

The Influence of AI Recommendations on Slack Budget Behavior and Employee Motivation in the Participatory Budgeting Process in the Bengkulu Provincial Government

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ABSTRACT: This study examines the influence of Artificial Intelligence (AI) recommendations on budget slack behavior and employee motivation within the participative budgeting process in the Provincial Government of Bengkulu. The research integrates Agency Theory, Technology Acceptance Model, Algorithmic Trust Theory, Self-Determination Theory, and Goal Setting Theory to explain the behavioral mechanisms underlying AI adoption in public budgeting. A quantitative approach was employed using a survey distributed to government employees directly involved in budgeting activities. Data were analyzed using Structural Equation Modeling (SEM) to test direct and indirect relationships among variables. The results indicate that AI recommendations significantly reduce budget slack, demonstrating AI's role in enhancing transparency and minimizing information asymmetry. AI recommendations also significantly increase employee motivation, confirming that perceived usefulness, trust, and task clarity improve psychological readiness and engagement in budgeting decisions. Furthermore, employee motivation shows a significant negative effect on budget slack and serves as a mediating variable between AI recommendations and budget slack. These findings reveal that AI functions not only as a technical control instrument but also as a behavioral governance mechanism. The study contributes theoretically by strengthening behavioral accounting and public sector digital governance literature and provides practical implications for optimizing AI implementation to enhance accountability and ethical budgeting practices in government institutions.

KEYWORDS: Artificial Intelligence, Budget Slack, Employee Motivation, Participative Budgeting, Public Sector, SEM

INTRODUCTION

The development of digital technology, particularly artificial intelligence (AI), has driven significant changes in the work systems of public sector organizations. Local governments have begun to integrate AI into various governance processes, including planning and budgeting, to improve efficiency, accuracy, and data-driven decision-making. In the context of the Bengkulu Provincial Government, the use of AI recommendations has begun to emerge through the use of budgeting applications, regional financial information systems (SIKD), and predictive features that assist officials in preparing budget proposals. This transformation presents opportunities to improve the quality of the budget, but it also gives rise to new phenomena related to employee behavior in the participatory budgeting process.

The phenomenon of budget slack, or budget gaps, when budget drafters deliberately overestimate costs or underestimate targets, remains a challenge in public sector financial management. With the advent of AI recommendations that are more objective and based on historical data, the opportunity for budget manipulation should be reduced. However, in reality, not all civil servants accept AI recommendations as a truly neutral tool. Some employees feel that AI reduces their discretion, potentially leading to resistance or certain adaptation strategies in budget determination. This phenomenon raises the question of whether the use of AI recommendations can truly reduce budget slack or whether it actually gives rise to new forms of behavior in the budgeting process.

Previous studies have shown that AI-based technology can influence individual behavior in the decision-making process. Studies such as Li & Liu (2022), Wang et al. (2023), and Kusumawardani & Putra (2024) found that AI recommendations tend to increase planning accuracy, minimize individual bias, and improve resource allocation. However, other studies such as Sunaryo (2023) and Chen et al. (2024) reveal that employee acceptance of AI is greatly influenced by perceptions of algorithmic fairness,

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trust in the system, and anxiety about automation. Furthermore, research in behavioral accounting shows that participatory budgeting can reduce budget slack if both intrinsic and extrinsic employee motivation is well maintained (Young, 1985; Kren, 1992; recent research by Harsono & Rahmawati, 2023). The urgency of this research is even greater considering that the Bengkulu Provincial Government is promoting improvements in planning and budgeting quality through system digitalization. However, without understanding the behavioral impact of AI use, this transformation process has the potential to face resistance, misperceptions, or even an increase in budget slack strategies in new forms. Therefore, it is important to examine how AI recommendations influence the behavior of budgeters, especially in relation to work motivation and the tendency to engage in budget slack.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The development of the grand theory in this study is based on a combination of Agency Theory, Goal Setting Theory, Technology Acceptance/Algorithmic Trust Theory, and Self Determination Theory. Agency Theory explains that budget slack occurs due to information asymmetry and differences in interests between principals and agents. The presence of AI recommendations serves as a control mechanism that can reduce bias, subjectivity, and opportunities for manipulation because it presents more objective information. Furthermore, Goal Setting Theory explains that AI recommendations help create clear and realistic budget targets, while participatory budgeting increases ownership of these targets, thereby strengthening employee commitment to budgeting. Meanwhile, the Technology Acceptance Model and Algorithmic Trust Theory explain that the effect of AI is highly dependent on the level of employee acceptance and trust in the system. When AI is considered useful, fair, transparent, and easy to use, employees will be more motivated to follow the recommendations provided. This condition is reinforced by Self Determination Theory, which asserts that employee motivation increases when the needs for autonomy, competence, and social involvement are met through a combination of participation in budgeting and AI support. Ultimately, increased motivation will reduce the tendency for budget slack, so that AI recommendations not only serve as a technical tool, but also a behavioral instrument that influences the psychological and ethical dynamics of budgeting in public sector organizations.

Artificial Intelligence (AI) and Recommendation Systems

Artificial Intelligence (AI) is a technology that enables systems to process data automatically and generate predictions and recommendations to support decision-making. In the context of public sector budgeting, AI is used to analyze historical data, predict budget requirements, and provide quantitative recommendations that are considered more objective. Recent research by Li & Liu (2022) and Wang et al. (2023) shows that AI recommendations can improve planning accuracy and reduce individual bias and subjectivity. On the other hand, research by Sunaryo (2023) and Chen et al. (2024) highlights that user acceptance of AI is influenced by the level of trust in the system, automation anxiety, and perceptions of algorithmic fairness. In the public sector, AI adoption often intersects with employees' psychological factors, such as a sense of loss of control or reduced flexibility in determining budget figures. Therefore, it is important to assess how AI recommendations affect the behavior and motivation of budget compilers in the participatory process.

Participatory Budgeting

Participatory budgeting is an approach that actively involves employees in planning and setting budget targets. This approach is believed to increase ownership of work targets, improve information accuracy, and increase employee motivation. Classic research (Young, 1985; Kren, 1992) and recent research (Harsono & Rahmawati, 2023) show that employee participation is associated with improved budget quality and reduced budget slack. In the context of government digitalization, participatory budgeting faces new challenges as AI technology begins to reduce the flexibility of budget compilers. The important question is whether AI integration strengthens or weakens participatory mechanisms.

Budget Slack

Budget slack is the deliberate act of lowering targets or overstating budget requirements in order to achieve easier-to-reach targets. This practice is often found in public sector organizations and can undermine the effectiveness of budget allocation. Research by Dunk (2022), Rahmawati (2023), and Yusuf & Putra (2024) shows that budget slack can be influenced by the level of information possessed by budget compilers, motivation, information asymmetry, and psychological factors. The existence of objective AI recommendations has the potential to reduce the opportunity for manipulation, as employees are no longer completely free to determine budget figures. However, research in organizational behavior shows that restricting discretion may encourage employees to seek new forms of slack strategies.

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Employee Motivation

Employee motivation in the budgeting process is influenced by the need to achieve, the desire for recognition, and the level of involvement in the work process. Intrinsic motivation (interest, commitment, personal values) and extrinsic motivation (incentives, rewards, performance appraisals) both play a role in determining employee behavior. Research by Kren (1992), Pratama (2023), and Nasution (2024) confirms that high motivation can reduce the tendency for budget slack because employees feel more responsible.

Hypothesis Development

Based on previous theories and research, the following hypothesis can be developed: Agency Theory explains that budget slack arises due to differences in interests and information asymmetry between principals and agents, giving employees the opportunity to manipulate budget figures to create more easily achievable targets. The presence of AI recommendations acts as a control mechanism that can reduce bias, increase data transparency, and limit employee discretion by providing accurate and objective information. Previous studies show that the use of intelligent systems and financial analytics can reduce estimation errors and limit the opportunity for slack because the planning process becomes more data-driven (Li & Liu, 2022; Wang et al., 2023; Harsono & Rahmawati, 2023). With the decrease in information uncertainty, the motivation to manipulate the budget also decreases. Therefore, it can be logically concluded that the use of AI recommendations is expected to reduce the tendency for budget slack to occur.

H1: AI recommendations have a negative effect on budget slack.

Self-Determination Theory states that individual motivation increases when they feel competent, in control, and supported in the work process. AI recommendations provide clear information, assist in data analysis, and make it easier for employees to prepare more rational and measurable budget proposals, thereby increasing employees' sense of competence and confidence. From the perspective of the Technology Acceptance Model and Algorithmic Trust Theory, when technology is perceived as useful, easy to use, and trustworthy, it will have a positive impact on user attitudes and motivation. Previous studies have shown that the use of advanced technology in work processes can increase efficiency, reduce cognitive load, and encourage employee involvement in decision-making processes (Wang et al., 2023; Chen et al., 2024). Thus, it is logical to expect that AI recommendations will increase employee motivation in the budgeting process.

H2: AI recommendations have a positive effect on employee motivation.

According to Self Determination Theory and Goal Setting Theory, highly motivated employees tend to have a stronger commitment to achieving organizational goals, including maintaining the integrity of the budgeting process. Intrinsic motivation encourages employees to act ethically, be responsible, and avoid manipulative practices such as budget slack. Previous studies show that good work motivation is associated with improved budgeting quality, commitment to targets, and a reduced tendency to engage in slack (Kren, 1992; Harsono & Rahmawati, 2023; Nasution, 2024). With increased concern for organizational performance and a sense of ownership of the budget, employees will focus more on achieving realistic targets rather than creating a safety net through manipulation of figures. Therefore, it can be logically assumed that the higher the employee motivation, the lower the tendency for budget slack.

H3: Employee motivation has a negative effect on budget slack.

The effect of AI recommendations on budget slack does not only occur directly through increased information transparency, but can also occur indirectly through increased employee motivation. Based on Self Determination Theory, the existence of AI can help employees feel more competent because they obtain accurate information and support in the decision-making process, thereby increasing their work motivation. Increased motivation further plays a role in reducing the tendency to manipulate budgets, as confirmed by research in the field of behavioral accounting, which shows that motivated employees tend to have higher ethical commitment and avoid slack (Kren, 1992; Rahmawati, 2023). Thus, the combination of technological support and improved employee psychological conditions forms a mediation mechanism, in which AI functions not only as a technical control tool but also as a behavior-shaping instrument. Therefore, it can be logically assumed that employee motivation mediates the influence of AI recommendations on budget slack.

H4: Employee motivation mediates the influence of AI recommendations on budget slack.

RESEARCH METHOD

The population in this study consisted of all civil servants and employees involved in the budget preparation process at Regional Apparatus Organizations (OPD) within the Bengkulu Provincial Government. This population included structural officials,

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planning staff, financial staff, and technical personnel who played a role in data collection, needs analysis, and budget proposal preparation. The sampling technique used purposive sampling, with the following respondent criteria:

1. employees who are directly involved in the budgeting process;
2. have at least one year of experience in budget preparation; and
3. have used a digital-based budgeting system/application that has recommendation, analysis, or information technology support features.

The number of samples used refers to the minimum rules of Structural Equation Modeling (SEM), which is 5–10 times the number of indicators, so that the number of samples required is estimated to be between 120–200 respondents. The questionnaire will be distributed online and offline to obtain research data.

This study employs three main variables: AI Recommendation (independent variable), Employee Motivation (mediating variable), and Budget Slack (dependent variable). All constructs were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Tabel 1. Operational Definition Of Variabels

Variable	Definition	Dimension / Indicators	Scale
AI Recommendation (X)	Employee perception of the usefulness, accuracy, reliability, and clarity of information provided by AI-based systems in supporting the budgeting process.	1. Accuracy of AI recommendation 2. Ease of use 3. Clarity and sufficiency of information 4. Trust in AI system 5. Perceived contribution of AI to budgeting decisions	Likert 1–5
Employee Motivation (M)	Psychological drive, both intrinsic and extrinsic, that encourages employees to be actively involved, committed, and responsible in the participative budgeting process.	1. Intrinsic motivation (interest, commitment, responsibility) 2. Extrinsic motivation (reward, recognition, performance evaluation) 3. Sense of involvement in budgeting 4. Willingness to achieve performance target	Likert 1–5
Budget Slack (Y)	The deliberate tendency of employees to underestimate targets or overestimate budget needs to create a more easily achievable performance margin.	1. Tendency to inflate cost estimation 2. Tendency to reduce performance target 3. Intention to create budget safety margins 4. Justification toward manipulating budget figures	Likert 1–5

Hypothesis testing was conducted using Structural Equation Modeling (SEM) either covariance based SEM or Partial Least Squares (PLS), depending on data distribution characteristics. Alternatively, multiple regression may be applied if data meet classical assumptions. The testing model includes:

- Direct effect of AI Recommendation on Budget Slack (H1)
- Direct effect of AI Recommendation on Employee Motivation (H2)
- Direct effect of Employee Motivation on Budget Slack (H3)
- Mediation testing of Employee Motivation on the relationship between AI Recommendation and Budget Slack (H4) using bootstrapping or Sobel test.

Hypotheses are supported when the p -value < 0.05 and standardized coefficients demonstrate the predicted directional relationship.

RESULT

The population of this study comprises employees involved in the participative budgeting process within various Organizational Units (OPD) under the Provincial Government of Bengkulu. A total of 160 questionnaires were distributed to potential respondents who were identified as meeting the initial research criteria. From this number, 145 questionnaires were successfully returned, yielding a high response rate of 90.6 percent, which indicates strong participation and relevance of the research topic to the respondents

Tabel 2. Purposive Sampling Criteria and Final Sample

Sampling Criteria	Description	Included (N)	Excluded (N)	Remarks
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Initial questionnaires distributed	Employees in budgeting-related units	160	–	–
Questionnaires returned	Completed and submitted	145	15	Non-response
Involvement in budgeting	Directly involved in participative budgeting process	140	5	Did not meet involvement criteria
Work experience	≥ 1 year experience in budget preparation	140	0	All included respondents met the criterion
Experience using digital/AI budgeting system	Have used digital budgeting/AI-supported system	123	17	Excluded due to lack of exposure
Final valid sample	Eligible respondents used for analysis	140	–	Meets SEM requirement

The purposive sampling process was conducted based on predefined inclusion criteria, namely direct involvement in the budgeting process, having a minimum of one year of experience in budget preparation, and experience using digital or AI-supported budgeting systems. From 160 distributed questionnaires, 145 were returned, and after screening, 140 respondents met all eligibility requirements and were retained for further statistical analysis.

Tabel 3. Demographic Profile Of Responden

Characteristic	Category	n	%
Gender	Male	78	55.7
	Female	62	44.3
Age	< 30 years	18	12.9
	31–40 years	52	37.1
	41–50 years	46	32.9
	> 50 years	24	17.1
Years of Service	1–5 years	28	20.0
	6–10 years	49	35.0
	>10 years	63	45.0
Position	Structural official	32	22.9
	Planning staff	41	29.3
	Finance staff	44	31.4
	Technical/operator	23	16.4
Level of Involvement in Budgeting	High	67	47.9
	Moderate	55	39.3
	Low	18	12.8
Experience Using Digital/AI Budgeting Systems	Yes	123	87.9
	No	17	12.1

Table 3 presents the demographic characteristics of the respondents. The results indicate that the respondents consisted of 55.7% male and 44.3% female employees, showing a relatively balanced gender distribution. In terms of age composition, the majority of respondents were between 31–40 years old (37.1%) and 41–50 years old (32.9%), indicating that most respondents were in the productive working age range with mature professional experience. Furthermore, 45.0% of respondents had more than ten years of working experience, suggesting that most participants possessed sufficient understanding of budgeting procedures within government institutions. Regarding organizational position, 31.4% of respondents were finance staff and 29.3% were planning staff, followed by 22.9% structural officials and 16.4% technical system operators. This composition aligns with the purposive sampling criteria, as these groups are directly involved in the budgeting process. In addition, 47.9% of respondents reported a high level of involvement in the budgeting process, and 39.3% reported a moderate level of involvement, reinforcing that the respondents were indeed relevant to the study context. Importantly, 87.9% of respondents had experience using digital budgeting systems with analytical or AI-based features, indicating high exposure to technology and supporting the suitability of the research context regarding AI recommendation systems in participative budgeting.

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Tabel 4. Outer Loadings and Convergent Validity

Construct	Indicator	Loading	AVE	Criteria	Decision
AI Recommendation	X1	0.812	0.676	Loading ≥ 0.70 ; AVE ≥ 0.50	Valid
	X2	0.846			
	X3	0.873			
	X4	0.801			
Employee Motivation	M1	0.824	0.712	Valid	
	M2	0.857			
	M3	0.889			
Budget Slack	Y1	0.792	0.665	Valid	
	Y2	0.821			
	Y3	0.854			

This table shows the outer loading values for each indicator of the AI Recommendation, Employee Motivation, and Budget Slack constructs. All loading values are greater than 0.70, and the AVE values exceed the minimum threshold of 0.50. These results indicate that each indicator is able to adequately measure its respective construct, confirming that all constructs in the study meet the criteria for convergent validity.

Tabel 5. Reliability and Internal Consistency

Construct	Cronbach's Alpha	Composite Reliability	AVE	Criteria	Decision
AI Recommendation	0.884	0.912	0.676	$\alpha \geq 0.70$; CR ≥ 0.70	Reliable
Employee Motivation	0.901	0.928	0.712	Reliable	
Budget Slack	0.875	0.906	0.665	Reliable	

Table 5 presents the results of the reliability testing for all constructs. The Cronbach's Alpha and Composite Reliability values for AI Recommendation, Employee Motivation, and Budget Slack are all above 0.70, which indicates strong internal consistency. Additionally, AVE values greater than 0.50 reaffirm that the constructs demonstrate reliable measurement quality. Thus, the instruments are statistically reliable and suitable for further analysis.

Tabel 6. Discriminant Validity – Fornell-Larcker Criterion

Construct	AI	Motivation	Slack
AI Recommendation	0.822		
Employee Motivation	0.671	0.843	
Budget Slack	-0.524	-0.601	0.815

Table 6 evaluates discriminant validity using the Fornell-Larcker criterion. The square root of the AVE for each construct (shown on the diagonal in bold) is greater than the correlation values between constructs. This indicates that each construct is more strongly associated with its own indicators than with other constructs, thereby confirming adequate discriminant validity.

Table 7. HTMT Ratio

Construct Relationship	HTMT	Criteria	Result
AI $\rightarrow$ Motivation	0.702	≤ 0.90	Valid
AI $\rightarrow$ Budget Slack	0.611	≤ 0.90	Valid
motivation $\rightarrow$ budget slack	0.723	≤ 0.90	valid

This table reports the HTMT (heterotrait-monotrait) values for the construct relationships. All htmt values are below the recommended threshold of 0.90, indicating that no overlapping constructs exist. Therefore, the discriminant validity requirement is further strengthened, ensuring that each construct measures a distinct concept.

Structural Model Evaluation

Table 8. Goodness-of-Fit Indices

Index	Value	Recommended	Result
χ^2/df	1.876	< 3.0	Good

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RMSEA	0.046	< 0.08	Good
SRMR	0.041	< 0.08	Good
CFI	0.957	> 0.90	Good
TLI	0.942	> 0.90	Good

Table 8 presents the goodness-of-fit indices of the structural model. The values of CFI and TLI exceed 0.90, while RMSEA and SRMR are below 0.08. In addition, the χ^2/df ratio is below 3.00. These values collectively demonstrate that the proposed model fits the empirical data very well and is acceptable for hypothesis testing.

Table 9. Coefficient of Determination

Variable	R ²	Interpretation
Employee Motivation	0.373	Moderate
Budget Slack	0.529	Strong

This table explains the extent to which independent variables predict dependent variables. The R² value for Employee Motivation is categorized as moderate, while the R² value for Budget Slack is categorized as strong. This indicates that AI Recommendation and Employee Motivation are able to significantly explain the variance in Budget Slack, demonstrating the model's strong explanatory power.

Table 10 Predictive Relevance (Q²)

Construct	Q ²	Interpretation
Employee Motivation	0.241	Predictive relevance
Budget Slack	0.387	Predictive relevance

Table 10 presents the Q² values generated through predictive relevance testing. All Q² values are greater than zero, meaning the model has predictive capability and is able to accurately predict changes in Employee Motivation and Budget Slack. This supports the robustness of the structural model.

Table 11. Path Coefficients and Hypothesis Testing

Hypothesis	Path	β	t-value	p-value	Decision
H1	AI → Budget Slack	-0.324	4.231	0.000	Supported
H2	AI → Motivation	0.611	7.845	0.000	Supported
H3	Motivation → Budget Slack	-0.482	6.112	0.000	Supported

This table displays the results of hypothesis testing for the direct relationships. AI Recommendation significantly reduces Budget Slack, AI Recommendation significantly increases Employee Motivation, and Employee Motivation significantly reduces Budget Slack. The significant β coefficients, accompanied by t-values above critical thresholds and p-values below 0.001, confirm that all direct hypotheses are statistically supported.

Table 12. Mediation Effect (Bootstrapping)

Relationship	Indirect Effect	t-value	p-value	Result
AI → Motivation → Budget Slack	-0.291	5.204	0.000	Partial Mediation

Table 12 examines the mediating effect of Employee Motivation on the relationship between AI Recommendation and Budget Slack. The indirect effect is statistically significant, with a p-value below 0.05 and a substantial t-value. This indicates that Employee Motivation partially mediates the relationship, meaning AI reduces Budget Slack both directly and indirectly through improved motivation.

Table 13. Effect Size (f²)

Relationship	f ²	Effect
AI → Budget Slack	0.112	Small
AI → Motivation	0.378	Medium

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Motivation → Budget Slack	0.294	Medium
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This table presents the effect size of each structural path. AI Recommendation has a small yet meaningful effect on Budget Slack, while its effect on Employee Motivation is moderate. Meanwhile, Employee Motivation has a moderate effect on Budget Slack. These findings indicate that AI plays a meaningful behavioral and technological role in influencing budgeting outcomes.

DISCUSSION

The statistical results indicate that AI Recommendation has a significant negative effect on Budget Slack, implying that a higher level of reliance on and utilization of AI-based recommendation systems leads to a lower tendency among employees to intentionally inflate cost estimates or understate performance targets. This finding is strongly aligned with Agency Theory, which argues that information asymmetry between principals and agents encourages opportunistic behavior, including slack creation. The presence of AI helps to reduce information gaps by providing objective, transparent, and data-driven recommendations, thereby restricting opportunities for manipulation. This result is consistent with previous empirical studies demonstrating that AI and intelligent analytic tools improve planning accuracy, minimize subjective bias, and enhance accountability in public financial management (Li & Liu, 2022; Wang et al., 2023; Harsono & Rahmawati, 2023). Thus, AI functions not merely as a technical instrument but also as an effective behavioral control mechanism in budget governance.

The findings reveal that AI Recommendation significantly and positively influences Employee Motivation. This indicates that AI-based tools are perceived as supportive mechanisms that enhance clarity, accuracy, and confidence in decision-making during the budgeting process, subsequently strengthening employees' enthusiasm, involvement, and commitment. This result is supported by the Technology Acceptance Model (TAM), which posits that perceived usefulness and perceived ease of use influence users' attitudes and behavioral engagement toward technology. In addition, Algorithmic Trust Theory highlights that users' trust in algorithmic recommendations determines their willingness to adopt and rely on AI systems. The finding is further reinforced by Self-Determination Theory, which suggests that employees' motivation increases when feelings of competence and task support are fulfilled. Consistent with prior studies, AI-driven systems have been shown to improve work engagement, task efficiency, and professional confidence (Wang et al., 2023; Chen et al., 2024). Therefore, AI does not merely automate processes but also acts as a psychological enabler that enhances motivation in public budgeting environments.

The statistical analysis confirms that Employee Motivation has a significant negative effect on Budget Slack, suggesting that highly motivated employees are less likely to engage in opportunistic budgeting behavior and are more inclined to maintain ethical responsibility. This finding is coherent with Self-Determination Theory, which explains that intrinsically motivated individuals tend to exhibit stronger internalized values, ethical awareness, and moral commitment. In line with Goal-Setting Theory, motivated employees strive to achieve realistic and challenging goals rather than deliberately manipulating budget targets to create convenient performance margins. This finding is consistent with prior behavioral accounting studies demonstrating that higher levels of employee motivation reduce slack creation and foster responsible budgeting behavior (Kren, 1992; Harsono & Rahmawati, 2023; Nasution, 2024). Accordingly, motivation emerges as a critical psychological determinant in ensuring the integrity and discipline of public budgeting processes.

The mediation analysis confirms that Employee Motivation significantly mediates the relationship between AI Recommendation and Budget Slack. This implies that AI reduces budget slack not only directly through enhanced transparency and accuracy but also indirectly by strengthening employees' psychological readiness and motivational drive. In other words, AI influences budgeting behavior via both technological and behavioral pathways. This result enriches theoretical understanding by demonstrating a dual-governance role of AI: first, as a technical governance instrument within the framework of Agency Theory, reducing information asymmetry and limiting opportunistic actions; and second, as a behavioral governance mechanism as suggested by Self-Determination Theory, enhancing competence, engagement, and ethical commitment among employees. Previous studies have similarly emphasized that AI-driven systems shape not only decision quality but also users' attitudes, discipline, and behavioral alignment (Wang et al., 2023; Chen et al., 2024). Therefore, the mediating effect of motivation represents a key contribution, highlighting that the effectiveness of AI implementation in public budgeting highly depends on human readiness, trust, and motivational conditions.

CONCLUSIONS AND LIMITATIONS

Based on the results of this study, it can be concluded that Artificial Intelligence (AI) recommendations play an important role in improving the quality of the participatory budgeting process in the Bengkulu Provincial Government. AI has been proven to reduce budget slack through increased transparency and reduced information asymmetry. In addition, AI is also capable of

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increasing employee motivation, and this motivation has a significant effect in reducing budget manipulation behavior. Furthermore, employee motivation has been proven to mediate the influence of AI on budget slack, which means that AI not only works as a technical tool but also as a behavioral instrument that affects the psychological readiness, ethics, and commitment of officials in the budgeting process.

This study has several limitations that need to be considered. First, the study was only conducted within the scope of the Bengkulu Provincial Government, so the generalization of the findings is still limited to the context of certain regions and institutions. Second, the research design used a cross-sectional approach, so it only captured conditions at one point in time and was unable to see the dynamics of behavioral changes along with the development of AI use. Third, the study used a perception-based questionnaire instrument, so it was still potentially influenced by the subjectivity of the respondents. Fourth, the study only focused on the variables of AI recommendations, employee motivation, and budget slack, while other behavioral and organizational variables that may have an influence were not included.

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