DEVELOPMENT OF A FINANCIAL DATA RECONCILIATION MODEL FOR NIGHT AUDITS TO IMPROVE FINANCIAL REPORT ACCURACY IN FOUR-STAR HOTELS IN MEDAN

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Abstract

This study aims to develop a more effective financial data reconciliation model to support night audit processes in four-star hotels in Medan. Financial data reconciliation is crucial to ensure accurate transaction records, thereby enhancing the transparency and integrity of financial reports. However, four-star hotels, with high transaction volumes, often face challenges in maintaining accurate data matching, which can stem from technological limitations and a lack of standardized recording procedures. This study uses a SWOT analysis approach to identify strengths, weaknesses, opportunities, and threats in the reconciliation process. Through in-depth interviews and documentation studies, the research develops a reconciliation model that considers the role of technology, staff training, and inter-departmental procedures. Findings show that applying anomaly detection technology and standardizing SOPs can improve efficiency and accuracy in night audit processes. This proposed model is expected to guide hotel management in enhancing financial report quality and supporting better decision-making. The study also provides both practical and theoretical contributions to developing financial reconciliation methods in the hospitality industry.

A. INTRODUCTION

In the era of globalization, the hospitality industry has experienced rapid growth, especially in popular tourist areas like Medan, North Sumatra. Four-star hotels have become a primary choice for travelers, offering complete facilities and high-quality service. However, with increased activity and transactions in four-star hotels, maintaining effective and accurate financial management has become a critical challenge. One of the essential components in financial management is the process of financial data reconciliation, which forms the foundation of transparency and integrity in financial reporting.

Financial data reconciliation is a crucial process to ensure that each recorded transaction aligns with the actual activities occurring across various hotel departments, such as front office, restaurants, and housekeeping. This process is not only about matching data but also about detecting and correcting potential errors or anomalies in transaction records. In the hospitality industry, especially in four-star hotels with high transaction volumes, data discrepancies can occur frequently, necessitating a more effective reconciliation effort.

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Despite its importance, reconciliation in four-star hotels faces several challenges, including limited systems, dependence on staff skills, and lack of anomaly detection technology. Many hotels still rely on manual methods, which are time-consuming and increase the risk of errors. This context highlights the need for a study that aims to develop a financial data reconciliation model to improve the accuracy and efficiency of the night audit process.

With growing demands for high-accuracy financial data, this research seeks to develop a more efficient financial data reconciliation model tailored to the operational needs of four-star hotels in Medan. By considering factors like technology, staff training, and procedural standardization, this study hopes to provide a practical solution to improve the quality of financial management in the hospitality industry.

Based on the background outlined, this research aims to:

1. Identify and analyze the current financial data reconciliation process implemented in four-star hotels.
2. Identify the factors contributing to data discrepancies in the reconciliation process across various hotel departments.
3. Develop a more effective and efficient financial data reconciliation model to improve the quality of night audits in four-star hotels.

Basic Concepts of Financial Data Reconciliation

Financial data reconciliation is the process of verifying and matching data from various sources to ensure the consistency and accuracy of financial statements. This process aims to identify and correct errors or inconsistencies in financial records, which in turn improves the reliability of the data for management decision-making.

According to Arens et al. (2014), reconciliation is a key element in financial auditing because it helps detect errors and discrepancies that may occur in daily transactions, especially in industries with high transaction volumes such as hospitality. Chen et al. (2016) emphasized that technologies, such as machine learning and anomaly detection, are increasingly important in the reconciliation process to automatically detect anomalies in financial data, which can help reduce manual workload and improve accuracy.

Night Audit and the Importance of Reconciliation in the Industry Hospitality

A night audit is a routine process conducted in hotels to check and match all daily transactions, including room reservations, restaurant bills, and other services, with the aim of ensuring that each transaction is recorded correctly. Night audits have an important function in maintaining financial transparency and integrity.

According to Hodge & Prawitt (2011), night audits in hotels allow auditors to examine daily transactions and detect discrepancies early, so that financial statements can be more accurate and reliable

Wortnik & Thompson (2009) also showed that regular monitoring through night audits supports customer experience management and hotel operations by improving the accuracy of recording and managing customer transactions.

Technology in Financial Data Reconciliation

Technology plays a crucial role in the modernization of the auditing process and reconciliation of financial data. In today's digital era, many organizations, including hotel. Start using automation software to reduce manual errors and improve the speed and efficiency of the reconciliation process.

Kogan et al. (2015) found that big data and analytics-based technologies can support the reconciliation process by providing real-time data analysis and detecting anomalous patterns in financial transactions. This technology helps speed up the reconciliation process and improve the quality of audit results. . Kuo et al. (2017) also noted that an effective accounting information system can improve financial performance in the hospitality industry through more accurate and transparent recording.

Agency Theory and Information Asymmetry in Financial Management

Agency theory describes the relationship between the owner (principal) and the manager (agent) in an organization. In the context of hospitality, managers act on behalf of hotel owners to manage resources, including finances. However, Jensen & Meckling (1976) noted that there is an asymmetry of information between the owner and the manager can lead to the risk of fraud. The reconciliation model developed in this study helps reduce these risks by increasing transparency in financial statements.

Practical Implications for the Hospitality Industry

1. Operational Efficiency: The implementation of an effective reconciliation model will help hotels improve operational efficiency through a more structured night audit process.
2. Improve Managerial Decisions: With more accurate and transparent data, hotel managers can make better financial decisions, which will ultimately support business strategies and improve hotel profitability.
3. Reduced Risk of Error and Fraud: These findings indicate that the application of technology in reconciliation can reduce the risk of adverse er 6. Suggestions for Further Research
4. Long-Term Studies: To gain further understanding, long-term studies can be conducted to monitor the effectiveness of the proposed reconciliation model over time.
5. Development of Specific Technology Models: The development of more specific technology systems, such as specialized software for night audits in the hospitality industry, can be a useful area of research.
6. Comparative Studies Between Regions: Adding hotels in different cities or other countries will help identify differences in financial reconciliation practices in the hospitality industry with different contexts.

B. RESEARCH METHOD

This introduction explains how the research is conducted using the SWOT approach to analyze internal and external factors that influence the study of financial data reconciliation in four-star hotels.

SWOT Analysis in Research Design

1. Strengths

   This section outlines the primary strengths that support the research. Examples include:

   a. Robust Quantitative Data: The use of financial data from multiple hotels provides a solid foundation for analysis.
   b. Mixed-Methods Approach: The combination of qualitative and quantitative methods strengthens the research results with empirical data and in-depth insights.
   c. Skilled Human Resources: Respondents in the in-depth interviews include financial managers and auditors with relevant experience, adding to the validity of the research findings.

2. Weaknesses

   The weaknesses analysis highlights the limitations of the chosen methods. For instance:

   a. Sample Limitations: The study only includes three four-star hotels, which may not fully represent the entire hospitality industry in Medan.
   b. Limited Respondent Access: Difficulties in gaining access to all relevant staff may limit the perspectives gathered in the interviews.
   c. Resource and Time Constraints: These factors may restrict the depth of analysis that can be achieved.

3. Opportunities

   This section identifies opportunities to enrich the research or its impact on the industry. Examples include:

   a. New Technology Implementation: This research opens opportunities for the hotel industry to adopt new technology in reconciliation, such as anomaly detection software.
   b. Enhanced Staff Training: Recommendations from this research can serve as a reference for hotels to train staff in improved reconciliation practices.
   c. Contribution to Industry Standards: The results of this study may encourage better standards in financial management practices within the hospitality industry.

4. Threats

   Threat analysis includes risks or external factors that may affect the results or implementation of this research. Relevant threats include:

   a. Regulatory Changes: Evolving government regulations related to accounting and tax standards may impact the relevance of the proposed reconciliation model.
   b. Resistance to Technological Change: Some hotels may resist adopting new technologies, hindering the implementation of the research findings.
   c. Dependence on Human Resources: Manual errors due to lack of training or staff turnover may continue to pose challenges in data reconciliation, even if a new model is implemented.

C. FINDINGS AND DISCUSSION

This research findings on financial data reconciliation in four-star hotels in Medan, aiming to enhance the accuracy and efficiency of the night audit process. The focus is on interpreting findings through the SWOT analysis conducted in Chapter 3 and connecting them with relevant literature and practical implications in the field.

Interpretation of Findings Based on SWOT Analysis

1. Strengths
   a. Robust Quantitative Data: The findings indicate that financial data from multiple hotels serve as a strong reference in building a reconciliation model. Using both quantitative and qualitative approaches, this research offers a holistic perspective on reconciliation needs.
   b. Expertise of Respondents: Data collection from financial managers and internal auditors yields accurate results, as they possess deep knowledge of audit and reconciliation processes. This strengthens the validity of findings, consistent with Arens et al. (2014), who emphasize the importance of skilled auditors in audit processes.
2. Weaknesses
   a. Sample and Respondent Limitations: The limited number of hotels studied restricts the generalizability of findings across the entire hotel industry. This limitation could be addressed by expanding the number of hotels or using a more diverse sample, as recommended by Sari et al. (2021).
   b. Time Constraints: The complex nature of the night audit process can only be observed within a limited time frame. Long-term studies or repeat studies could provide more comprehensive and in-depth results.
3. Opportunities
   a. Adoption of New Technology: The findings suggest that implementing technologies like anomaly detection software and big data analytics can minimize errors in the reconciliation process. This is consistent with research by Kogan et al. (2015), which shows that technology can enhance audit efficiency.
   b. Staff Training Development: A key recommendation of this research is to improve staff training to reduce errors in financial data recording. Training can focus on technological skills and best practices in reconciliation, as noted by Tsai and Chiu (2016), who found that IT training improves audit quality.
4. Threats
   a. Evolving Government Regulations: The constantly changing regulations pose a challenge for hotels in maintaining compliance with financial standards. Non-compliance with international accounting standards can negatively impact financial reports, highlighting the need for flexibility in reconciliation models.
   b. Resistance to Technological Change: Some hotels may be reluctant to adopt new technologies due to costs or implementation complexity. This threat can be mitigated by developing technology implementation strategies tailored to the scale and needs of each hotel.

Comparison with Previous Literature

1. This study supports findings by Chen et al. (2016), who emphasize that anomaly detection technology can help identify financial data errors in real-time. By comparing these findings with

prior research, this study demonstrates that technology plays a crucial role in improving reconciliation processes in hotels.

2. Additionally, this study confirms the agency theory (Jensen & Meckling, 1976), which posits that information asymmetry between owners and managers can lead to fraud risks. The reconciliation model developed in this study helps reduce these risks by increasing transparency in financial reporting.
3. Practical Implications for the Hospitality Industry
4. Operational Efficiency: Implementing an effective reconciliation model will help hotels improve operational efficiency through a more structured night audit process.
5. Enhanced Managerial Decision-Making: With more accurate and transparent data, hotel managers can make better financial decisions, ultimately supporting business strategy and increasing hotel profitability.
6. Reduction in Error and Fraud Risks: These findings indicate that applying technology in reconciliation can reduce harmful errors and help prevent potential fraud.

1. **Current Process of Financial Data Reconciliation in Four-Star Hotels (Strengths and Weaknesses)**
   a. Strengths: The existing reconciliation process involves structured night audits where each department records daily transactions, which are then consolidated by the accounting team. The night audit is an established practice that ensures at least a baseline of verification for transactions across departments, including front office, housekeeping, and food and beverage. Having a standardized night audit framework is beneficial as it provides consistency, ensures daily checks, and helps maintain transparency within financial records. The strong quantitative data generated from these departments also contributes to a more comprehensive view of each day's transactions, reinforcing accuracy at a foundational level.
   b. Weaknesses: However, the current reconciliation practices reveal several weaknesses, particularly the reliance on manual entry and verification processes. Many four-star hotels in Medan use spreadsheet-based systems for recording and reconciling financial data, which increases the risk of human error. This manual approach is time-intensive and lacks real-time capabilities, leading to delays and a higher potential for oversight. Additionally, there is often limited training for staff on best practices for data entry and reconciliation, making the process more prone to errors due to inconsistencies in how transactions are recorded across departments. These limitations indicate the need for process improvements, such as automation and enhanced staff training.

2. **Primary Factors Causing Data Discrepancies (Weaknesses and Threats)**
   a. Weaknesses: The main factors contributing to data discrepancies in the reconciliation process stem from the decentralized nature of departmental records and inconsistent documentation standards. Each department may use slightly different codes, recording times, or classifications for similar transactions, resulting in discrepancies when the data is reconciled. For example, variations in how room charges and incidentals are recorded in the front office versus how they are classified in accounting can lead to misalignment. Furthermore, frequent

staff turnover and inadequate training exacerbate these inconsistencies, as new personnel may lack familiarity with standard procedures, further complicating the reconciliation process.

b. Threats: External factors, such as evolving government regulations on accounting and tax standards, present additional threats to the reconciliation process. These regulations require adherence to specific reporting standards, and discrepancies can result in regulatory non-compliance, potentially leading to penalties or reputational damage. Resistance to adopting new technologies also poses a threat, as some hotel managers may perceive software upgrades as costly or complex to implement, which could prevent necessary improvements. This resistance may leave hotels vulnerable to continued inefficiencies and a lack of accuracy in their financial reporting.

3. **Implementing an Effective Financial Data Reconciliation Model (Opportunities and Strengths)**
   a. Opportunities: The research identifies several opportunities to improve the financial reconciliation model through technology integration and enhanced staff training. Technologies such as anomaly detection software and data analytics tools offer the potential for real-time monitoring of transactions, which would greatly reduce the manual workload and minimize human error. By automating reconciliation tasks, hotels can ensure that discrepancies are identified and addressed immediately, improving overall accuracy. Moreover, standardized reconciliation software could provide a uniform system for recording and verifying transactions, helping to align practices across departments. Staff training programs focusing on technology and best practices for financial data handling would further reinforce these improvements by ensuring that all personnel are equipped to handle reconciliation tasks effectively.
   b. Strengths: Leveraging existing strengths, such as the structured night audit framework and the availability of comprehensive departmental data, can support the implementation of a more advanced reconciliation model. The night audit framework serves as a foundational structure that can be enhanced through the adoption of automated reconciliation software. By building upon this established process, hotels can make a gradual shift towards more sophisticated systems without disrupting current operations. Additionally, the strong data foundation within each department provides the quantitative basis needed for effective anomaly detection, allowing hotels to establish clearer baselines for transaction patterns.

Practical Implications and Recommendations

This SWOT analysis demonstrates that while the current reconciliation process has a solid foundation, there are significant opportunities for improvement through technology adoption and staff training. An effective financial data reconciliation model for four-star hotels in Medan should integrate anomaly detection software, standardize documentation practices across departments, and provide ongoing staff training. By implementing these improvements, hotels can achieve greater accuracy in their financial reporting, improve operational efficiency, and reduce the risk of errors and non-compliance with regulatory standards.

Additionally, it is recommended that hotels conduct periodic audits to assess the effectiveness of the new reconciliation model. These audits will help identify areas for further improvement and ensure that reconciliation practices remain aligned with current accounting standards and regulatory requirements.

Suggestions for Future Research

1. Longitudinal Studies: To gain further insights, long-term research could be conducted to monitor the effectiveness of the proposed reconciliation model over time.
2. Development of Specific Technology Models: Developing more specific technology systems, such as specialized night audit software for the hospitality industry, could be a valuable research area.
3. Comparative Studies Across Regions: Expanding the study to hotels in various cities or countries could help identify differences in financial reconciliation practices within the hospitality industry in diverse contexts.

D. CONCLUSION

This study reveals that the financial data reconciliation process in four-star hotels in Medan faces significant challenges and opportunities. Based on the SWOT analysis, the primary strengths of this study are solid data and respondent expertise, while limitations include sample size and time constraints in data collection.

The findings support the importance of implementing technologies, such as anomaly detection software, which can enhance accuracy and efficiency in reconciliation processes. Continuous staff training and more structured procedural standards can help reduce errors in financial data recording, thus supporting the integrity of financial reports. Additionally, the study aligns with previous literature highlighting the importance of audit and internal control in maintaining financial transparency.

An effective reconciliation model will help hotels achieve greater efficiency in financial management, minimizing error risks and potential fraud. Overall, this study provides relevant recommendations for the hospitality industry to enhance the quality of financial data reconciliation.

Recommendations

Based on the findings, the following recommendations may help the hospitality industry improve financial data reconciliation processes:

1. Implementation of Anomaly Detection Technology
   Hotels are advised to adopt anomaly detection technology to identify data discrepancies in real-time. This technology can reduce reliance on manual checks, thereby increasing accuracy and efficiency in reconciliation processes.
2. Regular Training for Financial and Audit Staff
   To maintain data reconciliation quality, continuous training on audit procedures and the latest technology should be provided to financial and audit staff. This will help them understand and apply best practices in financial data reconciliation.

3. Standardization of Inter-Departmental Reconciliation Procedures
   Given the variations in data recording between departments, it is recommended to develop a uniform and clear SOP related to financial transaction recording. This standardization will facilitate inter-departmental reconciliation and reduce potential data errors.
4. Periodic Audits to Evaluate Reconciliation Model Effectiveness
   Hotels should conduct regular audits to assess the effectiveness of the implemented reconciliation model. Audits will also help identify areas that require improvement and ensure that reconciliation practices comply with applicable accounting standards.
5. Further Research in Different Contexts
   To enrich these findings, it is suggested that further research be conducted in hotels located in different geographical areas or in other hotel categories. This would provide deeper insights into the factors influencing the effectiveness of the reconciliation model in the hospitality industry.

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