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THE EFFECTIVENESS OF THE RECEIVABLES COLLECTION ACCOUNTING INFORMATION SYSTEM FOR INDEPENDENT PARTICIPANTS OF BPJS KESEHATAN BALIKPAPAN BRANCH

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Abstract

The phenomenon of arrears of Mandiri participant contributions (PBPU) reached 50-60% with an accumulated receivable of IDR 28 billion. This factual condition shows a real impact gap with social security regulations that mandate the accuracy of fund liquidity, in the theory of the Accounting Information System (SIA) which should be able to mitigate receivables risks systematically. The study aims to analyze the effectiveness of SIA receivables collection in Mandiri participants through a review of input, process, and output elements. The research method uses descriptive qualitative with a case study approach. Data was collected through participant observations, in-depth interviews with operational officers, and financial statement documentation. Research shows that SIA has not yet achieved optimal effectiveness due to constraints on the quality of input data integration and low acceptance of technology in the billing process. The findings indicate that the system actually raises new administrative challenges in the form of the need for manual validation, so that a restructuring of the strategy is needed to reduce the rate of receivables growth.

Keywords: Accounting Information System, Receivables Billing, BPJS Kesehatan, System Effectiveness, Independent Participant

INTRODUCTION

The National Health Insurance (JKN) program organized by BPJS Kesehatan is the government's effort to realize universal health coverage in Indonesia. This program aims to provide equitable and sustainable access to health services for the entire community. However, in its implementation, BPJS Kesehatan faces various challenges, especially in financial management sourced from participant contributions. One of the main problems is the high arrears of contributions for independent participants or Non-Wage Recipients (PBPU). This arrears have an impact on increasing receivables and can disrupt the financial stability of BPJS Kesehatan. Therefore, an effective accounting information system is needed to support the management and collection of receivables.

These delays and misclassifications have the potential to be inaccurate, thereby reducing the reliability of the presentation of the overall financial position statement. Therefore, receivables reporting systems that still rely on manual and non-real-time procedures need to be reviewed to ensure the quality of relevant, timely, and reliable accounting information as the basis for internal control and managerial decision-making. Digital transformation in public financial management has fundamentally changed the way government agencies and social organizing bodies manage assets and receivables, by integrating technologies such as cloud computing, big data analytics, and artificial intelligence to automate manual processes that were previously prone to human error. In the context of BPJS Kesehatan, this innovation not only accelerates the collection cycle of contributions for National Health Insurance (JKN) participants, but also minimizes the risk of budget leakage through real-time asset tracking. Recent studies show that the adoption of digitalization can reduce the rate of bad receivables by 25-30% in similar institutions, thereby strengthening the sustainability of national healthcare services amid post-pandemic fiscal challenges. (Ni et al., 2025)

This Therefore, a study of the effectiveness of digital transformation is important to assess its contribution to billing efficiency, reliability of receivables recording through automated trail audits, and the quality of internal control that is in line with SPIP standards. Practically, the results of this study can provide concrete recommendations for BPJS Kesehatan, such as the development of mobile modules for field billing and data backup protocols. Theoretically, this study enriches the literature on accounting information systems in the public sector with the perspective of the role of digital transformation in social financial governance, especially in developing countries such as Indonesia.

This research presents an update by integrating the Technology Acceptance Model (TAM) framework developed by Davis (1989) which emphasizes the perception of ease of use and perceived usefulness including elements of supervision, risk assessment, and reporting. This approach provides a comprehensive view of how TAM factors mediate technology adoption, thereby influencing the effectiveness of the implementation of accounting information systems in supporting proactive supervision and transparency of receivables management, with the potential to increase compliance of JKN participants.

REVIEW OF LITERATURE

The Accounting Information System (SIA) is a system that collects, records, stores, and processes data to produce information for decision makers. The components of SIA include the human resources of system users, operational procedures and instructions,

transaction data, application software, information technology infrastructure, as well as internal control over data and system security. The information generated should ideally be relevant, reliable, complete, timely, understandable, and verifiable (Romney & Steinbart, 2015).

Receivables management includes collection policies and procedures so that receivables do not become uncollectible. Kasmir (2019) explained that activity ratios, including receivables turnover, are used to measure the level of efficiency of resource utilization in receivables collection and assess the ability of organizations to carry out their operational activities efficiently. In hospitals shows that the lack of top management support and weak integration of information systems also create a tiered effect on high receivables, while a study on receivables of BPJS Kesehatan participants found that receivables turnover can be used as an indicator of the effectiveness of receivables management of health institutions (Ristilestari & Handayani, 2022).

BPJS shows a direct relationship between SIA and the effectiveness of receivables management. The integrated billing system makes it easier for staff to check delinquent participants and carry out the contribution collection process more systematically (Study on BPJS Kesehatan Denpasar Branch, 2024).

The difference between this study and the previous research lies in the focus of the previous research focusing on BPJS Employment or hospital claims receivables to BPJS, while this research focuses on the role of SIA on the effectiveness of collecting the receivables of BPJS Kesehatan independent participant contributions at the branch office level.

RESEARCH METHOD

This research uses a qualitative approach with a case study type, which aims to understand in depth and contextually how SIA plays a role in the management of receivables collection at BPJS Kesehatan Balikpapan Branch (Sugiyono, 2019). The data source consists of primary data in the form of interviews with informants who are directly involved in the receivables collection process, as well as secondary data in the form of supporting documents related to the mechanism and workflow of the system. Research informants are determined based on considerations of direct involvement and adequate knowledge related to SIA and the receivables collection process. The data collection technique was carried out through in-depth interviews that were semi-structured, observation of the process of using SIA in billing activities, and documentation studies. Data analysis uses an interactive model consisting of data reduction, data presentation, and conclusion drawing and verification (Miles, Huberman, & Saldaña, 2014). The validity of the data was tested through source triangulation and triangulation techniques.

RESULTS AND DISCUSSION

Situation Analysis

The Digital transformation supports the automation of the billing process and internal monitoring through real-time data synchronization between units, interactive analytics dashboards, and early notification of potentially delinquent accounts, for example, with predictive algorithms that detect slow payment patterns based on membership history. This

feature strengthens the relationship between the effectiveness of the System. Although digital transformation has been implemented nationally by BPJS Kesehatan, its effectiveness in reducing contribution receivables that reach billions of rupiah per year and improving the accuracy of financial reporting has not been fully tested, especially in branch offices with high transaction volumes. Research across various branch offices shows that the success of billing still depends on human factors such as officer motivation and digital network stability, where connectivity disruptions cause delays in data synchronization.

This research presents an update by integrating the Technology Acceptance Model (TAM) framework developed by Davis (1989) which emphasizes the perception of ease of use and perceived usefulness with the concept of SPIP as regulated in Government Regulation Number 60 of 2008, including elements of supervision, risk assessment, and reporting. This approach provides a comprehensive view of how TAM factors mediate technology adoption, thereby influencing the effectiveness of the implementation of accounting information systems in supporting proactive supervision and transparency of receivables management, with the potential to increase JKN participant compliance by up to 15-20%. Thus, it contributes conceptually through a hybrid TAM model that can be replicated in other public institutions, as well as practical for improving BPJS Kesehatan's financial governance through user behavior-based training strategies.

In practice at BPJS Kesehatan, the process of reporting receivables for independent participant contributions generally involves collecting data from several administrative sources, such as billing units, membership systems, and payment channels, which are obstacles that are not optimally integrated. This condition increases the risk between parts as well as the potential for human error in classifying the age of receivables based on the maturity period. Inaccuracies in the grouping of receivables age have a direct effect on the reliability of financial statements and the measurement of institutional credit risk. Furthermore, delays in data updates that can be caused by network factors, system synchronization, and delays in manual input often hinder timely billing decisions, increasing the possibility of receivables becoming uncollectible.

This delay and misclassification has the potential to be inaccurate, thereby reducing the reliability of the presentation of the institution's financial position report as a whole. Therefore, receivables reporting systems that still rely on manual and non-real-time procedures need to be reviewed to ensure the quality of relevant, timely, and reliable accounting information as the basis for internal control and managerial decision-making.

The research explains that the implementation of the Accounting Information System (SIA) in the collection of independent participant receivables at BPJS Kesehatan Balikpapan Branch has not been running effectively. The input, process, and output elements show structural limitations and affect each other, thus having an impact on the low quality of receivables management. In the input element, the main obstacle is related to the inadequate integration of participant data between work units. Receivables information sourced from membership, billing, and payment channels is still not synchronized. This disintegration causes data differences that require officers to re-examine. In addition, data updates have not taken place consistently because they still rely on manual processes and technical barriers. This will increase the potential for errors in the grouping of the age of receivables, which ultimately affects the accuracy of financial information. The quality of the input data has not met the standards of capability and relevance within the SIA framework.

In the process element, the performance of the system is influenced by the level of user acceptance of the technology used. The results of the interview system have not been able to be an easy-to-use tool or provide real benefits in supporting billing activities. In the framework of the Technology Acceptance Model (TAM), this reflects the low perception of convenience and usefulness. As a result, the implementation of billing still relies on manual interventions, especially in the data verification stage and determination of billing priorities. Such dependencies not only slow down workflows, but also have the potential to cause inconsistencies in the implementation of procedures. From the point of view of internal control, it shows that the system-based control function has not operated optimally in reducing operational risks.

In the output element, the information produced has not been able to support decision-making needs. The receivables age report still faces obstacles in terms of accuracy and timeliness of data presentation. Data inconsistency at the previous stage will have a direct impact on the quality of the report produced. In some situations, the available information does not show receivables in a timely manner, making it difficult to formulate the right billing strategy. It shows that the characteristics of the information produced, both in terms of reliability, relevance, and timeliness, have not been fulfilled in terms of SIA.

The research found that there was a discrepancy between the concept of the Accounting Information System and its implementation in the field. SIA is designed to improve the efficiency, accuracy, and transparency of financial information management. Currently, the system implemented is not able to integrate data effectively and cannot be used by users as the main tool in operational activities. This is shown by the high level of arrears of independent participants' contributions which is in the range of 50-60%, which indicates that the collection mechanism has not functioned optimally as a control tool.

Weaknesses in input, process, and output elements explain that the control components, especially related to risk assessment and control activities, have not been implemented effectively. The system's limitations in providing accurate and timely information have an impact on the slow response to potential risk of non-collectible receivables. The effectiveness of a system is determined not only by the existence of the technology, but also by the alignment between the system design, the competence of the user, and the control mechanisms applied. The implications of improvement efforts cannot be done in isolation. Integrated steps are needed through improving data quality, strengthening user capacity in utilizing the system, and improving technology-based internal control. Without a thorough adjustment, the system has the potential to remain an additional administrative burden and has not been able to improve operational efficiency with a real impact.

CONCLUSION

The implementation of the Accounting Information System (SIA) in the collection of independent participant receivables at BPJS Kesehatan Balikpapan Branch has not shown optimal performance. In the input element, data integration between units has not been carried out in harmony, resulting in information inconsistencies. In the process element, the use of the system has not been maximized due to the limited acceptance of technology by users and the dominance of manual involvement in verification activities and determination of billing priorities. In the output element, the information produced has not met the timeliness aspect, so it has not been able to support effective decision-making. These findings

show a discrepancy between the conceptual framework of SIA and its implementation practices, and indicate that the role of technology acceptance (TAM) and internal control (SPIP) has not been optimal. The impact of receivables management has not been supported by a system that is able to reduce the risk of not being billed with a real impact. Therefore, coordinated improvement steps are needed through improving data quality and integration, strengthening user competencies, and developing system-based internal controls so that SIA's performance becomes better, consistent, and accountable.

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