

# Evaluation of the Internal Control System over Raw Material Purchases at the BIG DONAT Cake Production MSME in Makassar

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This research aims to evaluate the internal control system for raw material purchases at MSME Big Donat in Makassar using the COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework approach. This study is crucial as internal control plays a strategic role in ensuring operational effectiveness and efficiency, including the raw material purchasing process, which is a key factor in production. A descriptive qualitative approach was employed, with data collected through interviews. The primary informant in this study was the business owner. Data were analyzed based on the five main components of the COSO framework: control environment, risk assessment, control activities, information and communication, and monitoring.

The findings indicate that the internal control system at MSME Big Donat is operational in practice but not yet fully compliant with COSO standards. The control environment is considered quite good, with an organizational structure and strong work ethic values; however, it is not yet supported by written standard operating procedures (SOPs) or job descriptions. Risk assessment is conducted directly by the business owner without formal documentation. Control activities, such as purchase authorization and goods inspection, are performed but lack standardized purchase forms and written procedures. Information and communication are carried out informally without a standardized recording system. Monitoring is conducted routinely by the owner but is not yet documented in the form of evaluation reports. This research provides a real-world illustration of internal control conditions in food-sector MSMEs and offers recommendations for improvement to MSME Big Donat in enhancing the effectiveness of its internal control system in accordance with COSO standards.

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## 1. Introduction

The effectiveness of internal control systems plays a crucial role in ensuring the operational success of organizations, including Micro, Small, and Medium Enterprises (MSMEs). In the context of MSMEs, raw material procurement is a critical area that directly affects production quality, efficiency, and cost management. Weaknesses in internal control during the purchasing process can lead to significant operational risks such as financial losses, poor product quality, and production delays.

MSME Big Donat, a growing MSME in Makassar operating in the food production sector, serves as the focus of this research. Observations suggest that, like many MSMEs, Big Donat has limited formal procedures in place to regulate its purchasing activities. Most control practices rely on the owner's direct supervision without supporting documentation such as Standard Operating Procedures (SOPs), formal risk assessments, or systematic monitoring mechanisms.

Given the strategic importance of internal control in business sustainability, especially in the procurement function, evaluating the internal control system at MSMEs Big Donat is essential. This study adopts the COSO (Committee of Sponsoring Organizations of the Treadway Commission) internal control framework as the analytical basis for this evaluation.

### 1.1. Background

The research is motivated by the growing recognition that MSMEs often struggle to implement formal internal control mechanisms. While internal controls are widely studied and applied in large organizations, their adoption within MSMEs, especially in Indonesia, remains underdeveloped.

The COSO framework, which consists of five main components including control environment, risk assessment, control activities, information and communication, and monitoring, provides a comprehensive guideline for evaluating internal control systems. However, previous studies, such as those by Bokings and Lestari (2024) and Krismahayani, Parnata, and Suwintana (2021), reveal that many MSMEs still rely on informal control practices with minimal documentation and structured procedures.

Observations at MSMEs Big Donat indicate similar issues, including a lack of documented SOPs for raw material purchasing, absence of formal risk identification processes, and limited use of standardized forms for transaction recording. These factors highlight the need for a detailed evaluation of the company's internal control system to identify existing weaknesses and recommend improvements aligned with COSO standards.

### 1.2. Problem Statement

Based on the background described, the research questions formulated in this study are as follows:

- 1) How is the internal control system for raw material purchasing implemented at BIG DONUT MSMEs in Makassar?
- 2) Is the internal control system effectively operating in accordance with the principles of the COSO framework?
- 3) What are the weaknesses found in the internal control system over raw material purchasing at BIG DONUT MSMEs, and what improvements can be made?

### 1.3. Objectives and Scope

The objectives of this study are:

- 1) To analyze the implementation of the internal control system for raw material purchasing at MSMEs Big Donat in Makassar.
- 2) To evaluate the effectiveness of the current internal control system based on the COSO internal control framework.
- 3) To identify weaknesses in the existing system and provide recommendations for improvement.

This research is limited to evaluating the internal control system related specifically to the

purchasing of raw materials at MSMEs Big Donat. It does not cover other operational areas such as sales, production, or inventory management beyond procurement processes. Data collection focuses on interviews with key personnel, observations of operational activities.

## 2. Literature Review

### 1) Internal Control System

An internal control system is a process involving management and business staff designed to provide reasonable assurance regarding the achievement of three objectives: effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations (COSO: 1992). Control is a process executed by management to reduce risk to the lowest and most acceptable level.

### 2) COSO Internal Control Components

COSO (2014) defines five main components of internal control, which are:

- Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring

#### 2.1. Related Work

Several prior studies have addressed the evaluation and implementation of internal control systems in Micro, Small, and Medium Enterprises (MSMEs), particularly in the area of raw material purchasing and internal control using the COSO framework.

- 1) Krismahanayani et al. (2021) evaluated the internal control system at PT Bali Kulina Utama. They found that while the company had implemented some control components, such as information and communication, weaknesses still existed, particularly in the control environment and risk assessment components, which lacked systematic documentation and task rotation. This condition is similar to findings at MSMEs Big Donat, where risk assessment is conducted informally without written procedures.
- 2) Andini and Kurniawan (2024) studied control activities in the inventory purchasing system at PT Gaya Sukses Internusa (GSI). Their research highlighted that the lack of task segregation and formal procedures was a significant issue, leading to weaknesses in control activities. Similarly, at MSMEs Big Donat, there's still a concentration of control functions in the hands of the owner, without formal separation of duties.
- 3) Bokings and Lestari (2024) analyzed the accounting system for raw material purchases at MSMEs Donat Buah Cimahi. Their study showed that organizational structure and financial documentation were still lacking, mirroring observations at Big Donat, where formal organizational and documentation structures are also minimal.
- 4) Zalfa and Arief (2021) examined internal control based on the COSO framework at PT Chitose Internasional Tbk. They found that while the company had adopted ERP-based control systems, weaknesses remained in areas like SOP updates and task segregation. This contrasts significantly with Big Donat, which still relies entirely on manual processes and lacks formal documentation.

#### 2.2. Research Gap

Based on the analysis of previous studies, most research on internal control systems in MSMEs has primarily focused on general aspects such as financial reporting, overall organizational control, and inventory management. Although several studies have applied

the COSO framework, most of them have concentrated on specific components, such as control activities or monitoring, without conducting a comprehensive evaluation of all five COSO components in the context of raw material purchasing.

Moreover, there is still a lack of studies that comprehensively assess how each component of the COSO framework is implemented within the purchasing processes of MSMEs. Empirical research that systematically evaluates internal control weaknesses based on the five COSO components control environment, risk assessment, control activities, information and communication, and monitoring. Particularly in the context of food-sector MSMEs in Makassar, remains very limited.

Therefore, this study aims to fill this research gap by conducting a comprehensive evaluation of the internal control system for raw material purchasing at MSMEs Big Donat in Makassar. By using the COSO framework as the analytical tool, this research is expected to provide deeper insights into specific weaknesses and improvement opportunities in the internal control system of raw material procurement in MSMEs.

### 3. Methodology

This research adopts a qualitative descriptive approach to evaluate the internal control system for raw material purchasing at MSME Big Donat in Makassar. This research design was chosen because it allows for an in-depth exploration of control practices and provides a comprehensive understanding of the phenomena being studied. The methodology aligns with the research objectives, which focus on analyzing and evaluating the implementation of internal controls based on the COSO framework.

#### 3.1 Data Collection

The primary data for this study were collected through interviews. Semi-structured interviews were conducted with the business owner and key personnel involved in the purchasing process. The semi-structured format allowed the researcher to explore key themes while providing flexibility for the respondents to elaborate on their experiences.

#### 3.2 Analysis Techniques

The data analysis was conducted using content analysis, categorizing the collected information according to the five components of the COSO internal control framework: control environment, risk assessment, control activities, information and communication, and monitoring.

Each COSO component was analyzed by comparing the actual practices observed at MSME Big Donat with the standard COSO criteria. The analysis aimed to identify areas of compliance and significant weaknesses in the internal control system.

#### 3.3 Validation

To ensure the validity and reliability of the data, cross-checking was conducted between information obtained from interviews. Member checking was also carried out by presenting the preliminary findings to key informants, especially the business owner, to verify the accuracy of the researcher's interpretations.

## 4. Results and Discussion

### 4.1 Key Findings

#### 4.1.1 Control Environment

The control environment at MSME Big Donat reflects the owner's strong leadership and personal involvement in day-to-day operations. Although there is no formal organizational chart or written job descriptions, roles and responsibilities are understood informally among staff. The owner also instills discipline and ethical values by monitoring employee performance and providing direct instructions.

However, the absence of documented Standard Operating Procedures (SOPs) and written policies creates a control environment that relies heavily on personal oversight rather than systematic management.

#### 4.1.2 Risk Assessment

Risk assessment at MSME Big Donat is conducted in an informal manner. The owner is aware of potential risks, such as delays in raw material delivery, price fluctuations, and variations in raw material quality. However, there is no formal process for identifying, evaluating, and documenting these risks.

The company does not conduct periodic risk assessments or prepare risk mitigation plans. As a result, the ability to anticipate and proactively manage procurement risks remains limited.

#### 4.1.3 Control Activities

The purchasing process is centralized, with all decisions and approvals handled directly by the business owner. The owner compares prices from multiple suppliers before making purchasing decisions as a form of cost control.

Every incoming raw material is physically inspected by both the owner and warehouse staff to check quantity and quality before acceptance. Payments are made exclusively via bank transfer to minimize cash handling risks.

#### 4.1.4 Information and Communication

Communication regarding raw material purchasing is conducted verbally or through instant messaging platforms such as WhatsApp. There is no formal reporting line or information system in place for tracking procurement activities.

Purchasing and financial transactions are recorded manually in a notebook (cash book), and there is no use of computerized accounting software. This method limits data accuracy and accessibility, especially for decision-making and audit purposes.

#### 4.1.5 Monitoring

Monitoring of the raw material purchasing process is carried out directly by the business owner on a daily basis. The owner routinely checks inventory levels, monitors supplier performance, and reviews purchasing activities.

However, monitoring activities are not formally documented. There are no periodic evaluation reports or internal audit processes that assess the effectiveness of the internal control system over time.

### 4.2 Interpretation of Results

The findings indicate that MSME Big Donat has partially implemented internal control elements in its raw material purchasing process. The control environment and monitoring activities are relatively strong due to the owner's direct involvement. However, significant weaknesses exist in risk assessment, control activities, and information and communication components.

In relation to the research objectives, the study successfully identifies the current state of

internal control implementation at MSME Big Donat, highlights the deviations from COSO standards, and pinpoints the specific areas needing improvement.

The lack of formal documentation, absence of SOPs, and insufficient risk management processes pose potential risks to operational efficiency and financial accuracy. Therefore, improving these areas is essential for enhancing the overall effectiveness of the internal control system in MSMEs like Big Donat.

## 5. Discussion

### 5.1 Comparison with Prior Research

The findings of this study show that while MSMEs Big Donat has implemented several aspects of internal control in its raw material purchasing process, many practices remain informal and owner-dependent.

These results are consistent with the study by Bokings and Lestari (2024), which identified weaknesses in documentation and organizational structure in MSMEs within the food sector. Similarly, Krismahanayani et al. (2021) also found that MSMEs often lack written SOPs, documented risk assessments, and monitoring reports.

The finding that risk assessment at Big Donat is conducted informally aligns with Rahayu (2021), who also observed the absence of structured risk analysis in MSMEs. Furthermore, the lack of standardized purchasing documents is similar to the situation described by Andini and Kurniawan (2024) at PT GSI, where inadequate task segregation and formal control procedures weakened internal control activities.

### 5.2 Limitations

This study has several limitations. The research was conducted on a single case (UMKM Big Donat), which limits the generalizability of the findings to other MSMEs.

The primary limitation of this study lies in its data collection method, which relied solely on interviews with the business owner. The absence of other data collection techniques such as observation, document analysis, or quantitative surveys may have limited the depth and breadth of the findings.

### 5.3 Future Research

Future research is recommended to adopt a more comprehensive data collection approach by combining interviews with other methods such as observations, document analysis, and surveys. This mixed-method approach will help improve data triangulation and reduce potential biases arising from single-source information.

Additionally, future studies may consider involving multiple MSMEs across different sectors and regions to enhance the generalizability of the findings. A longitudinal study design can also be applied to observe the long-term effects of implementing internal control improvements based on the COSO framework.

## 6. Conclusion

This study evaluated the internal control system over raw material purchasing at BIG DONUT SME in Makassar using the COSO framework. The research concludes that the internal control system is practically effective due to the owner's close supervision and strong ethical leadership. However, several weaknesses were identified, particularly in the areas of formal documentation, risk assessment procedures, separation of duties, and information

systems.

The control environment and monitoring activities are relatively strong but informal. Risk assessment and control activities are carried out based on the owner's experience without systematic procedures. Information and communication rely on verbal instructions and simple digital tools without formal record-keeping.

In general, the internal control system at BIG DONUT SME shows a moderate level of effectiveness but needs improvement in formalization and standardization to reduce operational risks and improve procurement efficiency.

## 7. Recommendation

Based on the findings of this study, several recommendations can be proposed to enhance the internal control system for raw material purchasing at BIG DONUT. First, the company is advised to develop and implement formal Standard Operating Procedures (SOPs) related to the raw material purchasing process. Second, BIG DONUT should conduct a formal and systematic risk assessment. This process is crucial to help the company identify, document, and manage various potential risks that may arise during the raw material procurement process.

Furthermore, a clear separation of duties is needed between the ordering, receiving, and recording processes. This is essential to minimize the possibility of errors and fraud in the purchasing process. Lastly, BIG DONUT needs to strengthen its monitoring and documentation activities by creating checklists, control forms, or evaluation reports that can be used to routinely record monitoring activities. By implementing these recommendations, it's expected that BIG DONUT's internal control system will operate more optimally and reduce procurement-related risks.

## APPENDIX

### LIST OF INTERVIEW QUESTIONS EVALUATION OF THE INTERNAL CONTROL SYSTEM OVER RAW MATERIAL PURCHASES AT THE BIG DONT CAKE PRODUCTION MSME IN MAKASSAR

COSO Components	Interview Questions
Control Environment	<ol style="list-style-type: none"><li>1. Who is involved in the raw material purchasing process in this business?</li><li>2. Is there a clear division of duties in the purchasing activities?</li><li>3. Are there any written rules or policies regarding the purchasing procedures?</li><li>4. How does the owner supervise or control the purchasing activities?</li><li>5. Have employees ever received training related to the purchasing process or record-keeping?</li><li>6. What kind of work culture is established in this business, especially regarding honesty and responsibility?</li></ol>

Risk Assessment	<ol style="list-style-type: none"> <li>Are there any obstacles or risks frequently encountered in purchasing raw materials (such as delays, stock shortages, price increases)?</li> <li>How does this business anticipate the risk of fraud or misuse in the purchasing process?</li> <li>Does the business have any backup plans if the main supplier fails to meet the raw material needs?</li> <li>Has there ever been a purchasing error or loss due to damaged or non-conforming raw materials?</li> </ol>
Control Activities	<ol style="list-style-type: none"> <li>Who makes the decision to purchase raw materials? Is there any approval or authorization process?</li> <li>How is the recording done when raw materials are received? Are the quantity and quality checked beforehand?</li> <li>Is the purchasing done in cash or non-cash? Who is responsible for making the payments?</li> <li>Is there any price comparison between suppliers before making a purchase?</li> <li>Is there any Standard Operating Procedure (SOP) or written procedure related to raw material purchasing?</li> <li>Are all purchasing expenses recorded consistently?</li> </ol>
Information and Communication	<ol style="list-style-type: none"> <li>How is the raw material purchasing information recorded? Is it done using a book, an application, or only verbally?</li> <li>Is there regular communication between the owner and employees regarding raw material needs?</li> <li>If there are problems in the purchasing process, how do employees report them to the owner? Is information from suppliers (such as price, stock, quality) always updated and communicated to the relevant parties?</li> </ol>
Monitoring	<ol style="list-style-type: none"> <li>How often does the owner check the purchasing records or raw material inventory?</li> <li>If errors or irregularities are found in the purchasing process, what actions are usually taken?</li> <li>Has the business ever re-evaluated the suppliers used? Are there any improvements made from time to time in the purchasing system or its recording?</li> </ol>

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## REFERENCES

- [1] Abdullah, L. O., and Zulfa, S. I. 2024 Evaluasi sistem pengendalian internal atas pembelian bahan baku food and beverage PT Tri Sukses Prima *Kajian Ekonomi dan Akuntansi Terapan* 1(2) 286–305
- [2] Andini, A. A., and Kurniawan, S. 2024 Evaluation of control activities in the inventory purchasing system (Case study at PT. GSI) *Proc. The 7th International Seminar on Business, Economics, Social Science, and Technology (ISBEST) 4*
- [3] Ardianingsih, A., and Setiawan, D. 2023 *Audit Internal Berbasis Risiko* (Jakarta: Bumi Aksara)
- [4] Bokings T P O R and Lestari A Y 2024 Tinjauan sistem akuntansi pembelian bahan baku pada UMKM Donat Buah Cimahi *Jurnal Pendidikan Tambusai* 8(1) 745–752
- [5] Hery 2017 *Mahir Accounting Principles* (Jakarta: PT Grasindo)
- [6] Krismahayani, N. T., Parnata, I. K and Suwintana, I. K 2021 Analysis and evaluation of internal control accounting information system for purchase of merchandise and cash disbursements at PT Bali Kulina Utama according to the COSO framework approach *Journal of Applied Sciences in Accounting, Finance and Tax* 4(2) 168–172
- [7] Lakis, V., and Giriūnas, L 2012 The concept of internal control system: Theoretical aspect *Ekonomika* 91(2) 142–152
- [8] Nguyen, T. T., and Le, A. T 2021 The impact of internal control on performance of small and medium- sized enterprises in an emerging economy *Asia-Pacific Management Accounting Journal* 16(2) Article 13
- [9] Setyawan, B., Riwajanti, N. I., and Susilowati, K. D. S 2021 SME internal control: How is compliance with COSO framework? *Dinasti International Journal of Economics, Finance & Accounting* 2(2) 221–235
- [10] Untari, D. T., Satria, B., Khasanah, F. N., Perdana, T. S., Sukreni, T and Winarso, W 2023 The effect of internal control of raw material inventory and production process planning towards the production process and business competitiveness in halal food-based SMEs *Uncertain Supply Chain Management* 11(1) 71–76
- [11] Wangarry, A, R., Korompis, S. N., Rumambi, H. D., Kaparang, R and Pantow, A. K 2023 Analysis of the implementation of internal controls based on the COSO framework (Study on MSMEs in North Sulawesi) *Int. J. Acad. Res. Account. Finance Manag. Sci.* 13(3) 620–631
- [12] Zalfa, N and Arief, K 2021 Evaluasi sistem pengendalian internal atas sistem pembelian bahan baku berdasarkan kerangka kerja terintegrasi pengendalian internal COSO pada PT Chitose Internasional Tbk *Indonesian Accounting Literacy Journal* 1(2) 480–489