

# Managerial Performance at Universitas Negeri Manado in Terms of Internal Control System Implementation and Organizational Commitment

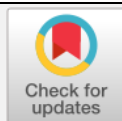
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## ABSTRACT

This research examines the internal control system implementation and organizational commitment effects on managerial performance at Universitas Negeri Manado empirically. This research uses the descriptive quantitative method, while the analysis method uses descriptive analysis. This research uses primary data by collecting research instruments in questionnaires, observation, and interviews. The target population is the management and staff of Universitas Negeri Manado. The sampling method using simple random sampling and the number of questionnaires that meet the processed requirements is 75 questionnaires. This research uses IBM SPSS Statistics software to test the collected data. Hypothesis testing uses the path analysis method. This research shows that internal control system implementation has a significant positive effect on managerial performance. Likewise, organizational commitment partially has a positive effect on managerial performance. Overall, internal control system implementation and organizational commitment positively and significantly affect managerial performance at Universitas Negeri Manado.

**Keywords:** Internal Control; Organizational Commitment; Managerial Performance; Performance Measurement

## 1. Introduction

Performance accountability is a form of accountability from a government agency for conducted activities within one year compiled through the reporting media. Universities must implement clean and good government agency management. World developments and the influence of globalization require universities to increase their competitive advantage to compete with other universities, nationally and internationally. University rankings are trending and becoming a reference. Performance is a significant factor in driving the university's competitive advantage to achieve high rankings and show a good reputation (Rasheed et al., 2016).

Another phenomenon shows that there is still a wide gap between higher education in Indonesia and the nature of higher education, especially concerning performance accountability. The causative factors are the unoptimized learning process, inconsistent curriculum implementation and not responsive to student needs, the lack of lecturers competence, inadequate learning facilities to support the learning process, and higher education that is not yet research-based.

In general, performance measurement is an essential key to improving and advancing for both an institution and an individual. Performance measurement aims to analyze institutions' or individuals' performance and achievement (Keban, 2008). One of the significant changes to the New Public Management (NPM) approach is budget reform, namely, using performance budgeting to replace traditional budgets (line-item & incremental budgeting).

Performance budgeting is useful, especially for limited resources; because it can help decision-makers get better value to increase their efficiency and effectiveness. The decision-makers can prioritize among highly competitive needs, and the results of these decisions directly observed in performance matrices and trends. Definition of performance measurement is a process for quantifying and evaluating work (Cocca & Alberti, 2010; Tangen, 2004). The work in question is past work (Cocca & Alberti, 2010). Performance measurement is one of the performance management elements (Cokins, 2004; Baxter & MacLeod, 2008).

Research related to performance and performance measurement in the public sector has been conducted, among others, by Atkinson et al. (1997), Hood (1995), Sofyani & Akbar (2013). The research focuses on organizational performance. Other essential factors in performance measurement are the internal control system implementation and organizational commitment. The increasing intensity of competition among higher education service providers encourages universities always to improve their performance. Organizational commitment is one of the components that can support the achievement of the university's objectives. Budgeting participation to achieve budget objectives through negotiations between superiors and subordinates (Brownell, 1982). Besides, expectedly, high commitment through budgeting participation improves managerial performance (Hansen & Mowen, 2006).

According to Sugioko (2007), who researched 16 private universities listed in the Association of Catholic Colleges, organizational commitment and higher education performance had a positive and significant relationship. Meanwhile, Somers & Birnbaum (1998) stated no relationship between organizational commitment and managerial performance. In the public sector (including universities), the weakness of implementing internal control creates a significant opportunity for irregularities in the budget execution of public funds.

The internal audit evaluates the effectiveness of the management control system (Bhayangkara, 2008). The results of other research conducted by Yudianti & Suryandari (2015) found that many private universities have sufficient information to implement risk management, internal control, and good university governance. The difference with this

research is that this research examines state universities' performance as higher education organizations that have a vital role in developing a country.

Based on the above description, this research aims to determine the effect of the internal control system implementation on managerial performance and organizational commitment on managerial performance. In addition, it aims to determine the effect of the internal control system implementation and organizational commitment simultaneously on higher education managerial performance accountability.

## **2. Literature Review**

### **2.1. Internal Control System**

The internal control system plays a vital role in creating operational efficiency and productivity, especially in achieving institutional objectives and public sector reform success (Altamuro & Beatty, 2010). Kewo (2014) stated that there is an effect of internal control on local government agencies' managerial performance. Altamuro & Beatty (2010) stated that internal control management and reporting improvements could increase financial report's quality.

Messier et al. (2006) argue related to the internal control system. The board of directors and management establishes internal control to provide reasonable assurance regarding the achievement of the organization's objectives, namely (1) feasibility of financial reports; (2) organizational operations efficiency and effectiveness; (3) compliance with applicable regulations.

According to INTOSAI (2004), internal control is an integral process that is affected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that in pursuit of the entity's mission, the following general objectives should be achieved:

- 1) executing orderly, ethical, economic, efficient, and effective operations;
- 2) fulfilling accountability obligations;
- 3) complying with applicable laws and regulations;
- 4) protecting resources against loss, misuse, and damage.

The elements of the Internal Control System in Government Regulation Number 60 of 2008 (Republik Indonesia, 2008) include:

#### 1) Control Environment

Includes actions, policies, and procedures that reflect all the top management attitudes, the board of commissioners, and the entity's owners regarding the importance of control. It means that the head of the agency and all employees must maintain a work environment and behave positively while still supporting healthy internal control and management.

#### 2) Risk Assessment

Risk assessment involves a dynamic and iterative process for identifying and assessing risks to achieving objectives. Internal control must assess the risks faced by the agency, both from outside and from inside.

#### 3) Control Activities

Determining actions through policies and procedures that help ensure management policies' implementation reduces risks in achieving the vision and mission. Control activities as a means of helping ensure the implementation of the head of agency policies.

4) Information and Communication

Information and communication are required to carry out internal control responsibilities to support objective achievement. The information must be recorded and then reported to the head of the agency and other designated parties.

5) Monitoring

This activity is related to the continuous or periodic assessment of internal controls quality by management to determine that the controls are operating as expected. Monitoring must assess the quality of performance over time and ensure recommendations on audit results, and other reviews followed up immediately.

## 2.2. Organizational Commitment

Organizational commitment variable is an important variable and has been widely researched and discussed in the social sciences, including accounting and management, so many definitions reveal organizational commitment. Porter et al. (1974), as cited in Armstrong (2006, p. 271), defines organizational commitment as the relative strength of an individual to an organization and individual involvement in a particular organization, which is characterized by three psychological factors:

- 1) A strong desire to maintain its membership in the organization,
- 2) A strong belief and acceptance of the organization's values and objectives, and
- 3) A willingness to make great efforts on behalf of the organization.

Organizational commitment is related to employees' feelings and beliefs about the organization they work as a whole. According to George & Jones (2012, p. 187), there are two dimensions of organizational commitment:

- 1) Affective commitment, namely commitment when the employee becomes a member of an organization, is happy, believes, feels good at being in the organization, and will do his best for the organization.
- 2) Continuance commitment, namely commitment when employees do not have the commitment and desire to be in an organization, but they think that the income they have left is too large (loss of seniority, job security, retirement, health benefits, and others).

Meanwhile, Sheldon (1971) stated that commitment is a positive evaluation of individuals and organizations' bond. Commitment is the key to superior performance, and coaching is a strategy for building that commitment (Coe et al., 2008). Commitment is not something that can be observed directly, where it can be concluded that the commitment exists because it has been done. Commitment is not real action but is related to emotional/psychological needs. It can be said that a "committed" person is when someone shows his/her intention or determination repeatedly to do his/her best and does not give up easily. Locke & Latham (2013) stated that if there is no commitment to a goal, that goal is useless. Allen & Meyer (1993), as cited in Luthans (2008), mention three organizational commitment components: affective, normative, and continuance.

1) Affective commitment

It comes from employees' emotional attachment to the organization. Thus, employees who have a strong affective commitment will identify themselves by being actively involved in the organization and appreciating them.



2) Normative commitment

It is related to employees' feelings about the organization's commitment. Therefore, employees who have high normative commitment will stay in the organization because they feel they should do so (ought to).

3) Continuance commitment (rational commitment)

It is related to commitment based on the employee's perception of their losses if they do not continue their work. Therefore, employees who have a strong rational commitment will stay in the organization because they need it.

According to [Locke & Latham \(2013\)](#), commitment is influenced by three things; 1) external factors, which consist of authority, peer factors, and external rewards 2) interactive factors, which consist of participation and competition; and 3) internal factors consisting of expectancy and internal rewards.

### 2.3. Managerial Performance

Performance describes how achievement level or work on a program or activities implementation to achieve the organization's vision, mission, goals, and objectives. Performance is an achievement obtained by an agency within a certain period. Measuring an organization's performance can be done by recording and measuring how the program or activity is implemented in the assessment's direction through the displayed results as a product, service, or a process ([Bastian & Saat, 2006](#)). It means that every operational activity must be measurable and its relationship with the achievement of the organization's future direction stated in the organization's vision and mission.

The definition of managerial performance can be said to be a manager's way or a leader's skill level in carrying out managerial activities. Managerial performance is an indicator of increasing the effectiveness of an agency or organization. Management functions in planning, organizing, controlling, and leadership are the foundation of managerial performance ([Mahoney et al., 1963](#)). Performance measurement is a way of organizational control because it can set awards or sanctions. [Siegel & Ramanauskas-Marconi \(1989\)](#) stated that behavior standards can be in management policies or outlining the formal plans in financial or budget planning.

The objectives of performance measurement in the public sector, among others, are intended to: 1) Measure the performance of the public sector to encourage the increased performance of public sector agencies. This is intended so that agencies focus on work unit goals. This situation can increase the efficiency and effectiveness of public sector organizations in public services. 2) Public sector performance indicators facilitate the allocation of resources in decision making. 3) [Mardiasmo \(2009\)](#) stated that public sector performance measures could improve institutional communication and create public accountability.

Performance measurement is useful as a measure index used in assessing a person's performance. It provides direction to expected targets, helps understand various government activities, and identifies various waste while encouraging efforts to reduce them.

The research hypothesis is:

- 1) Implementation of internal control has a positive effect on managerial performance;
- 2) Organizational commitment has a positive effect on managerial performance.

### 3. Research Methodology

This research aims to determine whether there is an effect of the internal control system implementation and organizational commitment on managerial performance in higher education institutions, namely Universitas Negeri Manado. This research uses the descriptive verification method to achieve research objectives. Descriptive verification research aims to examine hypotheses based on specific theories using an explanatory survey method to obtain accurate and factual information. Collecting data using a cross-sectional period, where data is collected only once in a certain period to get answers to research questions (Sekaran & Bougie, 2016). Universitas Negeri Manado's employees are the analysis units in this research.

The data regarding the research variables collected through questionnaires is data on an ordinal scale. In contrast, the data required for using inferential statistics (path analysis) as the primary analysis in hypothesis testing in this research on an interval scale. Therefore, the conversion is done first to increase from the ordinal scale to the interval scale.

The population in this research was Universitas Negeri Manado's employees. The sampling carried out in this study using simple random sampling. The sample size was determined using Taro Yamane or Slovin's formula (Riduwan, 2007). The data were tested for validity and reliability. The Pearson's product-moment correlation coefficient is used for the validity test. Cronbach's Alpha coefficient formula is also used for the data reliability test. The data collected was then analyzed using path analysis using Lisrel software. The use of path analysis considering that the relationship between variables in this research is correlative and causality. This analysis is used to determine the influence of exogenous variables on endogenous variables.

### 4. Results and Discussion

#### 4.1. Results

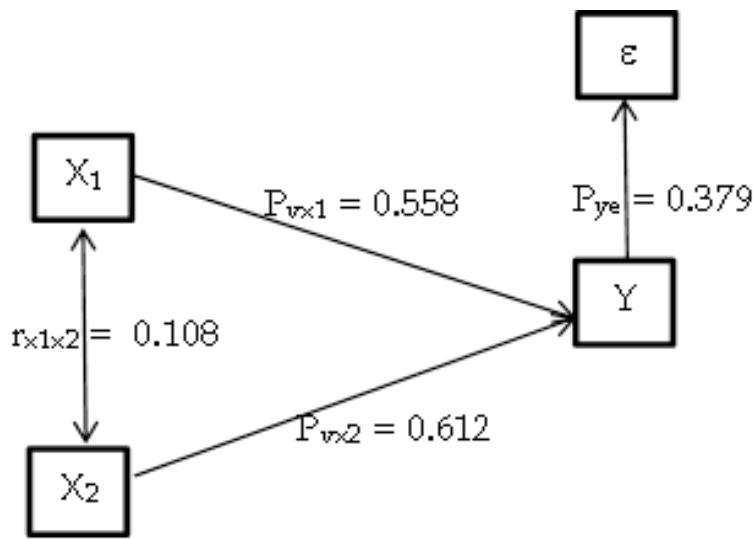
Universitas Negeri Manado (known as Unima) is located in South Tondano Sub-district, Minahasa Regency, North Sulawesi Province, Indonesia, with 42 km or 60 minutes from Manado City (the capital of North Sulawesi Province). The measuring instrument used to obtain data in this research was the questionnaire. The questionnaire's return rate was 55% from 130 respondents so that 75 questionnaires could be processed. Respondents are employees of Universitas Negeri Manado. Before being used in the data analysis, the research data needs to be tested for its reliability and validity. It needs to be done to know whether the used measuring instrument has been measured carefully and precisely. A good research instrument must meet the three main requirements: 1) valid, 2) reliable, and 3) practical (Cooper & Schindler, 2006).

Table 1. Reliability Test Results

Variable	R <sub>count</sub>	R <sub>critical</sub>	Result
X <sub>1</sub>	0.831	0.70	Reliable
X <sub>2</sub>	0.740	0.70	Reliable
Y	0.953	0.70	Reliable

Table 1 shows the results of the validity test calculations using the Spearman rank correlation. All question items for the variable of internal control implementation (X<sub>1</sub>), organizational commitment (X<sub>2</sub>), and managerial performance (Y) are valid because the

correlation value is the score of the statement items  $> 0.30$ . All variables are reliable because the reliability coefficient is greater than 0.70, as shown in **Table 1** above. Based on the Alpha Cronbach's method processing result, all variables' reliability test results are reliable because the reliability coefficient is greater than 0.70, as shown in **Table 1**.



**Figure 1. Path Coefficient Results**

**Figure 1** above shows the results of the path coefficient. The results showed that the path coefficient value in implementing internal control's effect on managerial performance ( $P_{yx1}$ ) marked positive with a value of 0.558. The path coefficient value in organizational commitment's effect on managerial performance ( $P_{yx2}$ ) marked positive with a value of 0.612.

The values above mean an increase in one unit of internal control implementation will increase managerial performance by 0.558 units. One unit increase in organizational commitment causes managerial performance to increase by 0.612 units. F-Test is performed to test the effect simultaneously.  $H_1$  accepted or  $H_0$  rejected is done by comparing  $F_{count}$  with  $F_{table}$ . This decision-making can be done by looking at the significance value provided that  $H_0$  is rejected if  $F_{count}$  is greater than  $F_{table}$ .

From  $F_{table}$  for a significance level of 0.05 and degrees of freedom  $df_1 = 2$  and  $df_2 = 75 - 2 - 1 = 72$ , it is obtained  $F_{0.05}(3; 74) = 2.732$ . Since the  $F_{count}$  value is greater than  $F_{table}$  ( $58,986 > 2,732$ ), it can be concluded to reject  $H_0$ .

**Table 2. Simultaneous Test**

Hypothesis	df	$F_{count}$	$F_{table}$	Statistics Conclusion
The internal control system implementation and organizational commitment simultaneously affect managerial performance	$df_1 = 2$ $df_2 = 72$	58.986	2.732	$H_0$ rejected

Source: data processed (2020)

The research results in the table above show that the internal control system implementation and organizational commitment simultaneously affect higher education institutions in terms of managerial performance. A partial test is conducted to see the

significance. A partial test is conducted to test the  $X_1$  effect on  $Y$  and  $X_2$  effect on  $Y$  using IBM SPSS Statistics 20 software and the T-Test. The  $t_{count}$  value gained from the calculation using IBM SPSS Statistics 20 software as follow:

**Table 3. Partial Test**

No	Hypothesis	Path Coefficient	$F_{count}$	$F_{table}$	Statistical Conclusions
1	The internal control system implementation has a positive effect on managerial performance	0.558	7.661	1.992	$H_0$ rejected
2	Organizational commitment has a positive effect on managerial performance	0.612	6.721	1.992	$H_0$ rejected

Source: data processed (2020)

A partial test on hypothesis 1 regarding the effect of internal control system implementation on managerial performance is indicated by the path coefficient  $p_{YX_1}$  of 0.558. The calculation results obtained the  $T_{count}$  of 7,661. The empirical test results state that  $H_0$  is rejected, meaning that the test is significant and hypothesis  $H_1$  is accepted. This decision was taken because  $T_{count} = 7,661 > T_{table} = 1.992$ . From the results of a partial test on hypothesis 1 for variable  $X_1$ , there is a positive effect of internal control system implementation on managerial performance partially.

A partial test on hypothesis 2 regarding the effect of organizational commitment on managerial performance is indicated by the path coefficient  $p_{YX_2}$  of 0.612. The calculation results obtained the  $T_{count}$  of 6,721. The empirical test results show that  $H_0$  is rejected, meaning that the test is significant and the hypothesis  $H_1$  is accepted. This decision was taken because  $T_{count} = 6,721 > T_{table} = 1.992$ . From the results of a partial test on hypothesis 2 for variable  $X_2$ , there is a positive effect of organizational commitment on managerial performance partially.

The magnitude effect of internal control system implementation and organizational commitment simultaneously on managerial performance is indicated by the R Square ( $R^2$ ) value of 0.621 or 62.1%.

**Table 4. Magnitude of the Path Coefficient**

Variable	Path Coefficient	Simultaneous Effect	Residual Effect
Internal Control ( $X_1$ )	$P_{yx1} = 0.558$	0.621	0.379

Source: data processed (2020)

The table above shows that the total effect of the internal control system implementation and organizational commitment variables on managerial performance is 0.621 or 62.1%. In comparison, the other effect factors on managerial performance showed a value of 0.379 or



37.9%. The managerial performance variable can be explained by 62.1% by the internal control system implementation and organizational commitment variables, and the remaining 37.9% are not examined in this research. Based on the correlation value and path coefficient obtained, the magnitude of direct effect and indirect effect on internal control system implementation and organizational commitment on managerial performance as follows:

**Table 5. Direct and Indirect Effects of Variables X<sub>1</sub> and X<sub>2</sub> on Y**

Types of Effect	Magnitude Effect	
<b>Direct effect</b>		
X <sub>1</sub> Direct	$P_{yx1} P_{yx1} = (0.558 \times 0.558)$	0.314 or 31.4%
X <sub>2</sub> Direct	$P_{yx2} P_{yx2} = (0.612 \times 0.612)$	0.375 or 37.5%
<b>Indirect Effect</b>		
X <sub>1</sub> through X <sub>2</sub>	$P_{yx1} r_{x1x2} P_{yx2} = (0.558 \times 0.108 \times 0.612)$	0.0368 or 3.68%

Source: data processed (2020)

The results obtained directly without any other variables indicate the direct effect of internal control system implementation on managerial performance of 31.4% and the indirect effect of 3.68%. The results showed an effect of organizational commitment on managerial performance, partially by 37.5%.

## 4.2. Discussion

### 4.2.1. The Effects of Internal Control System Implementation (X<sub>1</sub>) on Managerial Performance (Y)

The first hypothesis is that the implementation of the internal control system has positively affected managerial performance. The research results provide a path coefficient value from variable X<sub>1</sub> to variable Y with a value of 0.558. The path coefficient value is positive. This shows that an effective internal control system implementation, a robust system implementation, will result in good managerial performance. Furthermore, the T<sub>count</sub> value of the path coefficient of variable X<sub>1</sub> or internal control system implementation to variable Y or managerial performance is 7.661. The value of T<sub>count</sub> is greater than the T<sub>table</sub>, which means that the variable X<sub>1</sub> or the internal control system implementation has significantly affected variable Y or managerial performance.

The results showed that the internal control system implementation positively affects Universitas Negeri Manado's managerial performance. It means that a robust implementation of the internal control system will improve managerial performance. Referring to the table of strengths between variables, the effect of internal control system implementation categorized as a medium category. It is needed an increased implementation of the internal control system at Universitas Negeri Manado.

The research results are in line with Fogelberg & Griffith (2000) and Lau (2004), where internal control system implementation has a positive and significant effect on managerial performance. Rasheed et al. (2016) also stated that performance is a significant factor in driving a university's competitive advantage. The internal control system implementation plays a vital role in creating operational efficiency and productivity, especially in achieving institutional goals and public sector reform's success.

#### **4.2.2. The Effects of Organizational Commitment ( $X_2$ ) on Managerial Performance (Y)**

The second hypothesis is that organizational commitment has positively affected managerial performance. The research results provide a path coefficient value from variable  $X_2$  to variable Y with a value of 0.612. The path coefficient value is positive. This shows that strong organizational commitment will make managerial performance higher. Furthermore, the  $T_{count}$  value of the path coefficient of the variable  $X_2$  or organizational commitment to variable Y or managerial performance is 6,721. The  $T_{count}$  is greater than the  $T_{table}$ , which means that the variable  $X_2$  or organizational commitment significantly affected variable Y or managerial performance.

The results showed that organizational commitment positively affects Universitas Negeri Manado's managerial performance. It means that strong commitment will improve managerial performance. Referring to the table of strengths between variables, the effect of organizational commitment is categorized as a strong category.

This research results in line with [Sugioko \(2007\)](#), who researched 16 private universities and stated that organizational commitment has a positive and significant relationship with university performance. Organizational commitment is one of the components that can support the achievement of the goals of universities. Besides, high commitment through budgeting participation is expected to improve managerial performance ([Hansen & Mowen, 2006](#)). However, this result contradicts [Somers & Birnbaum \(1998\)](#), and [Breux \(2004\)](#) stated that there is no relationship between organizational commitment and managerial performance.

#### **4.2.3. The Simultaneous Effects of Internal Control System Implementation and Organizational Commitment on Managerial Performance**

The coefficient of determination (R Square) is 0.621 or 62.1%, while other factors affect 37.9%. This means that the variables of internal control system implementation and organizational commitment simultaneously affect managerial performance. Meanwhile, the effect of other variables not examined was 37.9%.

This shows that the internal control elements, such as the control environment, where the leadership and all employees generate positive and supportive behavior towards internal control, risk assessment elements, and control activities elements that ensure those leadership directives are implemented. Information and communication elements and monitoring elements will be carried out properly through a strong organizational commitment. This is because of a strong organizational commitment related to employees' feelings and beliefs about the organization where they work as a whole. It is also related to affective commitment, namely commitment when the employee becomes a member of an organization, is happy, trusts, feels useful in the organization, and will do their best for the organization ([George & Jones, 2012](#)).

Implementing a robust internal control system and strong organizational commitment will make better managerial performance based on management functions, including planning, organizing, controlling, and leadership, which will accelerate the achievement of the university's goals, missions, and vision. Higher education is an essential key for the progress and advancement of education in Indonesia.

## **5. Conclusion**

Based on the hypothesis testing, analysis results, discussion, and research findings, some research conclusions can be stated as follows: simultaneously, implementing the internal control system and organizational commitment positively affects Universitas Negeri Manado's managerial performance. Likewise, organizational commitment positively affects Universitas

Negeri Manado's managerial performance.

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## 7. Declaration of Conflicting Interests

The author has declared no potential conflicts of interest concerning the study, authorship, and/or publication of this article.

## References

- Altamuro, J., & Beatty, A. (2010). How does internal control regulation affect financial reporting?. *Journal of accounting and Economics*, 49(1-2), 58-74. <https://doi.org/10.1016/j.jacceco.2009.07.002>
- Armstrong, M. (2006). *Human Resources Management Practice* (10th ed.). London, UK: Kogan Page.
- Atkinson, A. A., & McCrindell, J. Q. (1997). Strategic Performance Measurement in Government. *CMA Magazine*, 71(3), 20-23.
- Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A Stakeholder Approach to Strategic Performance Measurement. *MIT Sloan Management Review*, 38(3), 25-37.
- Bastian, I., & Saat, S. (2006). *Akuntansi Sektor Publik: Suatu Pengantar*. Jakarta, Indonesia: Erlangga.
- Baxter, L. F., & MacLeod, A. M. (2008). *Managing Performance Improvement*. Abingdon, United Kingdom: Routledge.
- Bhayangkara, I. (2008). *Audit Manajemen: Prosedur dan Implementasi*. Jakarta, Indonesia: Salemba Empat.
- Breaux, K. T. (2004). *The effect of program commitment on the degree of participative congruence and managerial performance in a budgeting setting* (Doctoral Dissertation). Louisiana State University. Retrieved from [https://digitalcommons.lsu.edu/gradschool\\_dissertations/3080/](https://digitalcommons.lsu.edu/gradschool_dissertations/3080/)
- Brownell, P. (1982). Participation in the budgeting process: When it works and when it doesn't. *Journal of Accounting Literature*, 1(2): 124-153.
- Cocca, P., & Alberti, M. (2010). A framework to assess performance measurement systems in SMEs. *International Journal of Productivity and Performance Management*, 59(2), 186-200. <https://doi.org/10.1108/17410401011014258>
- Coe, C., Zehnder, A., & Kinlaw, D. C. (2008). *Coaching for Commitment Achieving Superior Performance From Individuals and Teams* (3rd ed.). Hoboken, NJ, United States: Wiley.
- Cokins, G. (2004). *Performance Management: Finding the Missing Pieces (to Close the Intelligence Gap)* (1st ed.). Hoboken, NJ, United States: Wiley.
- Cooper, D. R., & Schindler, P. S. (2006). *Business Research Methods*. Boston, United States:: McGraw Hill.
- Fogelberg, L., & Griffith, J. M. (2000). Control and bank performance. *Journal of Financial and Strategic Decisions*, 13(3), 63-69. Retrieved from <http://www.financialdecisionsonline.org/archive/pdffiles/v13n3/fogelberg.pdf>
- Hansen, D. R., & Mowen, M. M. (2006). *Cost Management: Accounting and Control* (5th ed.). Boston, United States: Cengage Learning.

- Hood, C. (1995). The "new public management" in the 1980s: Variations on a theme. *Accounting, Organizations and Society*, 20(2-3), 93-109. [https://doi.org/10.1016/0361-3682\(93\)e0001-w](https://doi.org/10.1016/0361-3682(93)e0001-w)
- INTOSAI. (2004). *Guidelines for internal control standards for public sector*. Wina, Austria: Internal Control Standards Committee.
- George J., & Jones, G. (2012). *Organizational Behavior* (6th ed.). Harlow, UK: Pearson Education.
- Keban, Y. T. (2008). *Enam Dimensi Strategis Administrasi Publik: Konsep, Teori dan Isu* (2nd ed.). Yogyakarta, Indonesia: Gava Media.
- Kewo, C. L. (2014). The Effect of Participative Budgeting, Budget Goal Clarity and Internal Control Implementation on Managerial Performance. *Research Journal of Finance and Accounting*, 5(12), 81-87. Retrieved from <https://www.iiste.org/Journals/index.php/RJFA/article/view/13570>
- Lau, C. M. (2004). The Effect of Accounting Control on Performance and Slack Creation. *Behaviour Research in Accounting*, 7, 132-140.
- Locke, E. A., & Latham, G. P. (2013). *New Developments in Goal Setting and Task Performance* (1st ed.). Abingdon, United Kingdom: Routledge.
- Luthans, F. (2008). *Organizational Behavior*. Boston, United States: McGraw-Hill/Irwin.
- Mahoney, T. A., Jerdee, T. H., & Carroll, S. J. (1963). *Development of Managerial Performance: A Research Approach*. Cincinnati, United States: South-Western Publishing Co.
- Mardiasmo. (2009). *Akuntansi Sektor Publik*. Yogyakarta, Indonesia: ANDI.
- Messier, W. F., Glover, S. M., & Prawitt, D. F. (2006). *Auditing & Assurance Services: A Systematic Approach* (4th ed.). Boston, United States: McGraw-Hill Education.
- Rasheed, M. I., Humayon, A. A., Awan, U., & Ahmed, A. D. (2016). Factors affecting teachers' motivation: An HRM challenge for public sector higher educational institutions of Pakistan (HEIs). *International Journal of Educational Management*, 30(1), 101-114. <https://doi.org/10.1108/ijem-04-2014-0057>
- Republik Indonesia. (2008). Peraturan Pemerintah Republik Indonesia Nomor 60 Tahun 2008 Tentang Sistem Pengendalian Intern Pemerintah. Lembaran Negara Republik Indonesia Tahun 2008 Nomor 127. Retrieved from <https://peraturan.bpk.go.id/Home/Details/4876>
- Riduwan. (2007). *Cara Menggunakan dan Memaknai Analisis Jalur (Path Analysis)*. Bandung, Indonesia: Alfabeta.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach* (7th ed.). Hoboken, NJ, United States: Wiley.
- Sheldon, M. (1971). Investments and Involvements as Mechanisms Producing Commitment to the Organization. *Administrative Science Quarterly*, 16(2), 143-150. <https://doi.org/10.2307/2391824>
- Siegel, G., & Ramanauskas-Marconi, H. (1989). *Behavioral Accounting*. Mason, United States: Thomson South-Western.
- Sofyani, H., & Akbar, R. (2013). Hubungan Faktor Internal Institusi dan Implementasi Sistem Akuntabilitas Kinerja Instansi Pemerintah (SAKIP) di Pemerintah Daerah. *Jurnal Akuntansi dan Keuangan Indonesia*, 10(2), 184-205. <https://doi.org/10.21002/jaki.2013.10>
- Somers, M. J., & Birnbaum, D. (1998). Work-related commitment and job performance: it's also the nature of the performance that counts. *Journal of Organizational Behavior*, 19(6), 621-634. [https://doi.org/10.1002/\(SICI\)1099-1379\(199811\)19:6%3C621::AID-JOB853%3E3.0.CO;2-B](https://doi.org/10.1002/(SICI)1099-1379(199811)19:6%3C621::AID-JOB853%3E3.0.CO;2-B)
- Sugioko, S. (2007). Faktor Pemediasi pada Pengaruh Partisipasi Anggaran terhadap Kinerja Pejabat Struktural Perguruan Tinggi. *Akuntabilitas*, 7(1).

- Tangen, S. (2004). Performance measurement: from philosophy to practice. *International Journal of Productivity and Performance Management*, 53(8), 726–737.  
<https://doi.org/10.1108/17410400410569134>
- Yudianti, F. N., & Suryandari, I. H. (2015). Internal Control and Risk Management in Ensuring Good University Governance. *Journal of Education and Vocational Research*, 6(2), 6–12.  
<https://doi.org/10.22610/jevr.v6i2.183>

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