



THE ROLE OF DIGITAL ADMINISTRATION IN IMPROVING THE EFFECTIVENESS OF FREIGHT TRANSPORTATION MANAGEMENT

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Abstract

Digital transformation in business administration is increasingly becoming a primary necessity in enhancing operational effectiveness. PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto has implemented digital administration in freight management to improve data efficiency and accuracy. The method used was observation during an internship at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto. These results indicate that the implementation of digital administration can accelerate the recording process, reduce human error, and enhance transparency and data accessibility for stakeholders. With the presence of a digital system, the monitoring and management of goods transportation processes become more structured and responsive to customer needs. However, challenges such as technological infrastructure and human resource readiness still need further attention. With the strengthening of the digital administration system, it is hoped that PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto can continue to improve effectiveness and competitiveness in the rail-based freight transportation industry.

Keywords: Digital Administration, Effectiveness, Freight Transport, Digital Transformation



A. INTRODUCTION

In today's digital era, various industrial sectors continue to transform to improve operational efficiency and effectiveness, including the transportation and logistics sector. PT Kereta Api Indonesia (Persero) as a rail transportation service provider, especially in PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto, has an important role in supporting the distribution of goods in Indonesia. Freight transportation via rail offers advantages such as large transport capacity, more competitive costs compared to other land transportation modes, and lower environmental impact.

Along with the increasing volume of goods shipments, the need for a more modern and efficient administration system is increasingly urgent. Conventional administration that is still manual-based often causes obstacles in data management, coordination between work units, and real-time monitoring of the status of goods delivery. Therefore, the implementation of digital administration is a strategic step to improve the effectiveness of freight transportation management at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto.

Although digital administration has been implemented in the management of freight transportation at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto, there are several problems that are still faced, including:

Dependence on technological infrastructure The implementation of digital systems requires adequate infrastructure support, such as a stable internet network and supporting hardware. At some operational points, there are still technical problems that hinder the smooth running of the system.

Human resource readiness Not all employees have sufficient understanding and

skills in operating digital administration systems, so ongoing training is needed.

Data security and integrity in digital administration, the risk of data leakage or system errors can be an obstacle that impacts the effectiveness of freight transportation management.

The suitability of administrative digitalization regulations and policies must be in line with applicable regulations in the transportation and logistics sector in order to run optimally.

To overcome these problems, some solutions that can be applied include:

Strengthening digital infrastructure by increasing investment in more reliable information technology networks and ensuring backup systems are in place to prevent operational disruptions.

HR training and development conducting regular training programs for employees to be more adaptive in operating digital administration systems. In addition, socialization on the importance of digitalization in improving work effectiveness is required.

Improving data security implementing encryption-based security systems and adopting cloud computing technology so that data can be accessed safely and efficiently.

Alignment with regulations conduct periodic evaluations of the policies implemented to be in accordance with transportation industry regulations and customer needs in digital-based logistics systems.

With the implementation of optimal digital administration, PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto is expected to improve the effectiveness of freight transportation management, accelerate the service process, and increase the company's



competitiveness in the rail-based freight transportation sector.

B. IMPLEMENTATION AND METHODS

Internship activities at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto were carried out for 4 months from August 19, 2024 to December 19, 2024. This internship is in accordance with the working days of PT Kereta Api Indonesia Daop 5 Purwokerto employees, namely Monday - Friday starting at 08.00 - 17.00 WIB.

The activities carried out by the author during the internship at PT Kereta Api Indonesia (Persero) Operating Region 5 Purwokerto are as follows:

Delivering financial fund application files and sending fund application documents from the Freight Transport Unit to the Finance Unit.

Visiting the Purwokerto checker and then interacting with the checker officer to understand the workflow related to the freight transportation process.

Delivered a letter proposing the purchase of stationery and sent a letter proposing the purchase of office stationery (ATK) for the Freight Transport Unit and related stations to the Daop Secretariat Unit (SEKDA).

Observe the loading and unloading process of Package Delivery Goods (BHP) and directly see the loading and unloading process of BHP commodities to understand operations in the field.

Manage freight transportation payment application documents and process application documents for the issuance of PT Lintas Nusantara Perdana freight transportation payment letters for BHP commodities using the Rail Document System.

Archiving invoice supporting documents and compiling archives of supporting documents for PT PUSRI Fertilizer

transportation bills.

Monitor program reports and realization of freight transportation volume and check and record volume data (tons) of Daop 5 Purwokerto freight transportation for 2023.

Copying BBM / BBK transportation billing documents and photocopying billing documents related to fuel oil (BBM) and special fuel (BBK) transportation.

C. RESULTS AND DISCUSSION

PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto has implemented a digital administration system in the management of freight transportation as part of efforts to improve operational effectiveness. This implementation includes digitizing the process of ordering, tracking, and managing freight transport documents that were previously done manually. The use of this technology aims to reduce administrative errors, speed up the service process, and increase transparency in the freight forwarding system.

One concrete step in the implementation of digital administration is the adoption of a digital-based transportation management system that allows customers to place orders online, track the position of goods in real-time, and receive automatic notifications regarding delivery status. In addition, PT Kereta Api Indonesia (Persero) Purwokerto Operation Area 5 also integrates this administration system with the company database to facilitate access to information for internal and external parties.

The successful implementation of digital administration in the management of freight transportation at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto can be seen from several key indicators. First, there is an increase in operational efficiency by reducing the time required in the administration and delivery of goods. Processes that previously took days can now be completed in a matter of hours, thanks to the automation system implemented.



The implementation of digital administration has produced several outcomes that are indicators of the program's success. Some of the main outcomes that can be identified include:

Increased operational efficiency with the digital administration system, the time required for document management and logistics transaction recording is significantly reduced. Previously, the recording process was done manually which was prone to errors and delays. After digitization, this process became faster and more accurate.

Increased data accuracy using digital information systems reduces the possibility of data input errors and lost documents. This has a positive impact on the reliability of information used in managerial decision-making.

Improved customer satisfaction with the digital goods monitoring system, customers can track the status of their shipments in real-time. This increases transparency and customer trust in the services of PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto.

Reduced operational costs The implementation of digital administration reduces the need for physical document printing and manual labor for administrative management, which has an impact on the company's operational cost efficiency.

In the implementation of digital administration, there are various factors that can be both drivers and inhibitors of program success.

The driving factors are management support commitment from the management of PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto in implementing administrative digitalization is a major factor in the success of implementation, the availability of technological infrastructure access to adequate hardware and software supports the smooth

running of the digital administration system, and training and human resource development to improve employee skills in using digital systems helps in optimizing the benefits of digital administration.

While the inhibiting factors are change resistance some employees still face difficulties in adapting to the new digital system, so it takes time to transition, technical constraints system disruptions or internet network limitations can be an obstacle in the smooth operation of digital administration, and Initial Implementation costs. Initial investment in technology infrastructure and employee training requires considerable costs, although in the long run it provides efficiency.

Based on the implementation, digital administration has proven to have a positive impact on improving the effectiveness of freight transportation management at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto. Increased operational efficiency, data accuracy, customer satisfaction, and reduced operational costs are the main indicators of the success of this program. Although there are some challenges in implementation, enabling factors such as management support and HR training can help overcome these obstacles. By continuing to develop technology and improve the readiness of human resources, PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto can further optimize the role of digital administration in the management of freight transportation in the future.

D. CLOSING

The implementation of digital administration in the management of freight transportation at PT Kereta Api Indonesia (Persero) Daop 5 Purwokerto has great potential to improve operational efficiency and effectiveness. By following the guidelines in the Railway Cargo System (RCS) Guidebook, digital administration through this system is



able to overcome various challenges in the process of recording, tracking, and managing logistics data. Although the implementation still faces several obstacles, such as system complexity, infrastructure limitations, lack of integration between systems, and low levels of employee adaptation.

Field results also show that strategic solutions, such as employee training, improving technological infrastructure, system integration, strengthening coordination, and changing work culture, are needed to optimize digital administration. Proper training and socialization can improve employees' competence and acceptance of technology, while investment in modern infrastructure will ensure smooth system operations. In addition, integration between various digital platforms will ensure data consistency and efficiency in decision-making.

By implementing these solutions, PT Kereta Api Indonesia Daop 5 Purwokerto can strengthen its digital administration system, support the smooth distribution of goods, and improve the quality of service to customers. This not only supports the company's operational goals, but is also in line with digital transformation in the world of modern transportation and logistics.

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