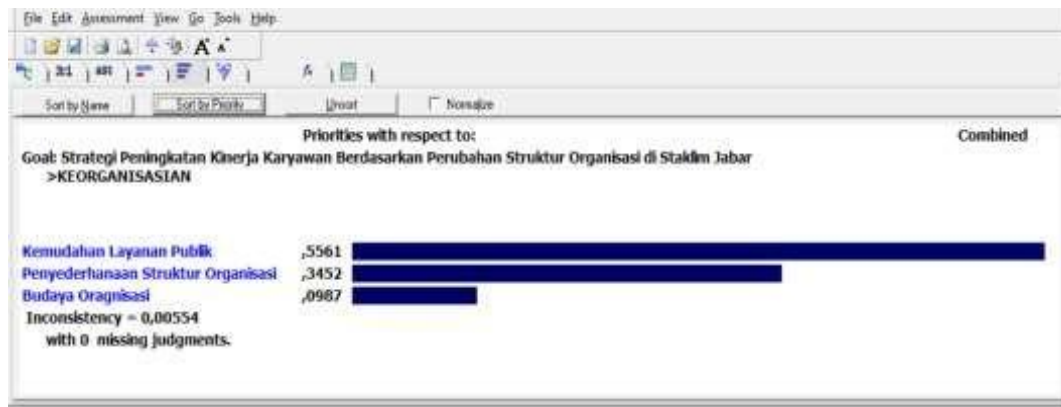


Figure 7. Results of expert choice factor level calculation

Source: Research Data, 2023

The highest priority is the ease of public services with a value of 0.5561 or 55.61%, simplification of organizational structure 0.3452 or 34.52% and finally organizational culture with a value of 0.0987 or 9.87%.

The results of data processing indicators of the Human Resources factor,

Table 10. Vector priority and Consistency Ratio The results of processing indicator parameters of the Human Resources factor

INFORMAN	VEKTOR PRIORITY				LAMDA MAK (λ _{max})	CI	RI	C-RATIO
	AHL	KOM	TIM	DSP				
P2	0,2500	0,2500	0,2500	0,2500	4,0000	0,0000	0,90	0,0000
P3	0,2500	0,2500	0,2500	0,2500	4,0000	0,0000	0,90	0,0000
P4	0,0574	0,1341	0,3695	0,4390	4,1910	0,0637	0,90	0,0708
P5	0,0684	0,5012	0,2661	0,1643	4,1316	0,0439	0,90	0,0487
P6	0,2970	0,0579	0,1804	0,4647	4,2337	0,0779	0,90	0,0866
P7	0,1650	0,0448	0,1650	0,6252	4,1346	0,0449	0,90	0,0499
P8	0,0500	0,0500	0,4500	0,4500	4,0000	0,0000	0,90	0,0000
GABUNGAN	0,1473	0,1475	0,3001	0,4051	4,0027	0,0009	0,90	0,0010

Source: Research Data, 2023

Based on the table above, the tendency of informants to give their opinions in the strategy of improving employee performance is to prioritize employee discipline and only one informant prioritizes competence, the compilation results of all informants' opinions can be determined that the most important in the strategy of improving employee performance is employee discipline with a value of 0.4051 or 40.51%, then in second place is teamwork with a value of 0.3001 or 30.01%, third place is competence with a value of 0.1475 or 14.74% and finally expertise with a value of 0.1473 or 14.73%. Calculation with *expert choice ver.11* application

The calculation results show relatively the same value as the calculation results using excel. The calculation results are below:

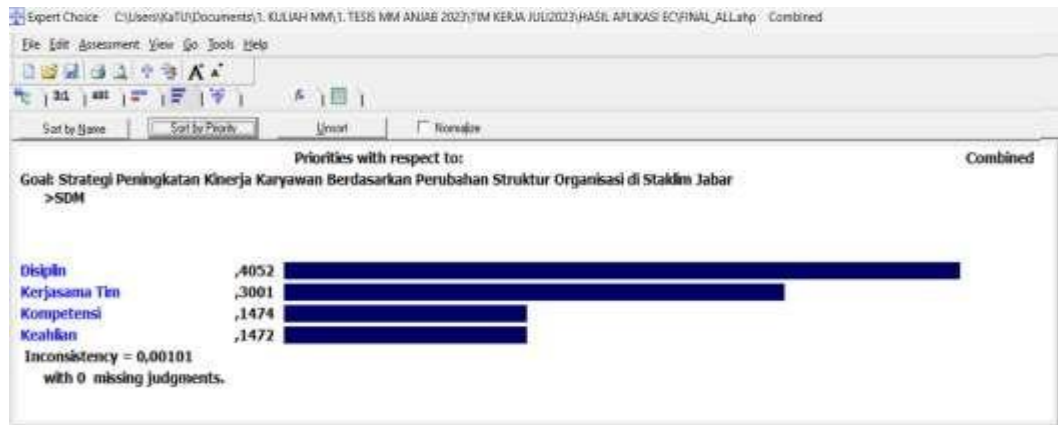


Figure 7. HR factor level calculation results

Source: Research Data, 2023

The highest priority is discipline with a value of 0.4052 or 40.52%, teamwork 0.3001 or 30.01%, then competence with a value of 0.1474 or 14.74% and finally expertise with a value of 0.1472 or 14.72%.

To calculate the priority of all indicators of the hierarchical factor, it is necessary to do a global calculation by taking into account all the values of each factor, indicator and strategy, the eigenvalue is obtained as a reference for determining priorities, in this study the authors used two ways of calculation, to see the comparison between the results of the *expert choice* application and *microsoft excel*, we can see the results as in the table below based on the results of *expert choice* and *microsoft excel* calculations.

Table 11. Ranking of Local and Global Eigen Values of Indicators on Strategy (Combined Public Services and Organizational Bureaucracy, *expert choice* results)

RANK	KODE	GABUNGAN PP & BO	Local	Global	Priority	Percen
1	DSL	Disiplin	0,405	0,243	0,2425	24,25%
2	TIM	Kerja sama Tim	0,300	0,180	0,1796	17,96%
3	KLP	Kemudahan Layanan Publik	0,556	0,110	0,1097	10,97%
4	TIC	Teknologi Informasi	0,517	0,106	0,1056	10,56%
5	KOM	Kompetensi	0,147	0,088	0,0883	8,83%
6	AHP	Keahlian	0,147	0,088	0,0881	8,81%
7	SOP	SOP yang sederhana	0,371	0,076	0,0757	7,57%
8	PSO	Penyederhanaan Struktur Organisasi	0,345	0,068	0,0682	6,82%
9	PSK	Penyesuaian sistem kerja	0,112	0,023	0,0229	2,29%
10	BDO	Budaya Organisasi	0,099	0,019	0,0194	1,94%

Source: Research Data, 2023

Table 12. Ranking of Local and Global Eigen Values of Indicators against Strategies (combined Public Services and Organizational Bureaucracy, *Microsoft Excel* results)

RANK	KODE	GABUNGAN PP & BO	Local	Global	Priority	Percen
1	DSL	Disiplin	0,405	0,242	0,2419	24,19%
2	TIM	Kerjasama Tim	0,300	0,179	0,1792	17,92%
3	KLP	Kemudahan Layanan Publik	0,557	0,112	0,1119	11,19%
4	TIC	Teknologi Informasi	0,517	0,104	0,1044	10,44%
5	KOM	Kompetensi	0,147	0,088	0,0880	8,80%
6	AHP	Keahlian	0,147	0,088	0,0880	8,80%
7	SOP	SOP yang sederhana	0,371	0,075	0,0748	7,48%
8	PSO	Penyederhanaan Struktur Organisasi	0,345	0,069	0,0694	6,94%
9	PSK	Penyesuaian sistem kerja	0,112	0,023	0,0226	2,26%
10	BDO	Budaya Organisasi	0,099	0,020	0,0199	1,99%

Source: Research Data, 2023

Comparing the results between the results of calculations using the *expert choice* application and the results of *Microsoft Excel* in general, the results are almost the same, only a slight difference in the results of global calculations in the third decimal, but in order of priority produces the same order as recommendations for performance improvement strategies.

The following is the recommended order of priority to achieve the main goal/goals as follows:

Based on the results of the last combined calculation of the public service strategy and organizational bureaucracy, it produces a different value compared to the results of the calculation of each strategy, the value is greater than the calculation of each strategy. With the recommended priority order of factor indicators for employee performance improvement strategies, starting from highest to lowest starting from highest to lowest Discipline (24.3%), Teamwork (18.0%), Ease of Public Service (11.0%), Use of Information Technology (10.6%), HR Competence (8.8%), HR Expertise (8.8%), simpler SOPs (7.6%), Simplification of Organizational Structure (6.8%), Work System Adjustments ((2.3%) and finally Organizational Culture (2.0%).

Table 13. Local and Global Eigen Values of Factor, Indicator and Strategy Variables

NO	FACTOR	EXCEL	Expert Choice	INDICATOR	EXCEL		Expert Choice		PUBLIC SERVICES	ORGANIZATIONAL BUREAUCRACY
					LOCAL	GLOBAL	LOCAL	GLOBAL		
1	HUMAN RESOURCE	59,72%	59,09%	Skill	14,73%	8,80%	14,5%	8,55%	75,29%	24,71%
				Competence	14,74%	8,80%	15,0%	8,86%		
				Team Collaboration	30,01%	17,92%	30,0%	17,74%		
				Discipline	40,51%	24,19%	40,5%	23,94%		
2	MANAGEMENT	20,18%	21,02%	Adjustment of the working system	11,20%	2,26%	11,2%	2,34%		
				Simple SOPs	37,08%	7,48%	37,2%	7,82%		
				Information Technology	51,72%	10,44%	51,7%	10,86%		
3	ORGANIZATIONAL	20,10%	19,89%	Simplification of Organizational Structure	34,54%	6,94%	33,1%	6,58%		
				Organizational Culture	9,89%	1,99%	10,6%	2,10%		
				Ease of Public Service	55,67%	11,19%	56,3%	11,21%		

Source: Research Data, 2023

To facilitate the assessment of the largest to smallest percentage level, the following bar graph of the global weight value is the final result in determining priorities in determining Employee Performance Improvement Strategies based on Changes in Organizational Structure at the WestJava Climatology Station as follows:

DISCUSSION

Some countries that have implemented bureaucratic reform programs in general can be viewed from aspects related to two dimensions, namely the Human Resources dimension of the apparatus and the organizational dimension. For aspects of the organizational dimension factors related to organizational structure, organizational culture, law, legislation and organizational technology. As for the human resource dimension of the apparatus related to aspects of knowledge, attitudes, behavior, skills, discipline, mindset, performance and integrity. (Akbar et al., 2021). Several ineffective factors and hampering the bureaucratic reform program of the Cimahi City Regional Government in general can be viewed from three main factors, namely 1. Institutional (organizational) aspects; 2. Aspects of Governance; and 3. Human Resources Aspect, (Rohayatin, 2017).

In developing a strategy to improve employee performance, two public service strategies and organizational bureaucracy have been determined, researchers add several indicators for each strategy as material for prioritization in its application later, along with a description of the indicators of each strategy in the form of:

1. Public Service

The aspects used as indicators for public services are as follows: speed standard time, facilities, transparency and accountability, professionalism, and information technology

2. Organizational Bureaucracy

The aspects that are used as indicators for organizational bureaucracy are as follows: time, administration, results, employee adequacy, and flexibility. Based on the description of the variables of factors, indicators and strategies above with the main aim of finding alternatives in employee performance improvement strategies based on simplifying the organizational structure at the West Java Climatology Station, if arranged in the form of a hierarchy it can be described as shown below:

Informant Character

The character of informants involved in this study can be grouped into several criteria, namely groups based on gender, age group, expertise group or profession, the old group working in the field of expertise and the last educational group, from the five classifications above can be used as material for consideration and objective analysis of the results of final data processing if needed and related, so that the desired end result can help obtain and draw a common thread towards solutions and solutions to improve employee performance improvement strategies based on changes in organizational structure, especially at the West Java Climatology Station.

Table 2. Gender Group of Informants

Gender	Number of Respondents	Percentage
Man	3	43%
Woman	4	57%
Sum	7	100%

Source: Research Data, 2023

Table 3. Age Group of Informants

Age (Years)	Number of Respondents	Percentage
35-40	2	29%
41-45	1	14%
46-50	1	14%
51-55	2	29%
>55	1	14%
Sum	7	100%

Source: Research Data, 2023

Table 4. Expertise Group or Informant Profession

Areas of Expertise	Number of Respondents	Percentage
Organization and Management	4	57%
Human Resources	1	14%
Climatologies	2	29%
Sum	7	100%

Source: Research Data, 2023

Table 5. Gender Group of Informants

Length of Work in the Field of Expertise	Number of Respondents	Percentage
4 - 10 Year	4	57%
11 - 20 Year	1	14%
> 20 Year	2	29%
Sum	7	100%

Source: Research Data, 2023

Table 6. The last educational group of Informers

Recent Education	Number of Respondents	Percentage
S-1	0	0%
S-2	7	100%
S-3	0	0%
Sum	7	100%

Source: Research Data, 2023

Table 19. Informer's group of origin

Origin	Number of Respondents	Percentage
Internal BMKG	4	57%
External BMKG	3	43%
Sum	7	100%

Source: Research Data, 2023

Calculations using the *Analytic Hierarchy Process (AHP)* method begin with determining the main goals of the problems to be solved in this study starting with determining goals, namely Employee Performance Improvement Strategies based on Changes in Organizational Structure at the West Java Climatology Station, data processing sourced from questionnaire data that has been obtained based on opinions from informants or experts in accordance with what has been determined. The questionnaire data is adjusted to the factors and indicators, each of which will be calculated for its importance with predetermined aspects of the strategy.

There are several data needed in the input for the AHP model including:

1. The value of the comparison in pairs between predetermined factors, namely the comparison value between:
 - a. Governance Factors with Organizational Factors, b. Governance Factors with HR Factors, c. Organizational Factors with HR Factors
2. Comparison value between indicators, where each factor has an indicator, so that a paired comparison value must be obtained between indicators both for management factors, organizational factors and HR factors. With paired comparison values for each indicator as follows:
 - a. Comparison of paired relative importance for Management with comparison matrix between, adjustment of work systems, simple SOPs and Information Technology.

- b. Comparison of paired relative importance for Organizational with comparison matrix between Simplification of organizational structure, Organizational culture and Ease of public services.
 - c. Pairwise comparison of relative importance for Human Resources with comparison matrix between Skills, Competencies, Teamwork and Discipline.
3. The pairwise comparison between public services and organizational bureaucracy is based on every indicator of each factor, consisting of: Work system adjustment, simple SOPs and Information Technology. Simplification of organizational structure, organizational culture and ease of public services. Skills, Competencies, Teamwork, and Discipline.
4. In addition, data are also needed for the importance value of each indicator, both for indicators of factors and indicators from the Strategy or in the AHP model called alternatives.

CONCLUSIONS AND RECOMMENDATIONS

Government policies in carrying out bureaucratic reform programs in all institutions and ministries, both central and regional, have a direct impact on changes in organizational structure and work mechanisms, at the West Java Climatology Station, for these changes the head of the West Java Climatology Station must immediately make policies and strategic steps in an effort to achieve goals by prioritizing from highest to lowest as follows Employee discipline supervision, strengthening teamwork, simplifying the public service sector, using information technology, increasing employee expertise and competence, simplifying operational standards, simplifying organizational structure, flexibility/work system adjustments, and implementing organizational culture. And prioritize public services over the implementation of organizational bureaucracy.

ADVANCED RESEARCH

Suggestions from researchers for further studies based on the process and results of research suggested several things as follows:

- 1). It is necessary to expand research to a higher level or head office, so that more complex problems will be obtained and more variable choices will be used.
- 2). It is necessary to map as well as possible the answers from informants as well as possible and immediately to find out the consistency of the answers or opinions given, so that there is no need to make repeated requests for opinions to informants after data processing is completed specifically for the AHP method.
- 3). The simplification of the organizational structure in UPT BMKG has only been carried out in early 2023 and the level of effectiveness and strategic has not been felt, so further studies are needed to test the success rate of the organizational structure simplification program, especially in UPT BMKG and in general in all institutions and ministries.

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