

Performance-Based Budgeting in Public Sector and Managerial Performance with Leadership as Moderating Variable

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ABSTRACT

This is a research of managerial performance in public sector. This research has two objectives, first, to test the effect of performance-based budgeting on the performance of government officials. Second, examine the role of leadership style in moderating the effect of performance-based budgeting on the performance of government officials. This research uses a quantitative approach. The questionnaires were distributed to local government officials in Pamekasan regency, Indonesia. The sampled 131 respondents were civil servants working in local government work units. The analysis technique uses Partial Least Square. Hypothesis test results found that performance-based budgeting affects the managerial performance of government officials. However, leadership has not proven to play a role as a variable that is able to moderate the effect of performance-based budgeting on the performance of government officials.

Keywords: *Performance-based budgeting; individual performance; leadership; public sector*



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INTRODUCTION

The changing era in the public sector started with a new public management concept and this was followed by the public sector reform. Many researches show the success of the new concept but there is also an un-intended result regarding the implementation of the public sector reform.

Many countries switch the concept of the budget. They no longer use traditional budget but performance-based budgeting. This concept is considered to improve the government performance. The success of local governments is also determined by their leaders. Thus, the existence of an appropriate leadership style can be a factor in determining the implementation of performance-based budgeting in improving the government performance. This study aims to test these hypotheses.

Indonesia became one of the countries that responded to changes in the state management. Changes in the relationship between the central and regional governments are stated in the autonomy law. Law Number 32 of 2004 concerning Regional Government explained that the development of autonomy in the provinces/regencies/cities is carried out by considering the principles of democracy, community participation, equity, justice as well as the regional potential and diversity. Law Number 33 of 2004 concerning the financial balance between the central and regional governments which emphasized the importance of public interests. The government provides the best services in a transparent and quality manner as well as a proper division of tasks. There is a comprehensive improvement in the performance of the public sector where each government office (Satuan Kerja Perangkat Daerah – SKPD) as a budget user (Agency, Agency, Bureau, Office) will produce different levels of performance according to the ability and sense of responsibility (Fikri and Wahyu, 2016).

Local government performance is a picture of the level of achievement of the implementation of an activity/program/policy in realizing the goals, objectives, mission and vision of the organization as outlined in the formulation of a *strategic plan* (*strategic planning*) of an organization (Triseptya et al., 2017). In other words, the performance is the extent to which the level of achievement of the activities/programs

carried out yields or achieves goals. In general, it can be said that performance is an achievement achieved by the organization within a specified period (Djiloy, 2016) An achievement of objectives will be well implemented if supported by the discipline of government officials. For government agencies, discipline includes elements of obedience and sincerity in carrying out the duties and abilities of sacrifice, in the sense of sacrificing personal and group interests for the benefit of the state and people.

Agency theory arises because of the existence of a relationship between agents and principals. An agency relationship is a contract between the principal and the agent. It means that the delegation of some decision-making authority to the agent. As an agent, the manager has a moral responsibility to maximize the profits of the owner. On the other hand, he also has the interest of maximizing their welfare (Jensen & Meckling, 1976).

Agency theory in the local government began to be practiced especially since the enactment of regional autonomy in 1999. The application of agency theory is examined from two perspectives, namely the relationship between the executive and legislative, and the legislative with the people. The implications can be decisive in the form of efficiency, but more in the form of negative things in the form of *opportunistic* behavior. The relationship between agency theory and this research is that the government acts as an agent (government manager), who must establish specific strategies in order to provide the best service to the public as well as the principal. Principals certainly want good performance results from agents, and the performance indicators can be seen from financial reports and excellent service. The useful financial reports and services depend on the strategy implemented by the government. If the government performance is excellent, then the community will trust the government.

Demand to local governments to provide services to the community requires local governments to have a mature plan to achieve maximum results. The government's plan to carry out state or regional finances planned as outlined in the form of a budget, in which the budget will show the government's function in carrying out various government affairs that are its responsibility (Wiguna, Sukartha & Astika, 2017).

Along with the increasing public demand for transparency in public expenditure budgeting, a performance-based system (*Performance-Based Budgeting*) is introduced as a substitute for the old budgeting system with a traditional system that is *incrementalism* and the structure of the budget structure is *line item* (Kurrohman, 2013).

Performance-based budgeting was implemented in Indonesia internal affairs regulation No. 59 of 2007. This new approach is different from the approach to *line-item* and *incremental* that before all local governments in Indonesia, use autonomy is centralized. Legislative is given the opportunity to play an active role in the formulation of public policies and budgets and budgeting as a legal product (called local legislation or regulation). The process of budgeting in performance budgeting starts from the Regional Work Unit (SKPD) in the Regional Government, such as offices, agencies, secretariat, and offices through a budget proposal document called the Regional Work Unit Budget Plan (Asmara, 2010).

Performance-based budgeting had a positive and significant effect on the performance of government agencies (Endrayani, 2014, Verasvera, 2016; Syawie, Saerang & Pontoh, 2016; Safriadi, 2015). Research conducted by Pradana and Supadmi (2018) as well as Djaelani and Subhan (2019) found that budget participation had a positive effect on managerial performance, and research conducted by Suhartini et al. (2019) found that high *budgetary slack* could improve managerial performance. However, research conducted by Ermawati (2017) showed that budgetary participation had no effect on managerial performance, and research conducted by Gunawan and Santioso (2015) found that budget participation negatively affected managerial performance. It shows inconsistencies, so the relationship between performance-based budgeting and the performance of government officials deserves to be re-examined.

Leadership is defined as a process to influence individuals to achieve common goals (Ag Budin & Wafa, 2015). Appropriate leadership style from superiors will improve the performance of subordinates, where subordinates, in this case, the government apparatus will work following the duties and pressures without carrying out their responsibilities properly. Different leadership styles will affect the way a person uses and develops human resources. Therefore, the leader must be able to use the

right leadership style so that subordinates can directly be motivated and improve the performance (Untari, Boedijono & Azhari, 2015). Effective leadership supports the higher performance of his subordinates (Kurniawan, 2018).

Leadership style in this study acts as a moderating variable. Assessing the presence of leadership style will strengthen or weaken the relationship of each performance-based budgeting, organizational commitment, and organizational culture with the performance of government officials. Leadership style becomes a moderating variable because it acts as a source of mobilizing human resources and other sources that exist in the organization. The role of leadership is also needed to align various kinds of needs and to create conducive work situations.

According to Kristiani et al.,(2018), leadership style strengthens the relationship of budgeting participation to the performance of government officials. Research conducted by Triseptya, (2017); Wiguna et al., (2017) found that leadership style was able to moderate the effect of budgetary participation on managerial performance. On the contrary, research conducted by Andika, (2019); Andriani, (2018) found that the leadership style was not able to moderate the influence of budgetary participation on the performance of the head of the Regional Government SKPD. It shows that there are still inconsistencies in the results of the research, hence the relationship between performance-based budgeting, leadership style and the performance of government officials deserves to re-examine.

This research is conducted to test the effect of performance-based budgeting on the performance of government officials. It also examines leadership style as a moderating variable in the influence of performance-based budgeting on the performance of government officials.

This research is important in re-examining inconsistency finding on performance-based budget variables on the performance of government officials moderated by leadership style. There is a phenomenon that occurs in Pamekasan Regency (Syafii, 2019). The discussion of the Regional Revenue and Expenditure Budget (APBD) in Pamekasan Regency until July 26, 2019, has not been carried out due to the government's budget draft which is not deposited by the government office. Sluggish remittance

of RAPBD is considered not dangerous in carrying out its duties and responsibilities that have an impact on the performance of the Pamekasan Regency SKPD and also expressed by Nur (2019). In 2018 Pamekasan Regency had to return funds to the state of 800 million due to problematic asphaltting projects, reflecting the poor performance of government officials in Pamekasan Regency.

LITERATURE REVIEW

Effect of Performance-based Budgeting on the Performance of Government Officials

Aliabadi et al. (2019) examined the *Budget Preparers' Perceptions and Performance-Based Budgeting Implementation: The Case of Iranian Public Universities and Research Institutes*. The purpose of this study discusses the reasons for the failure of the implementation of performance-based budgeting in Iranian State Universities. This research focuses on actors participating in the budgeting process. The research design used was basic theory and semi-structured interviews that were more in-depth from budget makers at Iran's State University universities and research institutions. The results of the study showed a loose relationship between the perceived and regulated budgeting process.

Alkaran (2018) examined the *Public Financial Management Reform: An Ongoing Journey Towards Good Governance*. The purpose of this study is to provide a better understanding of the influence of contextual factors on the reform of the public financial management (PFMR) process. The results of this study indicate that the PFMR process cannot be seen as an isolated initiative, more precisely as part of a broader set of NPM reforms to strengthen public accountability for performance.

Pratama and Handoko (2018) examined the Implementation of Performance-Based Budgeting in Improving the Performance of Local Governments in the Datuk Bandar Tanjung Balai Subdistrict. The purpose of this research is to find out the application of Performance-Based budgeting in improving Local Government Performance with case studies in Batuk Bandar Subdistrict, Kota Tanjung Balai. Data obtained from the Tanjung Balai authority user, and then the data was processed using a

descriptive-analytic method with a qualitative approach. The results of this study stated that all performance-based budgeting activities which include planning, implementing, reporting and evaluating as a form of performance improvement in all agencies in Datuk Bandar Kota Tanjung Balai District are appropriate or running well.

Performance-based budgeting is a budgeting method that allocates fund based on programmatic results that contribute to organisational goals. The outputs and results stated in the performance are targets for each work unit. The better the performance-based budget is implemented, the better the performance of government officials will be.

It was supported by Mahpudin and Santoso (2017), Endrayani (2014), Verasvera (2016), Syawie et al. (2016) and Safriadi (2015) that the performance-based budgeting had a positive and significant effect on the accountability of performance of government agencies. Research conducted by Pradana and Supadmi (2018) found that budget participation had a positive effect on managerial performance. Based on these suggestions, the first hypothesis (H_1) for this study is:

H_1 : Performance-based budgeting influences the performance of government officials.

The Leadership Style moderates the Effect of Performance-Based Budgeting on the Performance of Government Officials

Budget with a performance approach is a budget system that prioritizes efforts to achieve work results or outputs from the planned allocation of costs or inputs. An adequate performance budget is more than a program or organizational budget object with anticipated *outcomes*. A sufficient performance-based budget will identify links between value for money and results and can explain how these linkages can occur, which are crucial to effective program management.

Research conducted by Triseptya et al. (2017) showed that leadership style moderates budgetary participation on managerial performance, and research conducted by Wiguna et al. (2017) and Kristiani et al. (2018) showed that leadership style strengthens the positive influence of budgeting participation on the performance of government

officials. It estimated that leadership style strengthens performance-based budgeting on the performance of government officials. Therefore, the hypothesis is:

H₂: Leadership style can moderate the effect of performance-based budgeting on the performance of government officials.

METHODOLOGY

This research is an explanatory research aimed at testing the implementation of performance-based budgeting on the performance of government officials. Also, to test the leadership style variable as a moderating variable on the influence of performance-based budgeting variables on the performance of local government officials.

Performance-Based Budgeting

Budget with a performance approach is a budget system that prioritizes efforts to achieve work results or outputs from the planned allocation of costs or inputs. An adequate performance budget is more than a program or organizational budget object with anticipated outcomes. A sufficient performance-based budget will identify links between value for money and results and can explain how these linkages can occur, which are crucial to effective program management. To measure performance-based budgeting variables, indicators and questionnaires are used. The indicators in this study refer to the indicators used by Verasvera (2016).

Leadership Style

Leadership style is a process to influence, understand others and direct how the given task is carried out effectively. Leadership is a process where someone can lead, guide, direct or influence the thoughts and behaviour of others to achieve specific goals. Leadership style is measured using indicators and questionnaires developed by Pradana (2015).

Managerial Performance

Performance is the result of activities that is achieved concerning the use of the budget with measured quantity and quality, and the performance of the government officials was measured by indicators and questionnaires developed by Verasvera (2016).

Population and Sample

The population in this study included the structural officials involved in the preparation of the budget, Section Heads, and Office Heads in 52 Pamekasan District offices with as many as 271 people. There were 131 respondents for this study. Table 1 shows the characteristics of the respondents.

Table 1: Respondents' Profile

No.	Variables	Frequency	Percentage %
1	Gender		
	Male	98	75%
	Female	33	25%
2	Working experience		
	1-5 years	4	4%
	6-10 years	16	12%
	11-15 years	27	21%
	16-20 years	17	13%
	≥ 21 years	66	50%
Total		131	100%

RESULTS AND DISCUSSION

Distribution of Respondents' Answers on Performance-based Budget

Performance-based budgeting is a budgeting method for the management to associate any costs poured into activities with the benefits generated. Its variables are composed of 17 question items in which the results of distributing questionnaires to respondents led to the following description of the answers.

Based on respondents' respond in the table above, it concluded that most respondents agreed with the performance-based budget. Pamekasan Regency SKPD applied the performance-based budget well. Every service or agency has a complete financial information to be used as budget planning. Endorsement of the budget is carried out following a comparable scale of priorities. Budgeting in each service is carried out in a transparent and accountable manner. The success of the budget realization depends on following the procedures set out in terms of achieving objectives. The highest average of respondents' answers was on the score of 4 (Agree), 57.4%.

Table 2: Distribution of Respondents' Answers on Performance-Based Budgeting Variable (X₁)

Item	Score									
	1		2		3		4		5	
	f	%	f	%	f	%	f	%	f	%
X _{1.1}	1	0.8	3	2.3	9	6.9	61	46.6	57	43.5
X _{1.2}	1	0.8	3	2.3	4	3.1	64	48.9	59	45.0
X _{1.3}	0	0	0	0	6	4.6	53	40.5	72	55
X _{1.4}	0	0	2	1.5	12	9.2	76	58.0	41	31.3
X _{1.5}	0	0	1	0.8	4	3.1	76	58.0	50	38.2
X _{1.6}	0	0	0	0	11	8.4	73	55.7	47	35.9
X _{1.7}	0	0	0	0	22	16.8	70	53.4	39	29.8
X _{1.8}	0	0	0	0	6	4.6	84	64.1	41	31.3
X _{1.9}	0	0	2	1.5	23	17.6	68	51.9	38	29.0
X _{1.10}	0	0	2	1.5	24	18.3	66	50.4	39	29.8
X _{1.11}	0	0	1	0.8	8	6.1	85	64.9	37	28.2
X _{1.12}	0	0	1	0.8	7	5.3	81	61.8	42	32.1
X _{1.13}	0	0	0	0	22	16.8	81	61.8	28	21.4
X _{1.14}	0	0	2	1.5	6	4.6	87	66.4	36	27.5
X _{1.15}	0	0	1	0.8	10	7.6	86	65.6	34	26.0
X _{1.16}	0	0	0	0	11	8.4	81	61.8	39	29.8
X _{1.17}	0	0	1	0.8	11	8.4	79	60.3	40	30.5
Mean		0.1		0.9		8.8		57.4		32.9

Respondents' responses to each indicator in the performance-based budget variable can be defined as follows:

a. Preparation

In the preparation indicator, the highest average respondents answered agree, the answers are in functional categories, thus giving an illustration that SKPD Pamekasan Regency has a clear vision, mission

and goals, and has a complete financial information to be used as budget planning.

b. Ratification

In the highest average ratification indicator which the respondent answered agreed, the answer was in a first category, to show that the SKPD of Pamekasan Regency approved the budget with a comparable priority scale, and was timely following the budget planning.

c. Implementation

In the highest average implementation indicator, the respondents answered agree. The answers are in functional categories, indicating the SKPD of Pamekasan Regency implements across performance-based budgeting following the principles of performance-based budgeting, namely transparency, budget accountability, budget discipline, budget fairness, as well as budget efficiency and effectiveness. Besides, the budget implementation in the Pamekasan Regency SKPD is more oriented towards the utilization of the available budget in order to achieve optimal results from the activities carried out.

d. Evaluation and reporting

In the evaluation and reporting indicators, the highest average respondents answered agreed. The answers were in functional categories, illustrating budget realization was in line with the goals that it intended to achieve. It is used as a tool for accountability in achieving performance, as well as a tool which can motivate employees in the Pamekasan Regency SKPD to work better in providing services to the community.

Distribution of Respondents' Answers to the Leadership Style Variable (Z)

Leadership style is a process to influence, understand others and direct how the given task is carried out effectively. Its variables are composed of 12 question items; the results of distributing questionnaires to respondents leading to an overview of the answers as shown in Table 3.

Respondents agreed with the leadership style; in other words, the style of leadership in the District SKPD is classified as useful. It is seen from the highest average of respondents' answers that was on score 4 (Agree), 56.8%.

Table 3: Distribution of Respondents' Answers on Variable Leadership Styles (Z)

Item	Score									
	1		2		3		4		5	
	f	%	f	%	f	%	f	%	f	%
Z ₁	0	0	4	3.1	18	13.7	83	63.4	26	19.8
Z ₂	1	0.8	3	2.3	11	8.4	89	67.9	27	20.6
Z ₃	1	0.8	1	0.8	13	9.9	90	68.7	26	19.8
Z ₄	1	0.8	5	3.8	38	29.0	72	55.0	15	11.5
Z ₅	0	0	2	1.5	13	9.9	93	71.0	23	17.6
Z ₆	0	0	7	5.3	34	26.0	71	54.2	19	14.5
Z ₇	3	2.3	12	9.2	38	29.0	63	48.1	15	11.5
Z ₈	2	1.5	1	0.8	29	22.1	74	56.5	25	19.1
Z ₉	2	1.5	0	0	19	14.5	82	62.6	30	22.9
Z ₁₀	0	0	19	14.5	37	28.2	55	42.0	18	13.7
Z ₁₁	6	4.6	6	4.6	22	16.8	71	54.2	26	19.8
Z ₁₂	1	0.8	12	9.2	36	27.5	50	38.2	32	24.4
Mean		1.1		4.6		19.6		56.8		17.9

Respondents' responses to each indicator in the leadership style variable can be defined as follows:

a. Directive

In the directive indicator, the highest average respondents answered agree. The answers are in a proper category, thus providing an example that the leadership style in the Pamekasan Regency SKPD is a leadership that has a positive relationship with satisfaction and expectations of subordinates. By explaining the criteria for good and bad performance, and guide and give instructions on how to work so that the tasks given are completed on time.

b. Supportive

In supportive indicators, the highest average respondents answered agree, the answers are in a proper category. It shows that the leadership style in the Pamekasan regency SKPD which is a leadership that always explains problems to subordinates is approachable and satisfies the hearts of its employees.

c. Participatory

In the participatory indicator, the highest average respondents answered agree. The answers are in a proper category, thus giving an illustration that the leadership style in the SKPD of Pamekasan Regency is a leadership that uses discussion as a suggestion for decision making.

d. Achievement-oriented

On the highest average achievement-oriented indicators, the respondents answered agree. The answers are in a proper category so it displays that the leadership style in the Pamekasan Regency SKPD gives challenges to subordinates to stimulate the achievement of objectives, and carry out tasks properly. These make subordinates believe in producing sufficient work.

Distribution of Respondents' Answers on Managerial Performance Variables

Performance is the result of activities that is achieved in connection with the use of the budget with measured quantity and quality. Government apparatus is a human resource that runs the government bureaucracy and is the key to the running of policies and systems that has been set. Performance variables of government officials are compiled by 23 question items. The results of the distribution of questionnaires to respondents are obtained through a description of the answers as follows:

Table 4: Distribution of Respondents' Answers on Managerial Performance Variables (Y)

Item	Score									
	1		2		3		4		5	
	f	%	f	%	f	%	f	%	f	%
Y ₁	0	0	4	3.1	11	8.4	88	67.2	28	21.3
Y ₂	0	0	3	2.3	8	6.1	83	63.4	37	28.2
Y ₃	0	0	2	1.5	11	8.4	84	64.1	34	25.9
Y ₄	0	0	2	1.5	8	6.1	85	64.9	36	27.5
Y ₅	1	0.8	4	3.1	22	16.8	75	57.3	29	22.1
Y ₆	0	0	4	3.1	9	6.9	86	65.6	32	24.4
Y ₇	0	0	0	0	15	11.5	87	66.4	29	22.1
Y ₈	0	0	4	3.1	9	6.9	89	67.9	29	22.1
Y ₉	1	0.8	12	9.2	35	26.7	69	52.7	14	10.7
Y ₁₀	0	0	3	2.3	15	11.5	83	63.4	30	22.9
Y ₁₁	2	1.5	4	3.1	29	22.1	81	61.8	15	11.5
Y ₁₂	0	0	2	1.5	14	10.7	89	67.9	26	19.8
Y ₁₃	0	0	4	3.1	19	14.5	88	67.2	20	15.2
Y ₁₄	0	0	1	0.8	23	17.6	80	61.1	27	20.6
Y ₁₅	0	0	1	0.8	6	4.6	80	61.1	44	33.6
Y ₁₆	0	0	3	2.3	12	9.2	78	59.5	38	29.0
Y ₁₇	5	3.8	6	4.6	12	9.2	91	69.5	17	13.0
Y ₁₈	7	5.3	11	8.4	40	30.5	51	38.9	22	16.8

Item	Score									
	1		2		3		4		5	
	f	%	f	%	f	%	f	%	f	%
Y ₁₉	0	0	1	0.8	10	7.6	72	55	48	36.6
Y ₂₀	1	0.8	3	2.3	11	8.4	80	61.1	36	27.5
Y ₂₁	0	0	2	1.5	5	3.8	60	45.8	64	48.8
Y ₂₂	0	0	3	2.3	19	14.5	84	64.1	25	19.1
Y ₂₃	2	1.5	7	5.3	40	30.5	62	47.3	20	15.3
Mean		0.6		2.9		12.7		60.6		23.2

Based on the results of the responses of respondents in the table above, it concluded that the majority of respondents agreed with the performance of government officials, in other words showing that the performance of government officials in SKPD Pamekasan Regency is classified as excellent/good. It is seen from the highest average of respondents' answers on a score of 4 (agree) of 60.6%.

Respondents' responses to each indicator in the performance variables of government officials can be defined as follows:

a. Effectiveness

In the indicator of the highest average effectiveness, respondents answered agree. The answer is in functional categories, thus giving an example that the performance of government officials in the District Government of Pamekasan in carrying out budgeting takes into account the expected level of achievement (outcome). Every activity, program, and policy is carried out under the needs and priorities to create effectiveness.

b. Efficiency

In the highest average efficiency indicator, the respondent answered agree. The answer is in the proper category. It illustrated that the performance of government officials in the Pamekasan Regency SKPD in carrying out programs and activities by using the smallest possible resources and every activity, program and policy evaluated by assessing the cost efficiency to prevent waste.

c. Employee Growth

On the indicator of the highest average employee growth, the respondents answered agree. The answer is in a proper category, thus indicating government officials in the Pamekasan SKPD in placing employees who are under their knowledge and abilities. Periodical

training or seminars are held for employees. The work facilities provided have supported the smooth running of employee duties.

d. Customer satisfaction

In the highest average customer satisfaction indicator, the respondents answered agree. The answer is in the proper category. It shows the performance of government officials in the Pamekasan regency SKPD which has provided services quickly and precisely according to the wishes of the community, providing adequate facilities to meet the needs of the community, and measuring instruments of community satisfaction with appropriate services.

Evaluation of Measurement Model (*Outer Model*)

Validity test

Convergent validity testing aims to determine the validity of each indicator relationship with its latent variable. Test this convergent validity by looking at the value of the *loading factor* indicators that measure the construct. Each indicator on the research variable must have a *loading* value above 0.60 and a significant level below 5%. Besides, the value of loading all indicators for a particular variable must be higher than the value of loading for other variables. For example, the loading value on indicators $X_{1,1}$ to $X_{1,17}$ must be higher in the place of the performance-based Budget variable (X_1) than in the place of other research variables. If the loading value on the indicator whose value is less than 0.60 or the significance level of more than 5% then the relevant indicator is eliminated and tested again until all indicators are valid. The next check of convergent validity is to look at the AVE values. The AVE values are about or more than 0.50 (Table 5).

Table 5: AVE Values

Variables	AVE
Performance-based Budgeting	0.518
Managerial performance	0.567
Leadership style	0.437

Table 6: Correlation Value of Construction Variables

	Performance-based Budgeting	Managerial performance	Leadership style
Performance-Based Budgeting	0.72	0.589	0.456
Managerial performance	0.589	0.753	0.503
Leadership style	0.456	0.503	0.730

The diagonal value (the value in parentheses) is the root value AVE. The table above shows that all constructs have high reliability where the root value of AVE is greater than the correlation of other constructs so that all constructs have good discriminant validity.

Reliability Test

The last evaluation of the outer model is composite reliability and Cronbach’s alpha. Composite reliability and Cronbach’s alpha test the reliability of instruments on a variable. A variable is said to meet the reliability test if it has a composite reliability value and Cronbach’s alpha which is more significant than 0.7. Here are the composite reliability and Cronbach’s alpha values of each variable:

Table 7: Composite Reliability and Cronbach’s Alpha

	Composite reliability	Cronbach's alpha
Performance-Based Budgeting	0.937	0.927
Managerial performance	0.934	0.922
Leadership style	0.888	0.853

The table above shows that the composite reliability and Cronbach's Alpha values of all study variables have values more than 0.70, so it can be concluded that all variables have high reliability.

Evaluation of Structural Models

The stages in *Moderated Regression Analysis* (MRA) are:

Stage 1: $Y = b_1X_1 + b_2X_2 + b_3X_3$

The test results regarding the effect of performance-based budgeting, organizational commitment and organizational culture on the performance of government officials are as follows:

Table 8: Hypothesis Testing Model 1

	Path coefficients			P-value
X_1	→	Y	.365	<0.001
$R^2 = 0.456$				

Based on the table above, it explained that Performance-based budgeting (X_1) has a significant positive effect on the performance of government officials (Y) with significant value (p-value) of less than 5%.

When viewed from the value of R^2 is 0.456 meaning that the effect of performance-based budget, on the performance of government officials contributed 45.6% of the variance while the rest is influenced by other variables that are not discussed in this study.

Stage 2: $Y = b_1X_1 + b_2Z$

The test results regarding the effect of performance-based budgeting and leadership style on the performance of government officials are as follows:

Table 9: Hypothesis Testing Model 2

	Path coefficients			P-value
X_1	→	Y	0.330	<0.001
Z	→	Y	0.283	<0.001
$R^2 = 0.512$				

Based on the table above, it explained that:

1. Performance-based budgeting (X_1) has a significant positive effect on the performance of government officials (Y) with significant value (p-value)

of less than 5%.

2. The leadership style (Z) signifies positive effect on the performance of a government official (Y) with significant values (p-value) of less than 5%.

The R² value is 0.512 meaning that 51.2% of the variance was explained by the factors.

Stage 3: $Y = b_1 X_1 + b_4 Z + b_5 X_1 Z$

The test results regarding the effect of performance-based budgeting, on the performance of government officials through the leadership style are as follows:

Table 10: Hypothesis Testing Model 3

	Path coefficients			P-value
X ₁	→	Y	0, 331	<0.001
Z	→	Y	0, 154	0.035
x ₁ z	→	Y	-0,078	0.182
R ² = 0.569				

Based on the table above, the interaction between performance-based budgeting (X₁) and leadership style (Z) does not significantly influence the performance of government officials (Y) because the significant value (p-value) generated is more than 5%. When viewed from the value of R² is 0.569 meaning that the effect of performance-based budgeting, leadership style, on the performance of government officials was rather impactful (variance explained was 56.9%). In the third stage of the testing process, it can be concluded that leadership style (Z) is a *quasi* moderating variable.

DISCUSSION

Performance-based budgeting is a budgeting method for management to link any funding allocated for the related activities to achieve the expected

outputs and outcomes, including efficiency in achieving the results of these outputs. Ideally, the better the performance-based budget implemented, the better the performance of government officials. This study aims to provide a dynamic model for implementing performance-based budgeting. The findings of this study showed the analytical implementation model adopted for the United Nations, including comprehensive variables at both the external (state) and internal (organizational) level. The first hypothesis (H_1) testing suggested that a performance-based budgeting had positive effect on the performance of government officials.

Budget with a performance approach is a budget system that prioritizes efforts to achieve work results or outputs from the planned allocation of costs or inputs. An adequate performance budget is more than a program or organizational budget object with anticipated outcomes. Research conducted by Triseptya et al. (2017) showed that the leadership style moderates budgetary participation in managerial performance. Research conducted by Wiguna et al. (2017) as well as Kristiani et al. (2018) indicated that the leadership style strengthened the positive influence of budgeting participation on the performance of government officials. It estimated that the leadership style strengthens performance-based budgeting on the performance of government officials. However, this study rejected the results of research by Triseptya et al. (2017), Wiguna et al. (2017) and Kristanti et al. (2018) who found that the leadership style did not strengthen the effect of performance-based budgeting on the performance of government officials.

CONCLUSION

Based on the PLS results using the *Moderated Regression Analysis* (MRA) test, two findings were obtained. First, H_1 suggested that the performance-based budget signified a positive effect on the performance of government officials. Second, the style of leadership did not moderate the influence of performance-based budgeting on the performance of government officials. From the results of the study, it appears that performance-based budgeting influences the performance of government officials. Therefore, it is a good idea for the local government agency (SKPD) of Pamekasan Regency to enhance the implementation of

performance-based budgeting further. The application of performance-based budgeting as a tool for the Pamekasan Regency SKPD to achieve control effectiveness and improve the performance of Government Officials is recommendable. Increase organizational commitment, positive organizational culture, and planned budget are favourable for the interests of the wider community and to foster community participation and trust towards the government officials.

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Appendix 1

Performance-based Budgeting

No.	Statement Items
Preparation	
1	Government Agency has a clear vision, easy to remember and motivates members of the organization.
2	Government Agency has a clear mission, easy to remember and undertakes the main tasks and functions.
3	Within a period of 1 to 5 years, the Office has clear objectives, aligned with the vision and mission, becomes the primary basis for making targets and performance indicators in the implementation of activities.
4	Agency has a complete financial information available for use as budget planning.
5	Budget performance planning meeting is held before preparing the Office / Agency budget.
Ratification	
6	Budget approval done because the budget is following the proportional priority scale.
7	The timeliness of approval is following the budget implementation plan.
8	The reasons given by leaders in approving the budget are the planning of budgeting for the implementation of activities.
Implementation	
9	Budgeting in the Office / Agency has been carried out in budget transparency and accountability, budget discipline, budget fairness, budget efficiency and effectiveness, and prepared with a performance approach.
10	The budget preparation is aligned with the vision, mission, and objectives as well as the reality (can be achieved) and describe the results (<i>outputs</i> and <i>outcomes</i>) and based on <i>value for money</i> .
11	The Office / Agency budget is more oriented to the utilization of the available budget to achieve optimal results from the activities carried out.
12	Each activity is chosen based on a strategic plan and operational goals.

Report Evaluation	
13	Successful realization of the budget is by established procedures in terms of achieving goals.
14	Realization of the budget is per the objectives to be achieved by the Office / Agency.
15	The performance budget system has a role as a benchmark in implementing the goals and objectives of the Office / Agency.
16	In terms of budget reporting by the terms of reference for activities.
17	The Office / Agency budget realization report has provided a clear picture of the level of success, as well as encouraging the Office / Agency apparatus always to improve performance.

Leadership

No.	Item
Directive	
1	Bosses always explain the performance criteria that they consider good or bad.
2	The manager corrects the way of working so that the task is completed on time.
3	Bosses give instructions and always remind about company/agency regulations.
Supportive	
4	The relationship with manager is relatively close.
5	The manager always provides support to achieve better goals.
6	The manager never hesitates to praise the work done thoroughly.
Participatory	
7	The managers always involve the employee in decision making.
8	When there are difficulties, the manager helps to find a solution.
9	The manager always uses discussion as a means to make decisions.
Achievement-oriented	
10	Bosses always set challenging goals for a job.
11	The manager always expects the smallest mistakes possible.
12	If the achievements are considered satisfactory, the leader <i>gives rewards</i> .

Managerial Performance

No.	Item
Effectiveness	
1	Budgeting has considered expected levels of achievement (<i>outcomes</i>).
2	The budget performance plan is adjusted according to the strategic plan.
3	Budgeting at the Office / Agency has provided appropriate performance information so that it used to carry out effectively in the budget implementation
4	Every activity, program and policy are implemented according to the needs and priorities to create an effectiveness.
Efficiency	
5	In carrying out the activities of each apparatus in the Office / Agency to provide optimal performance with the use of a minimum budget.
6	The use of the budget is carried out by each section under the plans that have been prepared.
7	Every activity, program, and policy evaluated by assessing cost-efficiency.
8	The performance plan is used as a commitment to provide resources efficiently.
Employee growth	
9	Employee placement is following the knowledge and abilities possessed.
10	Increased employee performance education affects the progress of the agency.
11	Periodically there are training or seminars for employees.
12	Every Service / Agency employee works diligently and thoroughly to produce quality work.
13	Every Service / Agency employee works diligently and well in order to have a career that continues to increase.
14	Performance evaluation of each employee is done regularly.
15	Employee achievement will have an impact on the performance of the Office / Agency.
16	Development of agency performance is influenced by employee work motivation.

17	Work facilities provided by the office support the smooth running of employee duties.
18	Every Office / Agency employee works diligently and well in order to get a promotion.
Service satisfaction	
19	Providing services quickly and precisely according to the wishes of the community.
20	Availability of adequate facilities to meet the needs of the community.
21	Competence, courtesy, and credibility as Agency employees are indispensable in providing services to the community.
22	Measuring tools for community satisfaction with services (questionnaires, interviews, complaints) are appropriate and appropriate.
23	The number of public complaints decreases every year.