

The Influence of Internal Factors and Chief-Employee Relationships on The Performance of Civil Servants in Information Technology Moderation

HIJRAH APRIYANSYAH, ADLER HAYMANS MANURUNG, ZAHARA TUSSOLEHA RONY
Faculty of Magister Management and Business,
University of Bhayangkara,
Jakarta,
INDONESIA

Abstract: - This study aims to determine and analyze the effect of position equalization policies, leadership, work systems, and leader-member exchange on the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform, and to determine and analyze the effect of position equalization policies, leadership, work systems, and leader-member exchange on the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform moderated by information technology. The method used in this study is a quantitative method with survey techniques, where the population used as subjects in the study are civil servants within the Ministry of Administrative and Bureaucratic Reform. The number of respondents in this study was 251 employees of the Ministry of Administrative and Bureaucratic Reform. The results showed that equalization of positions, leadership, work system, and leader-member exchange had a positive and significant effect on the performance of civil servants of the Ministry. Information technology moderates the positive influence of equalization of positions and work systems on the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform. Information technology does not moderate the influence of leadership and leader-member exchange on the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform. This research has significant novelty both in terms of research topic, number of variables studied, and research locus.

Key-Words: - Internal Factors, Chief-Employee Relationships, Information and Technology Moderation

Received: March 13, 2023. Revised: August 27, 2023. Accepted: September 25, 2023. Available online: November 11, 2023.

1 Introduction

Bureaucracy is an organization in government which is an administrative chain to help achieve the government's goal of serving the community, [1]. Civil Servant is the main element in the administration of government and has a very strategic role in determining the success of development in various aspects, especially human resource development in the public sector. The performance of each civil servant is a key success factor in achieving human resource development goals which are national priorities. Nationally, the performance of the government depends on the individual performance of each employee. However, It's often that the performance of civil servants has a negative stigma in society. This is due to several cases such as criminal acts of corruption, collusion, nepotism, abuse of authority, and indiscipline of civil servants (Figure 1).

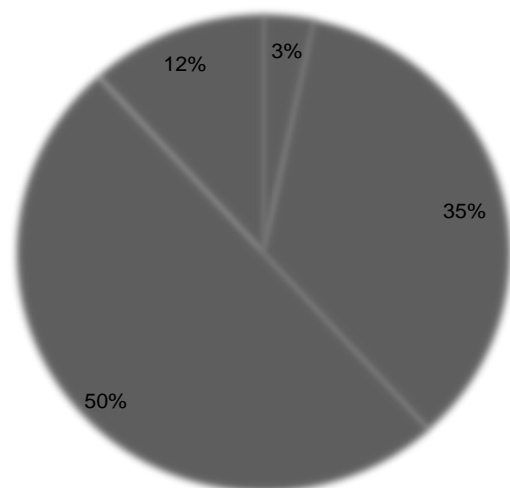


Fig. 1: Evaluation of the Implementation of Civil Service Performance Management in 2020

Based on data from the evaluation of the implementation of civil servant performance management in 2020 by the National Civil Service

Agency, as many as 3% of the total Government Agencies implemented performance management with a 'very good' performance predicate, followed by a percentage of 35% holding a 'good' predicate. Meanwhile, as many as 50% of Government Agencies hold the title of 'good enough' and as many as 12% with the predicate of 'bad' from the number of Government Agencies as a whole in the implementation of their performance management. The large percentage of agencies that have a 'bad' predicate compared to a 'very good' predicate on their performance management can have a negative impact and hinder the achievement of human resource development goals in government agencies.

In the Ministry of Administrative and Bureaucratic Reform, employee performance is influenced by several factors. Internal factors include equalization of positions, work systems, and information technology. The other elements in the chief-employee relationship are leadership and leader-member exchange. Based on employee performance information at the Ministry of Administrative and Bureaucratic Reform in the period 2020 to 2021, shows that the number of employees who performed well in 2020 was 360 (three hundred and sixty), and in 2021 increased to 494 (four hundred and ninety-four). The information shows an increase in the performance of employees with good status as many as 134 (one hundred thirty-four) people. Conversely, the performance of employees who have a bad predicate at the Ministry of Administrative and Bureaucratic Reform in 2020 amounted to 38 (thirty-eight people) and increased in 2021 with the number of underperforming employees decreasing to 24 (twenty-four) people.

The performance of employees in the Ministry of Administrative and Bureaucratic Reform is influenced by several factors, according to the results of interviews with the Bureau of Human Resources and General Affairs of the Ministry of Administrative and Bureaucratic Reform, several factors have a strong influence on the performance of each employee. Some internal factors that are considered the most influential, namely equalization of positions, leadership, work systems, and leader-member exchange and information technology are estimated to be internal factors that strengthen or weaken the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform. The Transfer of Administrator and Supervisory Posts of the Ministry of Administrative and Bureaucratic Reform is presented in Table 1.

Table 1. Transfer of Administrator and Supervisory Posts of Ministry of Administrative and Bureaucratic Reform.

| Structural Position | Old Structure (Number) | New Structure retained (Amount) | Administrative Officers Transferred to Functional |
|-----------------------------|------------------------|---------------------------------|---|
| Administrator (Echelon III) | 63 | 1 | 62 (F Associate Members) |
| Supervisor (Echelon IV) | 96 | 2 | 94 (F Young Members) |
| Sum | 159 | 3 | 156 |

Equalization of positions in of Ministry of Administrative and Bureaucratic Reform based on data on the transfer of administrator and supervisory positions of the Ministry of PANRB in 2020 was carried out by transferring as many as 63 (sixty-three) echelon III structural positions to 62 (sixty-two) functional positions of associate experts followed by the transfer of 96 (ninety-six) structural positions of echelon IV to 94 (ninety-four) functional positions of young experts. In line with the equalization of positions within the Ministry of Administrative and Bureaucratic Reform when compared with paragraph 3 related to employee performance, the position equalization policy influences employee performance within the Ministry of Administrative and Bureaucratic Reform. In paragraph 3 above, before the equalization of departments in 2020, the number of employees who have good predicates is 360 (three hundred sixty) people, while in 2021, after the equalization of positions, there is an increase in employee performance with an increase in employees whose performance has a good predicate of 494 (four hundred ninety-four) people. Based on this, the improvement in employee performance can be interpreted as equalization of positions affecting employee performance within the Ministry of Administrative and Bureaucratic Reform. The Number of Employees by Gender in the Ministry of Administrative and Bureaucratic Reform is presented in Table 2.

Table 2. Number of Employees by Gender in the Ministry of Administrative and Bureaucratic Reform

| Employee Gender | Total (Year) % | | | |
|-----------------|----------------|------|------|------|
| | 2019 | 2020 | 2021 | 2022 |
| Male | 57% | 56% | 54% | 53% |
| Female | 43% | 44% | 46% | 47% |

Based on these data, the influence of *leader-member exchange* in the Ministry of Administrative and Bureaucratic Reform is influenced by the gender of the head of the organization. In 2019, the number of male employees was higher at 57% compared to the number of female employees which was 43%. Similarly, data on the number of employees from 2020 to 2022 shows that the highest employee gender is dominated by male employees. With an average number of male employees from 2020 to 2022 of 54.33% and an average number of female employees from 2020 to 2022 of 45.66%. The difference in the number of employees in the Ministry of Administrative and Bureaucratic Reform is influenced by the gender of the leader considering that from 2019 to 2022 the gender of the leader in the Ministry of Administrative and Bureaucratic Reform is male. As with leadership, the factor of closeness to the leadership or *LMX* is very influential on the performance of employees in the Ministry of State Apparatus Utilization and Bureaucratic Reform. Gender equality between leaders and subordinates will make them comfortable in doing work so that the quality of work also increases as explained above. In accordance with *LMX* criteria, due to time pressure, there is a special relationship between leaders and employees in one group. The closeness of the relationship between the two will affect the refraction of performance appraisals because leaders not only view employee performance but also include exchange value in their relationships.

To improve work through bureaucratic simplification, changes were made to the work system that was originally tiered and siloed which involved slow decision-making to turn into a collaborative and dynamic work system. In government agencies, the work system is applied flexibly with the *Flexible Work Arrangement (FWA) system*. Based on the survey results from the Executive Secretary of the National Bureaucratic Reform Steering Committee, Civil Servant was able to meet the work target during FWA as much as 90.73%, Civil Servant satisfaction with the FWA work system as much as 90.22%, and unit leader satisfaction with the FWA work system as much as 85%. With the FWA work system, employees will be more focused on working, more productive, more efficient with time, fewer distractions and distractions, healthier physically and mentally, live calmly, and spend less. Work flexibility is a work pattern that provides flexibility for civil servants in government agencies in carrying out official duties at certain locations and times by utilizing an electronic-based government system.

The Ministry of Administrative and Bureaucratic Reform as the driving force of the bureaucracy utilizes the use of information technology to improve its performance, according to the following data (Table 3):

Table 3. Results of Evaluation of Electronic-Based Government System at the Ministry of Administrative and Bureaucratic Reform

| Year | Indeks | Predicate |
|------|--------|----------------|
| 2021 | 2.61 | Good Predicate |
| 2022 | 3.01 | Good Predicate |

In accordance with the results of monitoring and evaluation of electronic-based government systems at central agencies within the Ministry of Administrative and Bureaucratic Reform in 2021 with an index of 2.61 (good predicate) and in 2022 with an index of 3.01 (good predicate) show that information technology on employee performance has a positive and *highly significant* influence on employee performance. To obtain efficient and effective performance results, organizations must be able to interact with existing information technology and utilize information technology to help achieve their goals. The benchmark of the success of a government organization can be measured by the performance of employees produced in the organization. The presence of information technology has a very positive impact on the workforce of government organizations. The application of information technology for government institutions has had a good impact, therefore employee performance has improved. The implementation of e-government or the *Electronic-Based Government System* that has undergone improvements is expected to have a positive impact on the government's performance in providing services to the wider community, [2].

2 Problem Formulation

Based on this description there are such problems can be identified related to the lack of assurance and certainty for the careers of civil servants due to the implementation of bureaucratic simplification policies through simplification of organizational structure and equalization of positions that are considered to affect the performance of civil servants. The influence of leadership style in creating collaboration to achieve synergy in realizing performance targets and motivating employee performance. The quality of public services is still low due to procedural obstacles in

decision-making. There is still a low motivation for civil servants to change the structural work culture to an innovative work culture to realize the professionalism of civil servants. Limited use of information and communication technology in government administration.

3 Problem Solution

The data collection was carried out by distributing questionnaires *online* in the form of *Google Forms* sent to respondents. The minimum number of samples needed in this study was 247 respondents and researchers managed to obtain responses from 251 respondents, therefore researchers processed all the data obtained. Based on the data obtained in the data collection, the description of the characteristics of respondents will be described as follows.

1. The characteristics of respondents based on gender consisted of males as many as 153 respondents or 61% of all respondents. Female gender as many as 98 respondents or 39% of all respondents. The majority of respondents in this study were male.
2. The characteristics of respondents based on age consist of 20-30 years, namely as many as 82 respondents or 32.67% of all respondents. Aged 31-40 years as many as 92 respondents or 36.65% of all respondents. Aged 41-50 years as many as 92 respondents or 36.65% of the total respondents. Age >50 years as many as 17 respondents or 6.77% of all respondents. The majority of respondents' ages in this study were 31-40 years and 41-50 years.
3. The characteristics of respondents based on work units consisted of the Deputy for Institutional and Governance Affairs, which was 94 respondents or 37.45% of all respondents. Deputy for Public Service as many as 26 respondents or 10.36% of all respondents. Deputy for Bureaucratic Reform, Apparatus Accountability, and Supervision as many as 22 respondents or 8.76% of all respondents. Deputy for Human Resources Apparatus as many as 33 respondents or 13.15% of the total respondents. The Ministerial Secretariat was 75 respondents or 29.88% of the total respondents. Expert Staff for Work Culture as many as 1 respondent or 0.40% of all respondents. The majority of respondents' work units in this study are Deputy for Institutional and Governance Affairs.
4. The characteristics of respondents based on domicile consist of Bandar Lampung, which is

as many as 1 respondent or 0.40% of all respondents. Bekasi as many as 19 respondents or 7.57% of all respondents. Bogor as many as 13 respondents or 5.18% of the total respondents. Depok as many as 49 respondents or 19.52% of the total respondents. Jakarta had as many as 133 respondents or 52.99% of the total respondents. Karawang as many as 1 respondent or 0.40% of all respondents. Seoul as many as 1 respondent or 0.40% of the total respondents. Sukabumi as many as 1 respondent or 0.40% of all respondents. Tangerang as many as 33 respondents or 13.15% of the total respondents. The majority of respondents in this study are domiciled in Jakarta.

5. The characteristics of respondents based on length of work consist of 1-10 years, which is as many as 157 respondents or 62.55% of all respondents. The length of work for 11-20 years was 61 respondents or 24.30% of the total respondents. Working time of 21-30 years as many as 27 respondents or 10.76% of the total respondents. Length of work >30 years as many as 6 respondents or 2.39% of all respondents.
6. The characteristics of respondents based on tenure consist of 1-5 years, namely as many as 190 respondents or 75.70% of all respondents. The tenure of office of 6-10 years was 36 respondents or 14.34% of the total respondents. The tenure of office >10 years was 25 respondents or 9.96% of the total respondents.

3.1 Measurement Model: *Validity and Reliability Test*

The *outer model* is used to assess the validity and reliability of the model. Validity tests are carried out to determine the ability of research instruments to measure what should be, [3], and, [4]. Reliability tests are used to measure the consistency of measuring instruments in measuring a concept or can also be used to measure the consistency of respondents in answering question items in questionnaires or research instruments. The measurement model (*outer model*) uses *convergent validity*, *discriminant validity*, and *composite reliability tests*. The *convergent validity* of the *measurement model* can be seen from the correlation between the indicator score and the variable score score. Indicators are considered valid based on AVE values or entire *outer loading* variable dimensions.

The requirement for the fulfillment of convergent validity is that the *outer loading* value of

each construct/variable indicator is >0.70 , [5]. This study used an outer loading limit of 0.70. The results of convergent validity testing are obtained as follows (Figure 2):

Figure 2 shows that all indicators have *outer loading* values above 0.70 and all variable indicators in this study can be declared valid.

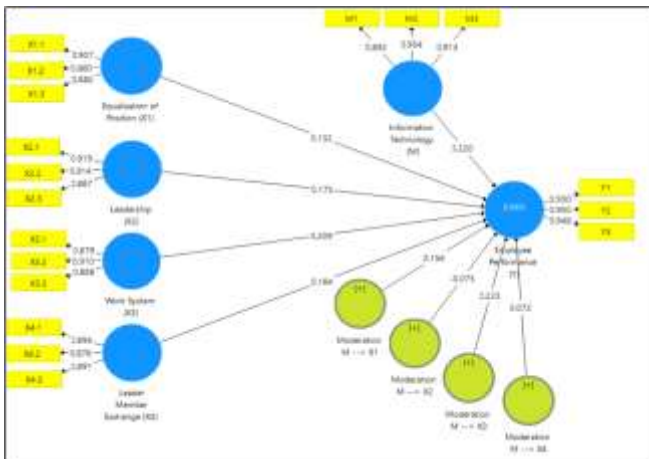


Fig. 2: shows that all indicators have *outer loading* values above 0.70 that all variable indicators in this study can be declared valid

The *discriminant validity* of the indicator can be seen in the *cross-loading* between the indicator and its construct. If the correlation of the construct with the indicator is higher than the correlation of the indicator with other constructs, then it indicates that the latent construct predicts the indicator in their block better than the indicator in the other block. The *discriminant validity method* is to test the *discriminant validity with reflexive indicators*, that is, by looking at the *cross-loading* value for each variable must be >0.7 , [6].

Reliability tests can be seen from the value of *composite reliability*. *Composite reliability* is the accepted limit value for a *composite reliability level* > 0.7 . The results of the *composite reliability* test are obtained as follows (Table 4):

Table 4. Composite Reliability Test Results

| | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------------|-----------------------|----------------------------------|
| Employee Performance (Y) | 0,960 | 0,889 |
| Equalization of Position (X1) | 0,919 | 0,791 |
| Leadership (X2) | 0,933 | 0,822 |
| Work System (X3) | 0,921 | 0,796 |
| Leader Member Exchange (X4) | 0,917 | 0,787 |
| Information Technology (M) | 0,943 | 0,847 |

Source: SmartPLS output results, 2023

Table 4 shows that all variables have a *composite reliability* higher than 0.70 therefore that all variables are reliable.

3.2 The Assessment of Structural Model: Inner Model

Structural models were evaluated using R-square for *dependent constructs*, the Stone-Geisser Q-square test for *predictive relevance*, and the t-test as well as the significance of structural path parameter coefficients. Assessing a model with PLS begins by looking at the *R-square* for each dependent latent variable. The interpretation is the same as the interpretation of regression. Changes in the R-square value can be used to assess the effect of a particular independent latent variable on whether the dependent latent variable has a substantive effect, [6]. In addition to looking at the R-square value, the PLS model is also evaluated by looking at the Q-square predictive relevance for constructive models. Q-square measures how well the observation values are generated by the model and also the estimation of its parameters.

R-Square (R2)

Structural assessment begins by looking at the R-square value for each endogenous variable value as the predictive force of the structural model. Changes in the value of the R-square (R2) can be used to explain the effect of a particular exogenous latent variable on whether the endogenous latent variable has a substantive influence. R-square values of 0.75; 0.50; and 0.25 can be concluded that the model is strong, moderate, and weak. The result of the PLS R-square represents the amount of *variance* of the construct described by the model, [6]. The higher the R2 value means the better the prediction model and research model proposed. The test result of R-square (R2) is obtained as follows (Table 5):

Table 5. R Square Test Results

| | R Square |
|--------------------------|----------|
| Employee Performance (Y) | 0,666 |

Source: SmartPLS output results, 2023

Table 5 shows that the R Square value for the employee performance variable is 0.666 which indicates a moderate model. Employee performance was influenced by equalization of positions, leadership, work systems, *leader member exchange*, and information technology by 66.6%, while the remaining 33.4% was influenced by other variables outside this study. R Square of 0.666 also shows

that this research model is included in the moderate model category because it is valued at above 0.50.

Q2 Predictive Relevance

PLS model evaluation can also be done with Q-square. The Q-square measures how well the observation values are produced by the model and also the estimation of its parameters. Q2 values > 0 indicate that the model has predictive relevance, while Q2 values < 0 indicate that the model lacks predictive relevance, and more specifically Q2 values of 0.02; 0.15; and 0.35 indicate a weak, moderate, and strong model, [6]. The Q-square values in this study are presented in Table 6.

Table 6. Q Square Test Result

| | SSO | SSE | Q ² (=1-SSE/SSO) |
|--------------------------------|---------|---------|-----------------------------|
| Leadership (X2) | 753,000 | 753,000 | |
| Employee Performance (Y) | 753,000 | 325,566 | 0,568 |
| Leader Member Exchange (X4) | 753,000 | 753,000 | |
| Moderation M over X1 | 251,000 | 251,000 | |
| Moderation M over X2 | 251,000 | 251,000 | |
| Moderation M over X3 | 251,000 | 251,000 | |
| Moderation M over X4 | 251,000 | 251,000 | |
| Equalization of Positions (X1) | 753,000 | 753,000 | |
| Work System (X3) | 753,000 | 753,000 | |
| Information Technology (M) | 753,000 | 753,000 | |

Source: SmartPLS output results, 2023

Table 6 shows that employee performance has a Q2 value of > 0 which is 0.568 therefore that the model has good predictive relevance with a strong model because it is above 0.35.

Quality Index

Smart PLS path modeling can identify global optimization criteria to determine the goodness of fit with the Gof index. The goodness of fit or Gof index developed by Tenenhaus et al. (2004) is used to evaluate measurement models and structural models and in addition, provides simple measurements for the entirety of the model predictions. The criteria for GoF values are 0.10 (GoF small), 0.25 (GoF medium), and 0.36 (GoF large), [6]. The Goodness of Fit value can be found by the following formula:

$$GoF = \sqrt{AVE \times R^2}$$

Explanation:

GoF = Goodness of Fit

AVE = Average AVE

R2 = Average R2

Average AVE = (0,822 + 0,889 + 0,787 + 0,791 + 0,796 + 0,847)/6 = 0,822

Average R² = 0,666

GoF = $\sqrt{AVE \times R^2}$

= $\sqrt{0,822 \times 0,666}$

$$GoF = \sqrt{0,547} = 0,739$$

A GoF value of 0.739 indicates that this research model has a high GOF (GoF large) therefore the model is declared fit.

3.3 Hypothesis Testing

Hypothesis testing in this study can be seen through the results of significant path coefficients. Significant values of path coefficients can be obtained using bootstrapping techniques with SEM-PLS software. The Table 7 presents results of testing the hypothesis of the research model.

Table 7. Hypothesis Test Results

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistic (O/STDEV) | P Values |
|---|---------------------|-----------------|----------------------------|-----------------------|----------|
| Equalization of Positions (X1) → Employee Performance (Y) | 0.132 | 0.137 | 0.054 | 2.449 | 0.014 |
| Leadership (X2) → Employee Performance (Y) | 0.175 | 0.180 | 0.062 | 2.819 | 0.005 |
| Work System (X3) → Employee Performance (Y) | 0.209 | 0.199 | 0.074 | 2.827 | 0.005 |
| Leader Member Exchange (X4) → Employee Performance (Y) | 0.184 | 0.189 | 0.071 | 2.595 | 0.009 |
| Information Technology (M) → Employee Performance (Y) | 0.220 | 0.213 | 0.064 | 3.449 | 0.001 |
| Moderation M over X1 → Employee Performance (Y) | 0.156 | 0.156 | 0.053 | 2.931 | 0.003 |
| Moderation M over X2 → Employee Performance (Y) | -0.075 | -0.075 | 0.044 | -1.676 | 0.094 |
| Moderation M over X3 → Employee Performance (Y) | 0.223 | 0.218 | 0.046 | 4.906 | 0.000 |
| Moderation M over X4 → Employee Performance (Y) | 0.072 | 0.071 | 0.067 | 1.079 | 0.281 |

H1: The Influence of Equalization of Positions (X1) on Employee Performance (Y)

The results of testing the influence of position equalization on employee performance obtained a P value of 0.014 < 0.05 which shows that position equalization has a significant effect on employee performance. In addition, a positive influence coefficient of 0.132 was also obtained which shows that there is a positive influence between equalization of positions on employee performance. When the equalization of positions is increased by 1 unit and other independent variables in this study are constant (0), then employee performance will increase by 0.132 units or vice versa when position equalization is decreased by 1 unit and other independent variables in this study are constant (0) then employee performance will decrease by 0.132 units. Based on this, it was obtained that equalization of positions had a positive and significant effect on employee performance, therefore the first hypothesis was accepted.

H2: The Influence of Leadership (X2) on Employee Performance (Y)

The results of testing the influence of leadership on employee performance obtained P values of 0.005 < 0.05 which showed that leadership had a significant effect on employee performance. In addition, a

positive influence coefficient of 0.175 was also obtained which shows that there is a positive influence between leadership on employee performance. When leadership is increased by 1 unit and other independent variables in this study are constant (0), then employee performance will increase by 0.175 units, or vice versa when leadership is decreased by 1 unit and other independent variables in this study are constant (0) then employee performance will decrease by 0.175 units. Based on this, it was obtained that leadership had a positive and significant effect on employee performance, therefore the second hypothesis was accepted.

H3: The Influence of Work System (X3) on Employee Performance (Y)

The results of testing the effect of the work system on employee performance obtained *P values* of $0.005 < 0.05$ which shows that the work system has a significant effect on employee performance. In addition, a positive influence coefficient of 0.209 was also obtained which shows that there is a positive influence between the work system on employee performance. When the work system is increased by 1 unit and the other independent variables in this study are constant (0), then employee performance will increase by 0.209 units, or vice versa when leadership is lowered by 1 unit and other independent variables in this study are constant (0) then employee performance will decrease by 0.209 units. Based on this, it was obtained that the work system had a positive and significant effect on employee performance, therefore the third hypothesis was accepted. The results of hypothesis testing also show that the work system is a variable that has a dominant influence on employee performance because it has the most distant influence coefficient of 0, which is 0.209.

H4: The Influence of *Leader Member Exchange* (X4) on Employee Performance (Y)

The results of testing the influence of *leader-member exchange on employee performance* obtained a *P value* of $0.009 < 0.05$ which shows that leader-member exchange has a significant effect on employee performance. In addition, a positive influence coefficient of 0.184 was also obtained which shows that there is a positive influence between *member exchange leaders* on employee performance. When the *leader-member exchange* is increased by 1 unit and the other independent variables in this study are constant (0), then employee performance will increase by 0.184 units, or vice versa when leadership is decreased by 1 unit

and the other independent variables in this study are constant (0) then employee performance will decrease by 0.184 units. Based on this, it was obtained that the *leader-member exchange* had a positive and significant effect on employee performance, therefore the fourth hypothesis was accepted.

H5: The Influence of Equalization of Positions (X1) on Employee Performance (Y) Moderated by Information Technology (M)

The results of testing the influence of position equalization on employee performance moderated by information technology obtained a positive influence coefficient of 0.156 and a *P value* of $0.003 < 0.05$ which shows that information technology significantly moderates the effect of position equalization on employee performance, therefore the fifth hypothesis is accepted. More specifically, information technology strengthens the positive influence of position equalization on employee performance because, in testing without moderation variables, the coefficient of influence of position equalization is 0.132 while the influence of position equalization moderated by information technology obtained a value of influence coefficient of 0.156. This shows that the efficiency of the positive influence of equalization of positions on employee performance increases after the moderation of information technology.

H6: The Influence of Leadership (X2) on Employee Performance (Y) Moderated by Information Technology (M)

The results of testing the influence of leadership on employee performance moderated by information technology obtained a negative influence coefficient of (0.075) and a *P value* of $0.094 > 0.05$ which shows information technology does not moderate the influence of leadership on employee performance, therefore the sixth hypothesis is rejected.

H7: The Influence of Work System (X3) on Employee Performance (Y) Moderated by Information Technology (M).

The results of testing the effect of the work system on employee performance moderated by information technology obtained a positive influence coefficient of 0.223 and *P value* of $0.000 < 0.05$ which shows information technology significantly moderates the influence of the work system on employee performance, therefore the seventh hypothesis is accepted. More specifically, information technology strengthens the positive

influence of the work system on employee performance because, in testing without moderation variables, the coefficient of influence of the work system is 0.209 while the influence of the work system moderated by information technology obtained a value of the coefficient of influence of 0.223. This shows that the positive efficiency of the influence of the work system on employee performance increases after the moderation of information technology.

H8: The Effect of *Leader-Member Exchange* (X4) on Employee Performance (Y) Moderated by Information Technology (M)

The results of testing the influence of leader-member exchange on employee performance moderated by information technology obtained a positive influence coefficient of 0.072 and a P value of $0.281 > 0.05$ which shows information technology does not moderate the influence of leader-member exchange on employee performance, the eighth hypothesis is rejected.

3.4 Discussions

The variable of equalization of positions with indicators of position type has a high influence on employee performance. This is in line with the position equalization policy in accordance with Minister Regulation of the Ministry of Administrative and Bureaucratic Reform No.17 of 2021 which provides definitions related to position equalization, namely the appointment of administrative officials into functional positions through adjustment/in passing to equivalent functional positions (types of positions).

The leadership variable with the leader competency indicator has a high influence, according to the statement of respondents that leaders in the Ministry of Administrative and Bureaucratic Reform have good analytical skills, can show good examples, are rational and objective in assessing problems, and are able to stimulate members to equip themselves with knowledge and expertise as reflected in the statement.

The work system variable with the work system environment indicator belongs to the high or very good category. The highest respondent index statement on the work system variable lies in the first statement which states that "A good work system is a work system that is able to achieve goals effectively". This shows that the work system in the Ministry of Administrative and Bureaucratic Reform is able to adapt to changes in the strategic environment, is easy to understand, accepted by the parties involved, and is flexible.

The variable *leader-member exchange* with indicators of professional respect has a high influence on employee performance. The highest respondent index statement on the leader-member exchange variable lies in the statement related to the leader's trust in employees and vice versa therefore it has a positive impact on employee performance in the Ministry of Administrative and Bureaucratic Reform, in other words, the higher the leader-member exchange will further improve employee performance.

The information technology variables belong to the high category. This means that information technology in the Ministry of Administrative and Bureaucratic Reform is high. The highest respondent index statement on information technology variables lies in the first statement which states that "Technology sophistication helps improve employee performance". This can be seen from the use of applications in the Ministry of Administrative and Bureaucratic Reform which have been integrated into the internal services of the Ministry.

The results of testing the effect of the work system on employee performance moderated by information technology obtained a positive influence coefficient of 0.223 and P value of $0.000 < 0.05$ which shows that information technology significantly moderates the influence of the work system on employee performance. More specifically, information technology strengthens the positive influence of the work system on employee performance because, in testing without moderation variables, the coefficient of influence of the work system is 0.209 while the influence of the work system moderated by information technology obtained a value of 0.223 influence coefficient. In the Ministry of Administrative and Bureaucratic Reform, *flexible work arrangements* will be implemented that rely heavily on mastery of information technology because this policy allows employees to complete their work from locations outside the physical workplace and includes remote work, working from different company locations, and working from home.

The results of testing the influence of leadership and leader-member exchange on employee performance moderated by information technology obtained a negative coefficient of influence. Considering that hypothesis testing using the hypothetico-deductive method requires a hypothesis that can be blamed. That is by compiling hypotheses in certain presentations therefore that the wrong hypothesis can be shown by researchers. Therefore the null hypothesis (H0) is proposed to be rejected,

and the alternative hypothesis (H_a) is supported in the study. Technology that does not moderate the influence of leadership and leader-member exchange on employee performance shows that information technology does not increase or decrease the influence of leadership on employee performance. The influence of leadership on the performance of employees in the Ministry of Administrative and Bureaucratic Reform will not change even though the information technology applied is good and adequate. Leadership and information technology have different contexts. Leadership relates to the ability to influence a group toward achieving a vision or set goal, while information technology is concerned with the technology used in conveying and processing information. Similarly, the existence of information technology will not change the influence of leader-member exchange on employee performance in the Ministry of Administrative and Bureaucratic Reform because leader-member exchange cannot always be achieved through the use of information technology. Leader-member exchange or closeness to the leader can also be created from direct interaction between leaders and employees, therefore when more interaction is carried out directly, the existence of information technology cannot support the creation of a leader-member exchange.

4 Conclusion

The results showed that equalization of positions, leadership, work system, and *leader-member exchange* had a positive and significant effect on the performance of civil servants of the Ministry of PANRB. Information technology moderates the positive influence of equalization of positions and work systems on the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform whereas information technology strengthens the influence of equalization of positions and work systems on employee performance within the Ministry. Information technology can affect the equalization of positions by accelerating administrative processes and adjusting data on the implementation of equalization of positions and work systems from effective and efficient work procedures and work procedures. Information technology does not moderate the influence of leadership and leader-member exchange on the performance of civil servants of the Ministry of Administrative and Bureaucratic Reform where information and technology do not increase or decrease the influence of leadership on employee

performance. As well as information technology does not moderate the influence of leader-member exchange on employee performance in the Ministry because leader-member exchange can not always be achieved through the use of information and technology however through direct interaction.

References:

- [1] Endah, K., & Vestikowati, E. (2021). Government Bureaucracy in the Delivery of Public Services. *Moderat: Scientific Journal of Government Science*, vol.7(3), pp.647–656
- [2] Hidayat, A. A., & Achjari, D. (2017). The effect of information technology investment on organizational efficiency. *Widya Wiwaha College of Economics Business Studies*, vol.25(2), pp.127–140
- [3] Abdillah, W., & Hartono, J. (2016). Partial Least Square (PLS): Alternatif Structural Equation Modeling (SEM) dalam Penelitian Bisnis. *CV Andi Offset*.
- [4] Manurung, A.H., Tjahjana, D., Pangaribuan, C. H. and M. E. Tambunan (2021), *Research Methods: Accounting, Finance, Investment and Management, PT Adler Manurung Press*
- [5] Hair, J. F., Hult, G. T. M., Ringle, C., dan Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling, PLS-SEM*. Los Angeles: SAGE.
- [6] Ghozali, I., & Latan, H. (2015). *Partial Least Square Engineering Concepts and Applications Using the Program SmartPLS 3.0 (2nd Edition)*. Diponegoro University Publishing Agency.

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

- Hijrah Apriyansyah, carried out the background, objective study, and analysis.
- Zahara Tussoleha Rony carried out theoretical review.
- Adler H. Manurung was responsible for the methodology and conclusion.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

No Funding was received for conducting this study.

Conflict of Interest

The authors have no conflict of interest to declare

Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)

This article is published under the terms of the Creative Commons Attribution License 4.0

https://creativecommons.org/licenses/by/4.0/deed.en_US