

## LOCAL GOVERNMENT PERFORMANCE MODEL THROUGH INNOVATION: ANALYSIS OF LEADERSHIP AND COMPETENCE

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#### Abstract

This study aims to find out, analyze and measure the direct and indirect influence of leadership and competence on the performance of local governments with innovation as a mediation variable. The total sample in this study was 486 respondents. The data were tested using SEM PLS by combining models formatively and reflectively. Performance Measurement in this study is different from what has been done before because it uses measurement indicators formatively. The results of the seven hypotheses proposed obtained the result that five hypotheses were accepted and two hypotheses were declared rejected. The hypotheses rejected are the direct influence of leadership and on innovation, as well as the indirect influence of leadership on the performance of local governments through innovation. This research has supported previous research that although the method of measuring the performance of local governments is different from before, it is still found that the performance of local governments is still based on outcomes. The results showed that the variable that has the greatest direct influence is innovation but innovation is not able to mediate the indirect influence of leadership on the performance of local governments. However, innovation is able to mediate the influence of competence on the performance of local governments. The results of the study refute the influence of leadership on innovation, although it is said that innovation depends on the ruler but this cannot be proven because innovation depends on the budget and rigidity of the local government bureaucracy.

**Keywords:** Competence; Innovation; Leadership; Local Government Performance.

#### INTRODUCTION

Measuring government performance is still a hot topic to talk about around the world. This is an interesting part for researchers to conduct research on the performance of local governments. This research will apply a more comprehensive approach than other studies by exploring problems related to measuring local government performance by combining indicators based on government regulations and management theory in general and modifying measurements formatively and reflectively on the indicators used.

Since its inception performance measurement is used for administrative purposes such as retention, dismissal, promotion and salary administration (Nastiti et al., 2021) (Manajemen et al., 2020).

This concept was moved from private to public institutions and in recent decades has become a broader and more important issue under public sector reforms (Tampubolon, 2020). An effective performance management system is used as a strategic tool to influence internal changes and to achieve desired results and high-performance organizations (Moussa et al., 2018a).

In large organizations such as public institutions, the system must be institutionalized and needs to be supported by all managerial levels but the concept of performance management has undergone many changes (Moussa et al., 2018b).

Padang Lawas Utara (Paluta) Regency, North Sumatra Province is one of the regencies whose position is very strategic in terms of social, economic and political interests. As a district that should be developed both the quantity of its development and the quality of community resources.

Based on the accountability statement report of the regional government of Padang Lawas Utara (Paluta) Regency, North Sumatra Province in 2019 and 2020, there were many weaknesses so that they could not meet the implementation of development evenly and the implementation of optimal government as expected by the community. The performance achievements of the local government of Padang Lawas Utara Regency (Paluta) of North Sumatra Province, which includes mandatory affairs and elective affairs, are still found to be deficient in the realization of achievements in various sectors.

Organizational theory states that effective leadership is the most important contributor to the success of overall organizational performance (Pujiono et al., 2020). Leadership theories are a bridge to help bureaucratic leaders develop their leadership styles that are adjusted to the level of maturity of their subordinates in order to improve the performance given to the public (Riyanto, 2020). This opinion indicates that in public organizations, effective leadership is needed in the implementation of leadership and in terms of programs must have been designed based on the achievements of the vision and mission that have been set.

In addition, the achievement of goals in the organization also depends on the type of innovation used and one of the main factors that are often considered to have an impact on innovation is leadership (Riyanto, 2020). A review of the innovation literature from the perspective of public sector innovation shows that in every organization, an innovative culture must be supported by individuals in power (Kattel et al., 2018).

Some studies show employees who behave innovatively are highly dependent on their competence and interaction with others and on environmental contextual factors in organizations (Sulaymonov & Du, 2020). All contextual factors affecting employees work environment, leadership has been recommended as one of the important factors for achieving the effectiveness of individual and organizational innovations (United Nations Economic Commission for Europe, 2017).

The measurement of performance in local government rests on the potential value of the measure to three audiences, namely local government managers, elected officials and citizens. Basically, measuring results is more difficult than measuring output; therefore,

some local governments use more output measures (efficiency) than results (effectiveness) (Ledford, E and Benjamin, 2018) (Ateh et al., 2020).

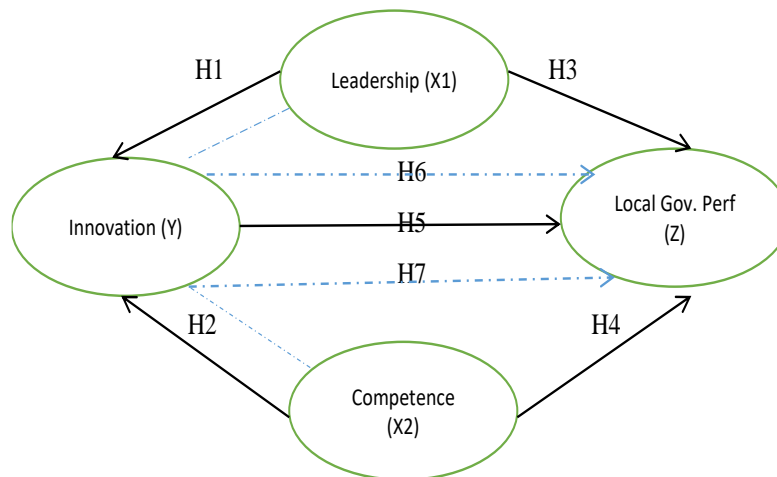
A leader is considered still the most crucial factor in increasing innovation and creativity (Pujiono et al., 2020). A leader is someone who is able to influence other individuals to work collaboratively to achieve significant results, besides that they are also someone who is able to understand the characteristics and ethical values held by their subordinates so that they can increase their productivity and commitment (Yuhertiana & Fatun, 2020).

(Moussa et al., 2018a) argue that, the small number of innovations carried out in the public sector is most likely due to the fact that there is still little understanding of how innovations in public sector organizations actually take place.

Moreover (Arundel et al., 2019) in their article stated that successful innovations will not be able to develop in the traditional bureaucratic model.

Many researchers have tried to define the concept of innovation particularly in the public sector but there has been no consensus on what innovation is. In addition, leadership behaviour and competencies possessed are expected to increase innovation in the public sector still remain ambiguous, and have implications for government or public performance remain ineffective and efficient.

Based on the theoretical description above, a conceptual framework is built which is depicted in the scheme below:



**Fig. 1: Conceptual Framework**

## METHOD

The approach used in this research is a quantitative research approach that emphasizes the testing of theories or concepts by measuring variables and analyzing data through statistical procedures with the aim of strengthening the hypothesis so that in the end it can help in strengthening old theories or the formation of new theories.

**Table 1: Variable Operational Definitions**

No.	Variable	Definition	Indicator
1.	Local Government Performance (Z)	the level of efficiency and effectiveness and innovation in achieving goals by the organization, as well as an illustration of the extent of the success or failure of the implementation of the main tasks and functions of the agency in achieving the goals, vision, mission that have been previously set	1. Input 2. Output 3. Outcome 4. Benefit 5. Impact
2.	Innovation (Y)	one of the mechanisms of an institution to adapt in a dynamic and sustainable environment, through efforts to create new ideas, new ideas and offer solutions that can solve problems more effectively and efficiently	1. New Service 2. Innovation Process 3. Innovation Administratio 4. Innovation system 5. Innovation Conceptual 6. Change radical change in Rationality
3.	Leadership (X1)	a process to influence others to understand about the effective implementation of tasks, a process to facilitate individuals and groups in achieving common goals, and ensuring that everything is well prepared to face future challenges	1. System Oriented 2. Value Oriented 3. Oriented to the implementation of Leadership
4.	Competence (X2)	the inside and forever is on one's personality and can predict behavior and performance broadly in all situations and job tasks	1. Values 2. Ethics 3. Strategic thinking 4. Engagement 5. Management Excellence

Source: Author by Selection

The population in this study is the total number of Civil Servants of Padang Lawas Utara Regency which amounted to 3,824 with samples drawn based on Non Probability Sampling using the Purposive Sampling method(Dr. Sandu Siyoto, SKM, M.Kes, M. Ali Sodik, 2015) total 588 civil servants having echelon / Structural positions in echelon II and III and echelon IV which are considered representative.

This study used quantitative methods with partial least square (PLS) analysis tools (Chege et al., 2019). Quantitative testing is carried out to test field data taken based on theoretical and empirical studies, test the validity and reliability of the relationship of indicators and latent variables (outer model or measurement model), and the relationship between variables which ends by testing the research hypothesis (inner model or structural model).

Quantitative analysis using a hierarchy component model with the stages of the process as shown in Figure 2 below:

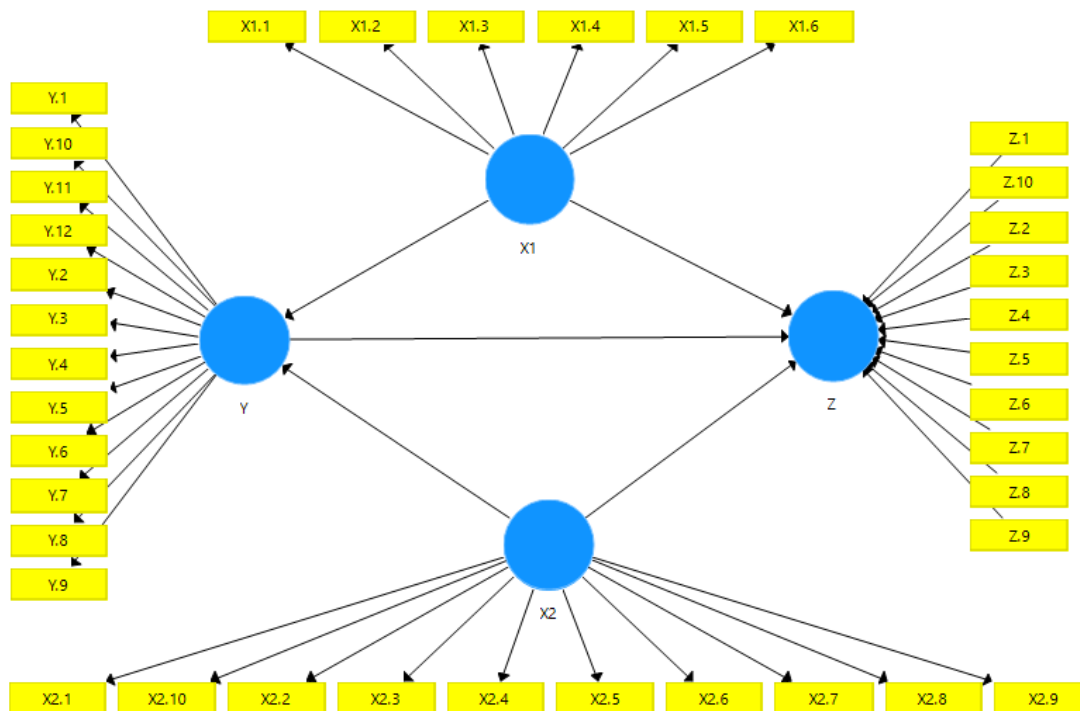


Fig. 2: Hierarchy Component Model

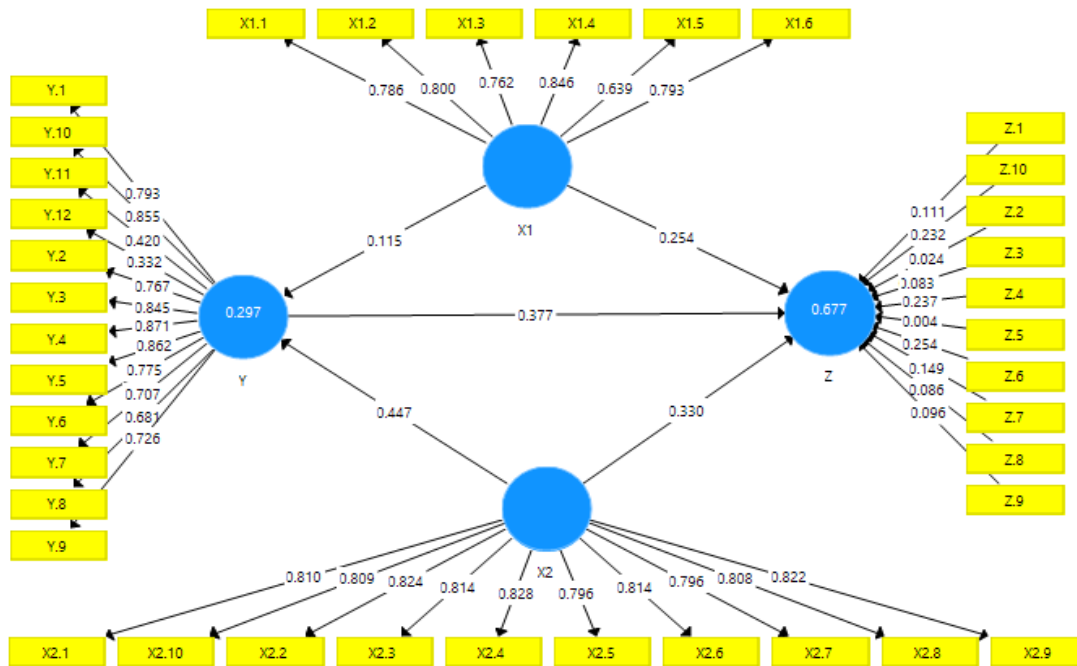
## RESULTS

The number of questionnaires distributed was 562 questionnaires. However, the Questionnaires that met the criteria for analysis were 486 questionnaires with a total of 76 defective questionnaires. Thus the number of respondents in this study was 486 respondents with the percentage rate of respondents for this study was 86.48%.

### A. Outer Model

In the Outer Model measurement, researchers use a combination of Formative Indicators in the measurement of Local Government Performance (Z) and Reflective Indicators on the variables Innovation (Y), Leadership (X1) and Competence (X2).

The outer model measurement scheme can be seen as shown in figure 3 below:



**Fig. 3: Full Model Bootstrap Results**

In the Local Government Performance Variable (Z), the outer model evaluation is carried out by Bootstrapping. The result is known that the outer weight value for the indicator is known from Bootstrap, which is looking at the T-Statistic value, as in table 2 below:

**Table 2: Formative Indicators of Local Government Performance (Z)**

Indicator	Outer Weight	Sig.	VIF	Loading Factor	Conclusion
Z.1	0,111	0,025	2,590	0,734	Significant
Z.2	0,024	0,640	2,439	0,705	Not Sig.
Z.3	0,083	0,134	3,084	0,819	Not Sig.
Z.4	0,237	0,000	3,239	0,856	Significant
Z.5	0,004	0,955	2,767	0,796	Not Sig.
Z.6	0,254	0,000	2,634	0,855	Significant
Z.7	0,149	0,005	1,849	0,653	Significant
Z.8	0,086	0,038	1,594	0,556	Significant
Z.9	0,096	0,098	2,289	0,741	Not Sig.
Z.10	0,232	0,000	2,498	0,825	Significant

Source: Researcher, data processed (2022)

From the bootstrapping results obtained the indicator value Z.1; Z.4; Z.6; Z.7, Z8 and Z.10 are significant which are characterized by outer weight values greater than 0.05 and sig values < 0.05. However, the outer weight indicators Z.2; Z.3; Z5 and Z.9 are insignificant because they are smaller than 0.05 and the sig value > 0.05. According to (Sarstedt et

al., 2020) the significance of the weight of the measurement item (weight) has the following provisions:

- a) If the weight is significant then the measurement item is still included in the model.
- b) If the weight is insignificant, but the Loading Factor (LF) > 0.5, it is still included in the model
- c) If the weight is not significant but the Loading Factor (LF) < 0.5 then the indicator is omitted in the model.

The results of processing some of the above indicators, although Z.2; Z.3; Z5 and Z.9 are not significant because they are smaller than 0.05 and the sig value > 0.05 but the indicator has a Loading Factor value of > 0.5 and a VIF value of < 5 so that the indicator can still be used.

Validity testing for reflective indicators uses the correlation between the values of the indicators and the values of their variables. The evaluation begins by looking at the validity indicator indicated by the value of the loading factor ( $\lambda$ ), if the value of the loading ( $\lambda$ )  $\geq 0.6$  then the indicator is said to be valid and vice versa.

From the results of processing the first loading factor, a value smaller than 0.6 was obtained, namely in the X1.5 indicator; Y11; Y12 Y8 and Y7 so this indicator is discarded.

The second loading factor test obtained results as shown in figure 3 below:

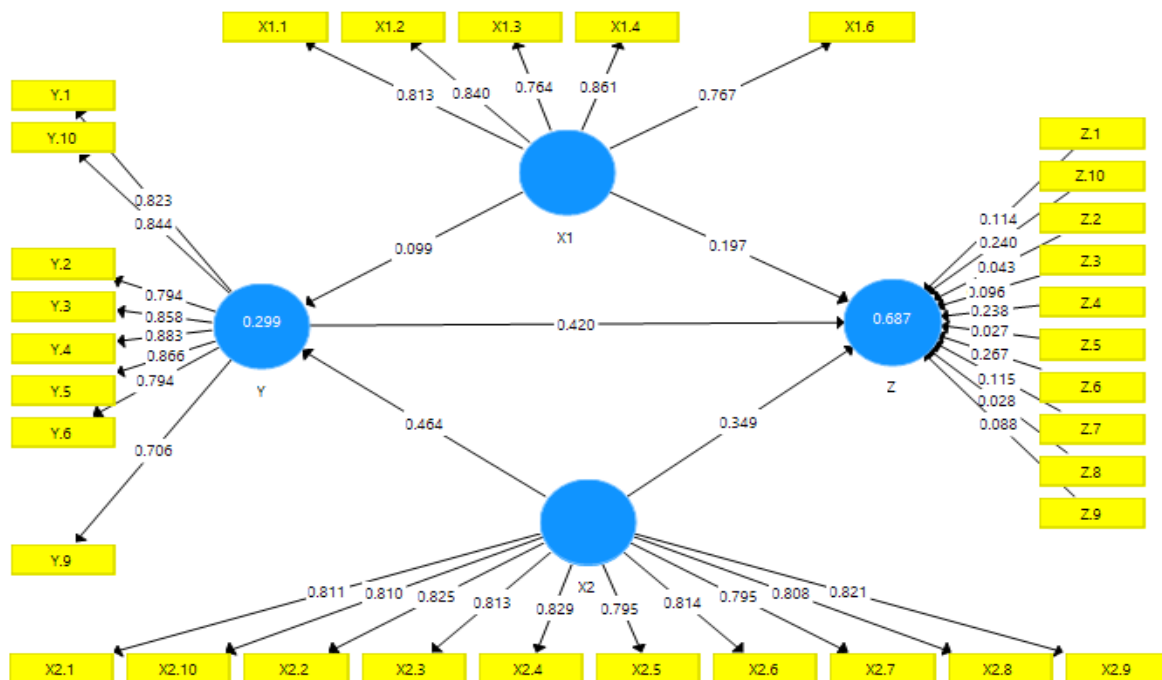


Fig. 4: Testing outer models



### Convergent Validity Test

After summarizing and reducing the indicators, the next stage is to test the reliability of the construct.

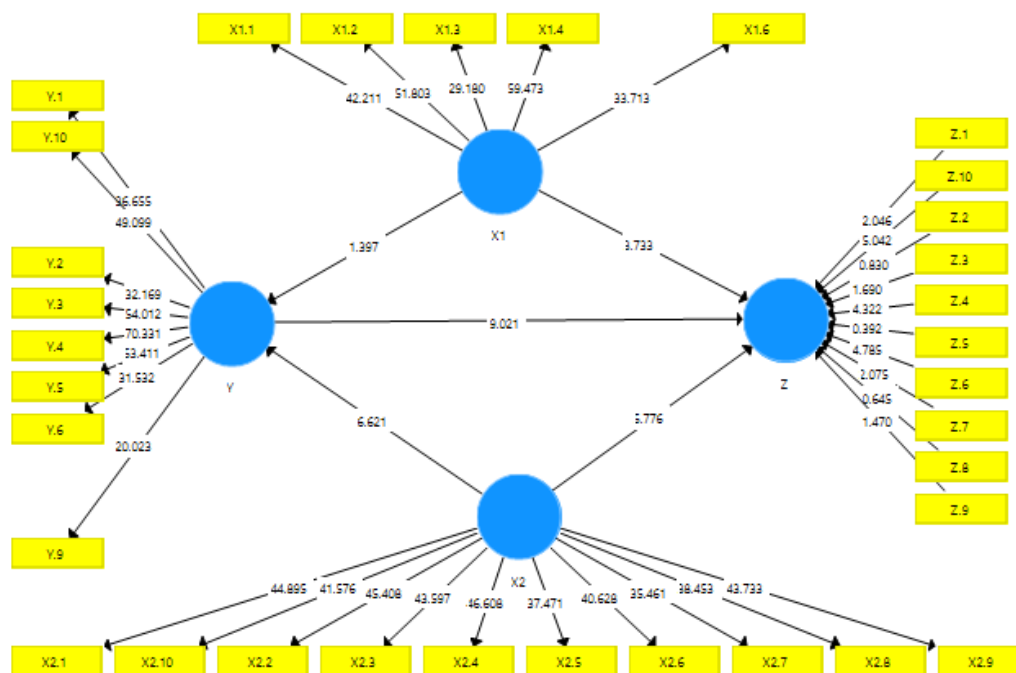
**Table 3: Variable Reliability**

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Varian Extrated
<b>Leadership (X1)</b>	0,868	0,874	0,905	0,656
<b>Competence (X2)</b>	0,943	0,943	0,951	0,660
<b>Innoovation (Y)</b>	0,931	0,934	0,943	0,677
<b>Local Gov. Performance (Z)</b>		1,000		

Source: Researcher, Processed Data (2022)

### B. Structural Model Evaluation (Inner Model)

For the evaluation of the Inner model can be seen in figure 5 below:



**Fig. 5: Inner Model**

### Q-Square Predictive Relevance (Q<sup>2</sup>)

Goodness of fit models are used to determine the magnitude of the ability of endogenous variables to explain the diversity of exogenous variables or in other words to know the magnitude of the contribution of exogenous variables to endogenous variables.



**Table 4: Predictive Q Square Test Results**

Variable	R <sup>2</sup>
Local Governance Performance (Z)	0,687
Innovation (Y)	0,299
$Q^2 = 1 - [(1 - R1^2) (1 - R2^2)]$	
$Q^2 = 1 - [(1 - 0.687) (1 - 0.299)] = 0.781$	

Source: Researcher, Data processed (2022)

Table 4 shows that the Q2 value is 0.781 or 78.1% which indicates that the model's ability to predict the influence of leadership, competence and innovation on the performance of local governments was 78.1% while others were influenced by other variables that were not studied in this study.

### Hypothesis Testing

The next step is to test the parameters for the structural model with the hypothesis used is:

H0:  $\beta_{ij} = 0$                       H1:  $\beta_{ij} \neq 0$

And the results of hypothesis testing can be seen in table 5 below:

**Table 5: Hypothesis Testing Results**

	Hypothesis	Original Sample	t-statistik	P-value	Conclusion
H1	Leadership (X1) → Innovation (Y)	0,099	1,401	0,162	Rejected
H2	Competence (X2) → Innovation (Y)	0,464	6,452	0,000	Accepted
H3	Leadership (X1) local government performance → (Z)	0,239	3,959	0,000	Accepted
H4	Competence (X2) → Local Government Performance (Z)	0,544	8,821	0,000	Accepted
H5	Innovation (Y) → Local Government Performance (Z)	0,420	8,807	0,000	Accepted
H6	Leadership (X1) → Innovation (Y) → Local Government Performance (Z)	0,042	1,332	0,183	Rejected
H7	Competence (X2) innovation → (Y)local government performance → (Z)	0,195	5,384	0,000	Accepted

Source: Researcher, Data processed (2022)

The results of data processing show that H1 and H6 are rejected because the resulting statistical value is smaller than 1.96. While H2, H3, H4, H5 and H7 are accepted because they have a value greater than t table.

## DISCUSSION

Based on the results of the measurement model test / the results of the Structural Equation Modelling (SEM) PLS analysis, it was obtained that the leadership variable did not have a significant effect on innovation. The leadership carried out by the Regent and Head of regional apparatus organizations (RAO) has been able to create working conditions and maintain the quality of service to the community and stakeholders.

Although the leadership of the Regent and Head of regional apparatus organizations (RAO) has not been able to fully create employee ideas and innovations, especially in the application of improving service quality and implementing main duties and functions in the context of implementing the Electronic-Based Government System (SPBE) in implementing the industrial revolution of the current 4.0 era. This has been seen in accordance with the test results that state that reject the first hypothesis so that it can be stated that leadership has no significant effect on innovation.

The lack of maximum realization and implementation of innovations in running the Electronic-Based Government System (SPBE), especially in the field of community services, is not due to employee factors but due to other supporting factors / external, namely the number of blank spot areas / areas in North Padang Lawas Regency that cannot be reached by telecommunications networks and the internet, especially the northern part because topographically it is still a hilly and valley area.

Another factor is the lack of budget in the Regional Apparatus Organization (RAO) to budget for innovation activities and or activity programs to create applications that aim to facilitate administrative and bureaucratic servants, this happens because of the lack of operational budgets, especially since the Covid-19 pandemic, many budgets have been plotted for handling and preventing Corona 19 so that the operational budget of Regional device organizations (RAO) is refocused a lot (cut and cut and cut re-budgeted) for the handling of Covid-19.

As explained about the competency variables in the second hypothesis, the competence in the North Padang Lawas Regency Government will be stronger, running and can be applied well if it focuses on Ethics, especially if the Regent and Head of the Regional Apparatus Organization (RAO) can set a good example in carrying out duties and responsibilities and provide a good example in the implementation of organizational management in the North Padang Lawas Regency Government in general. and in each Regional Apparatus Organization (RAO) in particular while still facilitating the work environment to increase innovation in services and be able to develop and communicate the objectives of achieving the vision and mission of the Regional Government.

The relationship between innovation and the performance of local governments, then that the innovation factor through the system is the most dominant indicator in reflecting the innovation variables in order to improve the performance of local governments, the most dominant item reflects on capacity building in employees, especially by providing opportunities for employees to innovate in carrying out their respective main duties and functions, especially in developing breakthroughs for improvement.

Organizations and those directly related to community services that are expected to be able to create good local government performance in accordance with the wishes of the community and also in accordance with the objectives stated in the vision and mission of the local government.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Of the seven hypotheses proposed, two hypotheses were rejected, namely the direct influencer of leadership on innovation, and the indirect influence of leadership on the performance of local governments through innovation. Meanwhile, the other five hypothesis were declared accepted.

The local government performance model in this study uses a different indicator measurement system from previous studies. In this study, the performance model is formative referring to inputs, outputs, outcomes, benefits and impacts, while the previous study used a reflective indicator measurement model (Ateh et al., 2020)(Alrowwad et al., 2020)(Sugiyanto & Santoso, 2018). However, the results of measurements on loading factors that have the greatest influence on this study are the outcomes, namely in the performance reports of local governments. This proves that measuring results is more difficult than measuring output as stated by (Ledford, E and Benjamin, 2018)(Ateh et al., 2020) this proves that the performance of local governments in Paluta is still based on outputs.

### Recommendations

Future researchers who want to develop this research to be able to conduct research on the performance of local governments in order to reach a wider area by proportioned sampling so that all regions canThis research examines the influence of innovation as a mediating variable for the influence of leadership on the performance of local governments, with insignificant results, future research can retest using different indicators or replace with other variables be represented and the number of samples will be larger. By doing so, more accurate results will be obtained.

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