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## Investigation On Key Factors Promoting Internal Control Implementation Effectiveness In Higher Education Institution: The Case Of Indonesia

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### ABSTRACT

This study aims to investigate the key factors promoting internal control implementation effectiveness in Indonesian Higher Education Institutions (HEIs). This study uses a qualitative approach by employing interviews as data collection technique. 13 informants were involved, consisting of management members of internal control unit, top management of HEI, and HEI accreditation assessor. The results reveal that to achieve effective implementation of internal control, seven key factors must be considered, including: (1) Management and foundation roles; (2) Awareness of all organization members; (3) Sufficient and competence of human resources; (4) Internal auditor attitude; (5) Organizational climate; (6) IT support; and (7) Funding support. The results of this study address research gaps related to internal control studies in the context of HEI, especially in developing countries, which according to Chalmers et al. (2019) still gets very little attention by accounting scholars.

**KEYWORDS:** Key Factors; Internal control; Higher Education Institutions; Indonesia.

## INTRODUCTION

Today, the issue of strengthening good governance practices in Higher Education Institutions (HEIs) continues to be a concern, especially amid the ranking and accreditation era. As suggested by some prior studies, internal control has significant role to enhance organizations performance (Al-Thuneibat, Al-Rehaily, & Basodan, 2015; Rosman, Shafie, Sanusi, Johari, & Omar, 2016; Zhou, Chen, & Cheng, 2016). However, efforts to pursue the quality of HEIs, that eventually influences ranking and accreditation position, can be hampered by corruptions that might still occur in HEIs. Indonesia Corruption Watch (ICW) has reported that the education sector was one of the ten most corrupted sectors in Indonesia during 2015 to 2019 with state losses reaching Rp 41.09 billion (Ramadhan, 2020). The corruption scandals very likely impact on the low achievement of value for money target in the HEIs. Accordingly, the corruption made the HEI budget useless and was not used optimally for the sake of improving performance and quality (Sofyani, Abu Hasan, & Saleh, 2021). To address this serious problem, strengthening governance practices through improving internal control effectiveness is being Indonesian government concern. This is manifested by the ratification of regulations related to the implementation of the internal control system at HEI through the Indonesian Regulation of National Education Minister Number 16 of 2009.

According to Committee of Sponsoring Organizations of the Treadway Commission (COSO), Internal Control is defined as:

“a process, effected by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.” (COSO, 2013, p. 3).

The internal control implementation is said to be effective if five components of its mechanisms: control environment, risk assessment, control activities, information and communication, and internal control monitoring; have been developed and implemented together in an integrated manner (COSO, 2013; Doyle, Ge, & McVay, 2007; Hermanson, Smith, & Stephens, 2012). Some studies concluded that internal control implementation has played crucial role in mitigating fraud in an organization. Zakaria, Nawawi, and Salin (2016) argued that internal control weaknesses can be major contributing factors for committing fraud. Thus, Nawawi and Salin (2018) suggested that to minimize the risk of occupational fraud committed in the organization, a strong internal control implementation is a necessary. Likewise, Rendon and Rendon (2016) claimed that to mitigate fraud, the organization needs to improve effective internal control implementation within the organization.

However, through systematic literature review paper published in Journal of Accounting Literature, Chalmers, Hay, and Khlif (2019) suggested that studies related to internal control issues in sectors other than companies, including HEI, especially in developing countries setting, received very limited attention from academics, especially from accounting circles. In the HEI context, several studies related to the role of internal control implementation have been carried out, namely in Taiwan by Duh, Chen, Lin, and Kuo (2014) and in Somalia by Abdullahi, Abdullahi, and Muturi (2016). These studies have the same findings that internal control significantly improves HEI's financial performance. Additionally, in Indonesia, the latest internal control research was undertaken by Sofyani et al. (2021). They found that internal control implementation contributes to improving accountability practices and mitigating fraud in HEI. To date, nevertheless, very little is known about the factors that drive the effective implementation of internal control in HEI. This issue is urgent to address since the benefits promoted by internal control would only be obtained by the organization

if this policy is implemented effectively, not limited to meeting the demands of regulators. Thus, to meet this gap, this study was executed.

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This study explicitly aims to explore qualitatively the key factors (determinants) that trigger the effective implementation of internal control in HEIs. The difference between this study and previous studies is in the context of HEI which is still rarely studied, especially in developing countries such as Indonesia (Chalmers et al., 2019). This research, although relatively simple, has theoretical and practical contributions worth considering. For the development of the body of knowledge, this study adds literature related to internal control, especially in the not-for-profit-organizations sector which according to Chalmers et al. (2019) needs to be studied further, especially in the context of developing countries as this study did, namely Indonesia. At the same time, this study presents key factors that are important for HEI management to consider in pursuing effective internal control implementation, which in turn would result at improving good governance practices, performance, and mitigating potential fraud at HEI.

## METHOD

### Research Design, Sample Size, and Informants

This research was conducted by using qualitative method with interview as data collection technique. Specifically, this study adopts basic interpretive and descriptive qualitative research approach. The interpretive paradigm and qualitative approach were employed considering that this study aims to explore a certain phenomenon that occurs within the organization through exploring experiences and opinions of actors who become research informants. Smith (2019) wrote that investigation on accounting innovations might be particularly unsuitable to quantitative approach. According to Francis et al. (2010), the sample size for study using interview method should be determined by data saturation by which is generally achieved after ten interviews. However, Benbasat, Goldstein, and Mead (1987) and Yin (2009) suggested to achieve sufficient variation across the samples to get better results in qualitative study. As such, category of HEI is considered in determining sample size in this study. Considering these justifications, 11 different HEIs based on category were involved as the samples and 13 informants were interviewed. Thus, this study has met the ideal number of samples and interviews for qualitative research as suggested by those mentioned scholars.

According to Oliver (2013), the informants for particular research purpose should be very specific. The informants should have experience and special insight into the research questions. Hence, the informants involved in this study are considered knowing the internal control implementation comprehensively in HEIs, namely head or management member of internal control unit. In case the HEIs do not have internal control unit, core management members of HEI are involved. They were selected due to their specific knowledge in answering questions of interview (Sekaran & Bougie, 2016). Nevertheless, one assessor of HEI accreditation board was also invited as additional informant to confirm the findings obtained from the key informants from HEI. In detail, the informants of this study consist of 10 internal control head/management member, two HEI top management members and one HEI accreditation assessor.

## JRAK Data Collection

11.3 The interview is employed to obtain data related to informants' experience in overseeing internal control implementation in their HEIs (Marshall & Rossman, 2014). The key interviewees are chosen based on their willingness (voluntary). In this study, three interview

modes are provided: face to face, video conference and telephone. All interviews were recorded using audiotape after get permission by the interviewee. In addition, all interviewees have signed a consent letter as evidence of their voluntary and the interview has been conducted. Most interviews lasted 45-60 minutes, but few of them have taken little bit longer since some issues needed to be explored further.

### **Administration and Course of Interview**

For conducting the interview, interview protocol was prepared as a guidance. It is used to ensure that all issues intended for the research were covered in each of the interviews. The interview questions are developed exploratory and open-ended with keywords to ask investigation questions and follow-up questions (Rikhardsson & Dull, 2016). Such approach allows interviewees providing opinions and perception in their own words. Also, it allows informants to discuss other topics, as long as the issues in the interview guide were addressed.

Due to massive COVID-19 spread during the data collection process, most interview sessions were conducted online by using teleconference. Only two interviews that obtain approval for face-to-face mode and conducting in interviewees' office by strictly implementing the COVID-19 protocol. Moreover, during online interviews, a ZOOM software was utilized because it is felt user friendly and has been used often by all online interviewees. All interviews were recorded using an audio recorder device and features in the ZOOM software. A double recording was performed so that a backup of the recording could be made.

### **Interview Data Analysis**

Qualitative data collected through interviews were in the form of video or audio files and saved in a digital recording device. These data were subsequently transcribed by the researchers to convert the data into text, which enabled the application of text analysis. Then, the text data were analyzed using the interpretive approach narratively, consisting of data reduction, data display, and the drawing of conclusions (Miles & Huberman, 1992; Sekaran & Bougie, 2016). An inductive thematic analysis proposed by Braun and Clarke (2006) was performed to interpret the text data. It is a systematic way to identify all the main concepts that emerge in the interviews, and then trying to categorize and develop those concepts into common themes. The qualitative data in this thesis were analyzed using an interactive model (Miles & Huberman, 1994). The processes consist of three main activities: Data reduction, data display, conclusion drawing, and verification from initial activities. For data quality assurance, four tests of interview data would be conducted, it consists of: credibility, transferability, dependability, and confirmability (Guba & Lincoln, 1989; Long & Johnson, 2000; Morse, Barrett, Mayan, Olson, & Spiers, 2002). A Nvivo 12 plus software was used to help data analysis process.

## **RESULTS AND DISCUSSIONS**

This study found the determinants which are perceived as critical by informants in attaining the effectiveness of internal control implementation in HEI including (1) Management and foundation roles; (2) Awareness all organization members; (3) Sufficient and competence of human resources; (4) Internal auditor attitude; (5) Organizational climate; (6) IT support; and (7) Funding support. Further explanation of the seven determinants highlighted above is presented in the following paragraphs.

### Management and foundation roles

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It was found that commitment and real support from the HEI management are the reasons most frequently mentioned by informants in all interviews as key factor to achieve effective implementation of internal control policy. As an example, the IC2 informant argued:

"Alhamdulillah, our leader (rector) is very supportive (for internal control implementation). So, whatever the internal control unit does, it is supported. When there are things like fraud or discrepancies regarding the use of HEI money, for example markup, the price is too high, then, I reported these findings to the leader, and our leader always followed up the report. Following up means that later he (rector) will reprimand the PPK (Pejabat Pembuat Komitmen/Commitment Maker Official) or the executor to amend the prices" (IC2.PUB.KSF3)

In addition, for private HEIs specifically, support from the foundation is also critical. Some informants expressed that when their leaders are indifferent, only delegate tasks or appoint officials for internal control unit without providing material and moral support, it is difficult for the internal control team to ensure that this policy runs ideally. In some extent, the HEI management in private HEIs often experience a conflict of interest with foundation. The conflict comes up when the foundation wanting to accumulate wealth through HEI while differently management wants HEI to concern with quality education and sustainable HEI development. As such, this conflict results at cutting or even disapproving certain budget for internal control implementation by the foundation. Consequently, control activities at HEI are not run properly. This situation clearly indicates that the commitment and support from foundation is lacking. Below is selected interview excerpt regarding conflicts of interest between HEI management and the foundation.

"...There are several conflicts of interest in our place (HEI) because the orientation of the manager and the owner (foundation) is often contradictory.... This situation promotes certain problem that is the limitation of financial management by the foundation, including a budget for internal control implementation." (IC3.PVT.OQ6)

### Awareness and support of all organization members

The interview results also pointed out that the awareness of organizational members on the importance of internal control implementation is another crucial factor in supporting the success. In fact, the internal control unit is only tasked with formulating policies and evaluating the implementation of internal control. Meanwhile, in practice, the policy is implemented by all elements and members of the organization. For example, the internal control implementation part that should be done by HEI management at all levels are formulating plans and budgets, preparing, and delivering accountability. Therefore, if the awareness is only on the part of internal control unit and top management, while that of the middle and lower levels of management and individuals is low, then the effectiveness of internal control implementation is difficult to achieve. The IC5 informant argued:

"...the second (key success factor) for us at the internal control unit, we also need the support of lecturers and other education staff. In my opinion, as a leader in the internal control unit, I feel that not the entire academic community is welcome with the internal control policy, especially related to financial matters, for example..." (IC5.PUB.KSF8)

**JRAK**  
**11.3**

### Sufficient and competence of human resources

Furthermore, the results found that sufficient number and competence of human resources who responsible to oversee internal control are indeed crucial factors in the implementation

of internal control. Many informants admitted that it was difficult to implement internal control because of the limited number of human resources. However, this situation is a dilemma for private HEIs especially as they must pay attention to the financial condition if they want to recruit new employees. In private HEIs, new employees recruited means a new financial burden for paying new salary. As an example, the IC5 informant claimed:

“The internal control unit here only consists of head and secretary, no staff. However, in fact, the work of the internal control unit is everywhere (a lot) ... We do not even have an office. Such is the situation here... I think this is also experienced by internal control units in several other Islamic-based public HEIs like us. The problem is the same, limited human resources” (IC5.PUB.KSF12)

### **Internal auditor attitude**

Furthermore, the interviews also found that internal auditors often encounter a dilemma where they must audit activities carried out by all management at all levels on HEIs. It is because in fact the management is their co-workers. This situation then gave rise to the so-called as a peer audit dilemma. In such situation, a humble, friendly, and cooperative attitude owned by internal auditor is needed. Some informant argued that many management members at the middle and lower levels at HEI, who incidentally auditees, see internal auditors as “internal police”. This view sometimes results in a less harmonious relationship between auditees and auditors, and further results in the ineffective implementation of internal control. It is because the effectiveness of internal control policy depends on the cohesiveness of all parties in HEI to commit to implementing internal control. For example, when the internal control team formulates policies for budget review, budget authorization, and monitoring of KPIs, the cooperation of the auditee is needed so that the budget that is not optimally absorbed and the KPIs that have not been achieved can be followed up. However, when the relationship between the auditor and the auditee is not harmonious, the auditee will be indifferent to the recommendations of the internal auditor team. The IC11 informant argued:

“We take a soft approach like humble, friendly, and cooperative attitude ... sometimes I also like to joke.... Such approaches make them (auditees) willing to cooperate... I tell them that we are not the police.... The more "hostile" they are, the less likely they are to be audited... Alhamdulillah, what we have done so far has been successful. Maybe because I was not too fierce. In this campus a sense of kinship is prioritized.” (IC11.PVT.KSF16)

In addition to soft approaches, it is also important for internal auditors to have a firm attitude. It aims at control activities at HEI can run according to the predetermined objectives. However, this firm attitude can sometimes trigger disharmony. Nevertheless, if accompanied by a humble, friendly, and cooperative attitudes, the potential for disharmony due to a peer audit dilemma situation might be reduced. The IC2 informant claimed:

“If the chief auditor is calm (not firm), the employees work a little more relaxed... Firmness is needed. So, employees will be targeted, for example this (certain job) must be completed tomorrow, or a week, it must be done. Even though they continue to nag and nag, with their nagging, employees are motivated to perform, that is my experience” (IC2.PUB.KSF17)

### **Organizational climate**

Moreover, this study found that organizational climate is an equally important factor to support the effectiveness of internal control implementation. The climate found in this study are open climate and familiar climate (Halpin, 1971). Where open climate refers to a situation where members of the organization feel happy to work, cooperate with each other and there

is openness, the familiar climate implies a high sense of camaraderie between leaders and members (Halpin, 1971). The IC11 informant indicated:

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“We are trying to make the work environment as comfortable as possible on campus. Because we will linger there, as second home. If we create conflict, how unpleasant it would be when we linger. So, I always tell my friends (staff and lecturers) ... what is it called... I give them a positive influence to strengthen each other's brotherhood. I put it in terms, we are one unit, one workplace, which means we are brothers. As I mentioned earlier, second home. So, communication is also not rigid here, and then good relations are also going well. Alhamdulillah, such good culture is up to the management level... although we realize that there are indeed limitations. When we are serious about work, we are aware of the position of superiors and subordinates. But when we are outside of work, we usually joke with each other. So, by doing so, the work atmosphere is carried out well.” (IC11.PVT.KSF18)

### **IT support**

Some informants felt that the task of overseeing the internal control implementation was hard when it was done manually. One informant claimed that the poor IT development at the HEI she worked had hampered the implementation of internal control. One of some informants (IC1) declared:

“...the role of IT is very vital..., the nature of IT is speeding up work.... In addition, IT is integrating data between units at HEI... if there is no data integration, it will be very difficult... it will take time for the internal audit process.” (IC1.PVT.IT-ICC1)

While the IC12 informant argued:

“With IT, work can be completed faster... it is also easier to carry out internal audits...” (IC12.PVT.IT-ICC2)

Besides, informants from HEI accreditation assessors (HA2) also indicated that today IT has become a basic and absolute necessity. IT can help HEI to be more agile and faster in executing activities and adjusting changes in the environment. The HA2 informant argued:

“Supporting systems with IT, in my opinion is absolute (must) due to the current situation. It has become a demand. We cannot all activities be too slow.... we need a fast-executing policy, and this is with us having to look at the data. We can no longer run a university without looking at, for example, risk-based management.... Hence, with IT we can achieve efficiency and speed.” (HA2.IT-ICC5)

### **Funding support**

It is undeniable that funding is a very crucial thing in an organization. Whatever policy is made, the funding is needed. This is what the informants also feel in carrying out internal control policy. The implementation this kind of policy, of course, requires a clear allocation of funds, for example, to establish internal control unit, appoint employees, recruit auditors, provide performance incentives, and so on. The IC10 informant argued:

“Alhamdulillah, because we are a fairly large university, the funds for the implementation of the internal control were indeed given in large amounts. Whatever we asked for, it was given. But, of course, we (internal control team) also must show output performance which must be in accordance with the funds given...” (IC10.PVT.KSF6)

## Discussions

This study pointed out seven key factors that play an important role in promoting the effective internal control implementation in HEI, they consist of (1) Management and foundation roles; (2) Awareness all organization members; (3) Sufficient and competence of human resources; (4) Internal auditor attitude; (5) Organizational climate; (6) IT support; and (7) Funding support. As such, the current study results are in line with several studies. This research is consistent with Akbar, Pilcher, and Perrin (2012) suggested that to achieve effective performance measurement system implementation in government institutions, management's commitment through good leadership was found to be a major contributor. Similarly, Ahyaruddin and Akbar (2016) uncovered that the management plays an important role in gaining good performance and accountability in local government.

Moreover, Pratolo, Sofyani, and Anwar (2020) suggested that the organizational commitment and competence of HEI leaders were the key success factors of effective performance-based budgeting policy implementation in HEI. However, they emphasized that management positions in many HEIs in Indonesia seems elite and more as political positions rather than professional. So, in some HEIs, the struggle for sitting the management positions at all levels is fierce. This situation brings negative impact that is often people who win the selection of management positions at the middle and top levels at HEI are not sufficiently competent. Consequently, the performance-based budgeting policies do not work as they should. It triggers a performance-based budgeting policy that has no significant impact on HEI. The same condition is also very likely to occur in the context of the internal control implementation since almost all informants agreed that the commitment and competence of HEI leaders are the key factors for the success of these two policies. In addition, this study finding is also in line with a study by Mihret and Yismaw (2007) that the management support with resources and commitment to implement the internal audit recommendations is essential in getting internal audit effectiveness in public HEIs in Ethiopia.

On the other hand, in addition to management, this research reveals a new finding that the role of the foundation is also crucial. This is because if HEI management faces a conflict of interest with the foundation, then goal congruence between the two parties will not be established. The impact is the decline in the quality of HEI governance, especially in terms of internal control implementation. This finding is crucial for scrutiny, especially for regulators, considering that several informants expressed that the HEI Foundation often only positioned HEI as a money-making machine. In the end, HEI's operations were only limited to complying with regulations. This has an impact on the formality of the implementation of HEI governance, including the internal control implementation. This kind of practice will only lead to fake compliance (Cohen, Krishnamoorthy, & Wright, 2008), and the objectives of implementing internal control, such as strengthening governance and mitigating corruption, will be difficult to achieve. Moreover, as the foundation role is rarely discussed in literature, this research presents a new contribution to the body of knowledge, particularly about the HEI governance issues in developing country context. The focus of governance studies in the HEI sector is often elaborated on the role of management and organizational issues rather than the position of the foundation as the owner of private HEIs.

Hereafter, awareness of the middle and lower levels of management and all employees at HEI also plays an important role in achieving effective internal control implementation. It is because in practice, the two policies are implemented by all elements within the organization, not partial. This result is in line with Yudatama, Hidayanto, Nazief, and Phusavat (2019) that the awareness of organizational members is needed to achieve a successful IT governance



implementation within organization. In different context, a research by Dwianika, Murwaningsari, and Suparta (2020) also found the similar suggestion that water awareness has a significant role in improving the sustainability of firm's performance in urban areas in Indonesia.

Furthermore, sufficient and competence of human resources who are responsible for overseeing internal control is also significant issues to consider in pursuing the effectiveness of the implementation of these two policies. Sufficient number of staff is important to consider so that all work related to internal control can be handled properly. Sufficient team formation is also to prevent job overload which has implications for disrupted employee performance (Karatepe, 2013). Meanwhile, competence employee means the employee have intelligence, education, and training to provide added value to the organization through performance (Chambers, 2014). Kabuye, Nkundabanyanga, Opiso, and Nakabuye (2017) found that the competence of internal auditors plays an important role in the effective fraud management of financial services companies. Gramling and Myers (1997) argued that internal auditor certification is considered a signal of a significant level of competence and is important for advancement within the internal audit department. Additionally, Harrington (2004) suggested that attributes related to competencies such as education, experience, and professional certification, in addition to computer and communication skills, are things that must be considered in recruiting internal auditors into the organization.

Next, further important findings indicate that the success of internal control stems from effective internal audit practices. Improving the effectiveness of internal control implementation requires audit reports which are then followed up. To achieve that, the attitude of the internal auditor is considered very crucial. In this research, it was found that the soft approach like humble, friendly, and cooperative attitude shown by internal auditors when carrying out evaluations of meeting standards and achieving performance and accountability is an important determinant of realizing goal congruence between auditees (HEI management) and internal auditors. Consequently, such situation is able to promote effective internal control. This finding is a meaningful input considering that in several cases the management of HEI as the auditee views the internal auditors at HEI as being external auditors. As a result, the auditee sometimes tends to avoid and even "antagonize" the internal auditor. In fact, in essence, the internal auditors are partners who help HEI management to strengthen governance practices and avoid asset management that does not add value, as well as mitigate potential fraud. This finding is in line with Sarens and De Beelde (2006) that senior management wants internal audit team to compensate for the loss of control they experience due to the increasing complexity of the organization. Senior management also expects internal audit team to fulfill a supporting role in monitoring and improving risk management and internal control and wants them to monitor corporate culture. Furthermore, they expect internal audit team to be a training ground for future managers. Developing it, this finding provides new insight into the role of internal auditors' attitudes in promoting effective internal control since discussions on this issue are still scarce in the existing literature.

Farther, this study also highlights the importance of organizational climate in attaining effective internal control. The first significant climate type found in this research is an open climate that is the situation where members of the organization feel happy to work, cooperate with each other and there is openness among the organization members (Halpin, 1971). While the second one is familiar climate which is related to a high sense of brotherhood between leaders and members, but at a professional level that is outside of work (Halpin, 1971). This finding affirms research by Jing, Avery, and Bergsteiner (2011) who found that

supportive climates tend to be associated with higher organizational performance in small retail pharmacies including financial performance, staff satisfaction, customer satisfaction, and may reduce staff turnover. In the current study context, in simple terms, harmonious relationship between auditors and auditees will support good communication and coordination to achieve effective internal control implementation.

Next, the results of this study also confirm many research results that IT support is pivotal in supporting the implementation of internal control (Grant, Miller, & Alali, 2008; Rubino, Vitolla, & Garzoni, 2017). Finally, this research discovered that the funding is no less important factor to reach effective internal control implementation. This is very logical as several informants stated that the governance policy at HEI obviously requires funding support. This finding is in line with Doh, Jang, Kang, and Han (2018) that research funding have a significant effect on academic researchers performance in South Korea.

## CONCLUSION

This study aims to investigate the determinants of the effectiveness of the implementation of internal control in HEI. The results show that there are seven key factors that affect the effectiveness of internal control at HEI Indonesia, including: (1) Management and foundation roles; (2) Awareness of all organization members; (3) Sufficient and competence of human resources; (4) Internal auditor attitude; (5) Organizational climate; (6) IT support; and (7) Funding support. These results serve as input for practitioners regarding aspects that must be considered to promote effective internal control at HEI. This is crucial to consider in improving good governance practices at HEI.

This research certainly has some limitations. Firstly, as the nature of qualitative research is weak in terms of external validity (generalizability), the reader needs to keep this note in mind in concluding this study. Therefore, further research can empirically test with a survey approach whether the determinants found in this study statistically influence the effectiveness of internal control in HEI. Secondly, exploration the effectiveness of internal control implementation in this study is only limited to the perceptions of informants. Meanwhile, whether specific indicators have been fulfilled to conclude the internal control policy is already run effectively, are not measured. Therefore, future studies are suggested to take advantage of the survey method, by asking for indicators of the effectiveness of internal control through prepared questionnaire. From there, quantitative data will be obtained that are useful for explaining the level of effectiveness of the implementation of internal control in numerical unit.

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