

## **DIGITALIZATION IN THE MANAGEMENT OF BUDGET AND FINANCIAL SYSTEMS AT PT KERETA INDONESIA OPERATING AREA 5**

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### **Abstract**

Digitalization of financial management has emerged as a pivotal advancement in enhancing efficiency and transparency within corporate budgeting processes. This study investigates the implementation of digital systems in budget management at PT Kereta Api Indonesia (Persero) Operating Region 5 Purwokerto. The internship was conducted within the finance unit, concentrating on the preparation and review of budget plans utilizing digital systems. The research employs a qualitative approach, grounded in field observations and documentation analysis. The findings indicate that digitalization significantly improves the accuracy of financial data and minimizes human errors. Nonetheless, certain challenges persist, including employee adaptation to new systems, reliance on manual verification processes, and integration issues with other departments. To address these challenges, it is recommended to establish structured training programs, automated verification systems, and integration of financial systems with operational and marketing units. The implementation of digital budgeting holds substantial potential for optimizing financial management, thereby facilitating enhanced decision-making and financial accountability.

***Keywords:*** *digitalization, budgeting, financial management*

### **Abstrak**

Digitalisasi dalam pengelolaan keuangan telah menjadi suatu langkah yang sangat penting dalam meningkatkan efisiensi dan transparansi dalam proses penyusunan anggaran perusahaan. Penelitian ini menganalisis penerapan sistem digital dalam pengelolaan anggaran di PT Kereta Api Indonesia (Persero) Daerah Operasi 5 Purwokerto. Magang dilakukan di unit keuangan dengan fokus pada penyusunan dan penelaahan rencana anggaran biaya menggunakan sistem digital. Metode yang digunakan dalam penelitian ini merupakan pendekatan kualitatif yang didasarkan pada observasi lapangan dan analisis dokumentasi. Hasil penelitian menunjukkan bahwa digitalisasi secara signifikan meningkatkan akurasi data keuangan dan mengurangi kesalahan manusia. Meskipun demikian, terdapat beberapa tantangan yang masih dihadapi, antara lain adaptasi karyawan terhadap sistem baru, ketergantungan pada proses verifikasi manual, dan masalah integrasi dengan unit-unit lain. Untuk mengatasi tantangan tersebut, disarankan agar dilakukan pelatihan terstruktur, penerapan sistem verifikasi otomatis, dan integrasi sistem keuangan dengan unit operasional serta pemasaran. Implementasi digitalisasi anggaran memiliki potensi besar untuk mengoptimalkan pengelolaan keuangan, yang pada gilirannya mendukung pengambilan keputusan yang lebih baik serta meningkatkan akuntabilitas finansial.

**Kata Kunci:** digitalisasi, anggaran, pengelolaan keuangan

## **A. INTRODUCTION**

### **1. Situation Analysis**

PT Kereta Api Indonesia (Persero) Operating Region 5 (Daop 5) Purwokerto is one of the operational units that has responsibility for the management of rail transportation in the western part of Central Java. In order to support modernization efforts and increase efficiency, PT KAI Daop 5 Purwokerto has implemented digitalization in various aspects of financial management, including in the preparation and verification of cost budget plans.

### **Finance Unit at PT KAI Daop 5 Purwokerto**

The Finance Unit at PT KAI Daop 5 Purwokerto plays a very important role in ensuring the company's financial stability and accuracy. This unit is divided into several sub-sections, which include:

#### **A. Tax Finance**

In charge of managing the company's tax obligations, ensuring compliance with applicable tax regulations, and optimizing tax efficiency.

#### **B. Budget Accounting**

Manage the preparation of the annual budget, monitor budget realization, and conduct variance analysis to ensure the use of funds is in line with planning.

#### **C. Billing**

Oversee the process of collecting revenue from various sources, ensuring timely cash inflow and minimizing uncollectible receivables.

### **Implementation of Digitalization in Financial Management**

The implementation of a digital system in financial management at PT KAI Daop 5 Purwokerto aims to improve operational efficiency, data accuracy, and transparency of financial processes. The steps that have been taken include:

#### **1. Use of Integrated Accounting Software**

Adopt a digital-based accounting system that enables the integration of various financial sub-sections, thereby facilitating real-time access and exchange of information.

#### **2. Budgeting Process Automation**

Utilize digital tools in designing and monitoring budgets, allowing for quick adjustments to changing operational and financial conditions.

#### **3. Digitization of Financial Documents**

Reducing the use of physical documents by implementing an electronic document storage and management system, which increases efficiency and simplifies the audit process.

### **Benefits of Digitalization in Financial Management**

The implementation of digitalization in financial management at PT KAI Daop 5 Purwokerto provides various benefits, including:

#### **1. Improved Operational Efficiency**

Automation of financial processes reduces the time and effort required for routine tasks, allowing staff to focus more on analysis and strategic decision-making.

#### **2. Higher Data Accuracy**

The use of digital systems can minimize human error in recording and calculating, thereby increasing the reliability of financial information.

### 3. Transparency and Accountability

Digital systems make it easier to track and monitor financial transactions, which in turn increases transparency and facilitates accountability in budget management.

## **Challenges in Implementing Digitalization**

Although it brings various benefits, the implementation of digitalization in financial management at PT KAI Daop 5 Purwokerto is also faced with several challenges, including:

### 1. Human Resources Readiness

Training and skill development is required for employees so that they can operate the digital system effectively.

### 2. System Integration

Connecting digital financial systems with legacy systems requires careful planning and execution to ensure data compatibility and synchronization.

### 3. Data Security

Increased digitization brings risks related to information security, so adequate data protection measures are required to prevent leakage or unauthorized access.

Overall, digitization in financial management at PT KAI Daop 5 Purwokerto is a strategic step in line with technological developments and the need for operational efficiency. By overcoming the existing challenges, the company is expected to achieve more effective, accurate, and transparent financial management.

### 2. Problems

Although PT Kereta Api Indonesia (Persero) Operating Region 5 (Daop 5) Purwokerto has implemented a digital system in financial management, there are still some problems that need to be overcome. The following is a more in-depth analysis of these problems:

### 1. Lack of Understanding and Skills of Digital System Users

Digital transformation requires human resources who are competent in operating new technologies. However, some employees at PT KAI Daop 5 Purwokerto still experience difficulties in using the digital system for budget management, especially related to the process of data input and checking financial reports automatically. This may be due to a lack of adequate training or resistance to change from manual to digital systems. In addition, limitations in technological and financial knowledge may hinder the effectiveness of digital system implementation.

### 2. Dependence on Manual Systems in Some Aspects

Although digitalization has been implemented, there are some procedures that are still carried out manually, such as checking billing documents and tax verification. This reliance on manual systems can be caused by several factors, including:

#### a. Trust in Manual System

Some employees may feel more comfortable and have more confidence in using this old manual method.

#### b. Feature Limitations of Digital Systems

Available digital systems may not be able to fully accommodate all specific needs in the financial management process, thus still requiring manual intervention.

### c. Infrastructure Constraints

Limitations in technological infrastructure, such as unstable internet connectivity, may force employees to revert to manual methods.

This reliance on manual systems has the potential to reduce efficiency and increase the risk of human error in financial management.

### 3. Challenges in System Integration

The digital system used in budget and financial management has not been fully integrated with other units, such as operations and marketing. This situation causes delays in the data synchronization process and less timely decision-making. This integration challenge can be caused by:

#### a. Technology Platform Differences

Different units may use incompatible platforms or software, making integration difficult.

#### b. Lack of Process Standardization

Non-uniform business processes among units can hinder the efficient flow of information and data.

#### c. Resistance to Change

Some units may be reluctant to change established systems or processes, even though integration may provide long-term benefits.

In order to overcome this problem, a holistic approach is needed which includes intensive training for employees, development of adequate technology infrastructure, and commitment from management to encourage system integration between units. In addition, it is important to build a work culture that is adaptive to technological change and innovation to ensure the success of digital transformation at PT KAI Daop 5 Purwokerto.

### 3. Solution

To handle the problems that have been identified in digital financial management at PT Kereta Api Indonesia (Persero) Purwokerto Operation Area 5, various strategic solutions can be applied as follows:

#### 1. Training and Capacity Building of Human Resources

Increasing the competence of human resources is the key to success in implementing digital systems. Some steps that can be taken are:

1. Conducted regular training programs focusing on the use of accounting software, financial statement analysis, and digital-based budgeting procedures. The purpose of this training is to ensure employees understand and can operate the system efficiently.
2. Encourage a culture of learning among employees through organizing workshops, seminars and e-learning. This approach is expected to help employees stay informed with technological developments and best practices in digital financial management.
3. Conduct regular evaluations of training effectiveness and provide constructive feedback for continuous improvement.

Research shows that human resource capacity building in digital financial management contributes significantly to improving financial transparency and accountability.

#### 2. Digital System Automation and Optimization

To improve efficiency and accuracy in financial management, the following measures can be implemented:

a. Process Automation Implementation

Reduce manual tasks by adopting an automation system in budget preparation and financial report verification. This automation is expected to minimize human error and speed up the work process.

b. Utilization of Latest Technology

Integrate technologies, such as Optical Character Recognition (OCR) for document digitization and Intelligent Character Recognition (ICR) for character recognition, to improve accuracy and efficiency in financial data processing.

c. User-Friendly System Development

Design a system interface that is intuitive and easy to use, so that employees can adapt quickly and reduce resistance to change.

Automation in financial management is proven to improve operational efficiency and reduce manual workload.

3. Financial System Integration with Other Units

Integration between units within the company is essential to ensure a smooth flow of information and informed decision-making. Steps that can be taken include:

a. Build a system that connects the finance unit with operational, marketing, and other units, so that data can be accessed in real-time and information synchronization runs efficiently.

b. Establish uniform standard operating procedures between units to facilitate system integration and minimize

communication barriers.

c. Organize training involving employees from various units to understand the importance of system integration and how each unit contributes to achieving common goals.

Integration of information systems within the company can optimize resources and improve overall operational efficiency.

4. Outputs Produced

With the implementation of the above solutions, PT KAI Daop 5 Purwokerto is expected to achieve the following results:

a. Improved Operational Efficiency

The process of budget preparation and verification will become faster and more accurate through an automated digital system.

b. Error Reduction

The lack of manual intervention is expected to reduce the risk of errors in financial recording and reporting.

c. Increased Transparency and Accountability

Digital systems enable real-time tracking of transactions, increase transparency, and simplify auditing.

d. Faster and More Precise Decision Making

System integration between units ensures accurate and up-to-date data is available to management, supporting more informed decision-making.

Through the implementation of these strategies, PT KAI Daop 5 Purwokerto is expected to improve competitiveness and service quality, in line with technological

developments in the transportation industry.

## **B. IMPLEMENTATION AND METHODS**

### **A. Activity Implementation**

This internship was carried out at PT Kereta Api Indonesia (Persero) Purwokerto Operation Area 5, specifically in the Finance Unit. This unit has responsibility for budget management, accounting, taxation, and billing. The duration of the internship lasted for four months, starting from August 12 to December 6, 2024, with a work schedule that followed office operating hours, namely Monday-Thursday at 08.00-16.30 WIB and Friday at 07.00-16.30 WIB.

Interns consist of D3 Accounting students who have an academic background in corporate budget practicum and management accounting. This internship activity aims to provide hands-on experience in preparing and checking cost budget plans using a digital system.

During the internship, participants were placed in the Budget and Accounting section and the Tax Finance section, where they contributed to various administrative tasks and financial analysis. Some of the main tasks performed include:

- Prepare and check the Cost Budget Plan (RAB) through a digital system.
- Analyze financial statements related to company expenses and income.
- Perform data entry into PT KAI's SAP system, including tax and billing documents.
- Verify financial documents such as tax invoices, invoices, and fund disbursement request letters (G64).
- Archiving and digitizing

financial documents, including cooperation contracts and proof of transactions.

- Carry out stock-taking to ensure conformity between accounting records and physical inventory in the field.

This internship provides practical insights into the implementation of digitalization in the company's financial system, and emphasizes the importance of data accuracy in budget management.

### **B. Activity Method**

The method applied in this internship is on-the-job training, with the following approach:

#### 1. Observation

- Observed the digital financial systems used at PT KAI Daop 5 Purwokerto, such as SAP and Rail Tax.
- Understand the workflow in managing the company's budget and financial system.

#### 2. Direct Practice

- Carry out financial administrative tasks, such as checking and inputting data into the system.
- Use corporate accounting software in the management of financial documents and budget reports.
- Simulate financial data processing with guidance from finance unit staff.

#### 3. Discussion and Guidance

- Participated in discussion sessions and shared information with PT KAI employees regarding financial management practices.
- Receive guidance from

supervisors on budget verification and reporting procedures.

#### 4. Evaluation and Report

- Compile daily and weekly reports on the tasks that have been carried out.
- Evaluate the effectiveness of digital systems in budget management.

Through this method, interns not only gain practical experience in digital financial management, but also understand the challenges and solutions in implementing digital systems in companies. This experience is expected to increase competence in the field of corporate budgeting and management accounting, and become a useful provision in entering the professional world

### C. RESULTS AND DISCUSSION

#### 1. Implementation of Digitalization in Budget Management and Financial System

PT Kereta Api Indonesia (Persero) Purwokerto Operation Area 5 has adopted digitalization in the management of budget and financial systems through the implementation of the Company Application System (SAP) and Rail Tax. This step is in line with the company's efforts to improve operational efficiency and financial transparency. The use of SAP enables the integration of various business functions, including financial management, thus simplifying the process of budget preparation and monitoring. On the other hand, Rail Tax serves to facilitate the management of corporate taxation.

As a D3 Accounting student who has completed an internship at the Finance Unit of PT KAI Daop 5 Purwokerto, the author is directly involved in the process of preparing and verifying the Cost Budget Plan (RAB) by utilizing a digital system. This experience provides a practical understanding of the

application of the theory learned in the Corporate Budget Practicum and Management Accounting courses in a real work environment.

The digitization process that was implemented included the following stages:

- Digital Budgeting: Each unit in PT KAI Daop 5 Purwokerto submits a budget through Letter G64, which is then checked and approved digitally using SAP.

- Document Verification and Checking: Financial documents such as invoices, tax invoices, and proof of payment are uploaded into the system to ensure data accuracy and validity.

- Digital Stock-taking: Asset inventory data is matched through the system to ensure conformity between digital records and physical conditions on the ground.

- Financial Report Analysis: The digital system provides real-time data on budget realization and expenditure, making financial analysis and decision-making easier.

The implementation of digitalization not only improves operational efficiency, but also supports transparency and accountability in the company's financial management.

#### 2. Indicators of Success of Digitization in Budget Management

The implementation of digitalization at PT KAI Daop 5 Purwokerto has resulted in several success indicators, among others:

- Improved Efficiency of the Budget Process: The use of digital systems speeds up the budget preparation and verification process, reducing the time and effort required compared to manual methods.

- Reduction of Recording Errors: Automation in the system reduces the risk of human error in financial records and calculations.

- Financial Transparency and Accountability: Every transaction and budget

utilization can be easily traced, supporting the principles of good corporate governance.

- Better Data Integration: The SAP system enables data synchronization between work units, improving the accuracy and consistency of financial information.

This success shows that digitalization plays an important role in improving the company's financial and operational performance.

Based on the results and discussion of Digitalization in Budget Management and Financial Systems at PT Kereta Api Indonesia Operating Region 5 Purwokerto, it can be concluded that the application of digital systems has provided significant benefits in improving efficiency and transparency in financial management. Digitalization through the Company Application System (SAP) and Rail Tax allows companies to manage budgets more quickly, accurately, and integrated between work units.

However, the implementation of digitalization still faces several challenges. The main supporting factors in the success of this program are the full support of the company's management, the availability of adequate technology infrastructure, and continuous HR training. Meanwhile, inhibiting factors in the implementation include employee resistance to the new system, dependence on some manual processes, and challenges in system integration with other units such as operations and marketing.

### 3. Enablers and Barriers to the Implementation of Digitalization

#### Driving Factors

- Company Management Support: A strong commitment from the management of

PT KAI Daop 5 Purwokerto in adopting digital technology drives the successful implementation of the system.

- Adequate Technology Infrastructure: The availability of supporting hardware and software, such as SAP and Rail Tax, facilitates the digitization process.

- Human Resources Competency Enhancement: Training and skill development for employees in using digital systems ensures faster and more effective adaptation.

#### Inhibiting Factors

- Resistance to Change: Some employees may be reluctant or have difficulty adapting to the new system, which may affect the effectiveness of the implementation.

- Reliance on Manual Processes: Some procedures are still done manually, such as double-checking documents, which can potentially hamper digital workflows.

- Suboptimal System Integration: Synchronization between the financial system and other units, such as operations and marketing, requires further adjustments to ensure smooth data flow.

## D. CLOSING

### Summary

The internship experience has shown that digitalization in the management of the budget and financial system at PT Kereta Api Indonesia Daop 5 Purwokerto has had a significant positive impact. Increased efficiency, accuracy, and transparency are some of the main benefits that have been felt. However, to achieve the full success of this initiative, ongoing support is needed in the form of human resource training, technological infrastructure upgrades, and work culture adjustments to overcome the challenges.

For students of the Diploma 3 Accounting Program, involvement in this

process provides valuable insights into the practical application of concepts learned in the Corporate Budgeting and Management Accounting Practicum courses, and prepares them for future professional challenges.

### Advice

In order for the implementation of digitalization at PT KAI Daop 5 Purwokerto to be more optimal, the following steps can be considered:

#### A. Improving Employee Training and Mentoring

Companies need to hold regular training so that employees are more accustomed and proficient in using digital systems. Direct assistance from experts can also help accelerate technology adaptation in the work environment.

#### B. Reduce Reliance on Manual Processes

As much as possible, all stages in budget and financial management need to be fully digitized. Manual checks can be reduced by developing more sophisticated automation systems, thus speeding up the workflow.

#### C. Improving System Integration between Units

Data synchronization between the finance unit and other units, such as operations and marketing, needs to be improved to make budget management more effective and decision-making more accurate.

#### D. Conduct Periodic Evaluation of Digital Systems

Companies need to conduct regular system evaluations and updates to ensure that the digital systems used remain relevant and able to accommodate the evolving needs of the company.

With improvements and strengthening in these aspects, it is hoped that digitalization in budget management and financial systems

at PT KAI Daop 5 Purwokerto can run more optimally, provide long-term benefits for the company, and increase accountability and efficiency in financial management.

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