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Analysis of Constraints in Implementing Inaportnet at Sorong Port Class 1

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ABSTRACT

This research examines the challenges that arise when expanded logistics operations are conducted utilizing the Inaportnet program, which has been in place at KSOP Class 1 in Sorong City since 2017. This study examined a population using the inaportnet application at the Port of Sorong City. Using a qualitative descriptive methodology, the Inaportnet application, which is currently being improved, users or stakeholders who need guidance with how to use the application, and the occasionally in-interfered-with signal in the Port of Sorong City are a few challenges that must be overcome. It is hoped that the findings of this analysis and discussion will provide information and recommendations for implementing Inaportnet at the Port of Sorong City to ensure service fairness (first come, first served), realize transparency of ship and goods services at the Port, hasten the completion of ship and goods services, and reduce costs associated with handling ship and goods services.

Keywords: *Inaportnet, Constraints, Implementing, Logistics, Services.*

1. INTRODUCTION

The Port of Sorong City is a seaport located in Papua Island, the eastern island of Indonesia. It is owned by the government and serves as both a passenger and container terminal. The Port has two piers and handles vessel arrivals daily. It has a conventional and container berth, each with a length of 220 m and 250 m, respectively, and a maximum draft of 12-14 m.

The Port of Sorong City in West Papua, Indonesia, has been at the forefront of efforts to enhance logistics operations [1] through the Inaportnet program, a technological solution introduced in 2017. The program was envisioned to revolutionize the efficiency, transparency, and cost-effectiveness of shipping and goods handling services at the Port, aligning with today's global trade landscape demands.

However, this ambitious initiative has encountered challenges that necessitate thorough investigation. These challenges encompass various aspects of Inaportnet's deployment and utilization, specifically emphasizing understanding the experiences and viewpoints of the individuals and entities utilizing the Inaportnet application within the Port of Sorong City.

Figure 1. Container Port of Sorong

One notable challenge is the intricate nature of the Inaportnet application itself. As a dynamic and evolving technology, it continuously undergoes improvements and updates. That fact can pose difficulties for users and stakeholders who may need help to grasp the full spectrum of its capabilities and functionalities. Such challenges can impede the program's effectiveness and undermine its intended benefits.

Another dimension of these challenges is the uncertainty that some users and stakeholders harbor regarding the Inaportnet application. These uncertainties encompass questions about the application's practical utility, potential advantages, and operational procedures. If left unaddressed, these uncertainties can breed resistance to adopting the technology, hindering its integration into daily operations.

Furthermore, the sporadic interference of signals in Sorong City stands out as a significant challenge to the seamless operation of the Inaportnet program. Signal disruptions can trigger delays, errors, and inefficiencies in

logistics operations, adversely affecting the program's overall efficiency and reliability.

In light of these challenges, there is a pressing need for an in-depth study employing a qualitative descriptive methodology. This research approach is well-suited to explore the rich tapestry of experiences and perspectives held by those using the Inaportnet application within the Port of Sorong City. By delving into the qualitative nuances of these issues, the research aims to uncover the root causes of challenges and, importantly, to identify potential solutions.

Thus, this research endeavor represents a vital step toward addressing the challenges that have emerged while implementing the Inaportnet program in Sorong City. By doing so, it aspires to position the Port of Sorong City as a more competitive, efficient, and transparent hub for trade and logistics, thereby contributing to regional economic development and fostering global trade connectivity.

2. METHODOLOGY

This research will rely on a qualitative research methodology to tackle the difficulties associated with implementing the Inaportnet program at the Port of Sorong City. This choice of methods is deliberate and well-suited to the study's objectives. It enables an in-depth investigation into the multifaceted experiences, perceptions, and viewpoints of the individuals and groups directly involved in utilizing the Inaportnet application. The qualitative approach offers depth and detail that quantitative methods may not achieve, making it particularly advantageous for capturing the nuances of the challenges and opportunities associated with the Inaportnet program.

The primary advantage of qualitative research lies in its ability to delve deeply into the lived experiences and subjective perspectives of the individuals and stakeholders engaged with the Inaportnet application. Through techniques such as interviews and focus group discussions, this methodology allows participants to express their thoughts, concerns, and insights in their own words. This process is crucial for understanding what challenges exist, why they occur, and how they are perceived by those directly impacted.

One key aspect of the research methodology is adopting a qualitative descriptive research design. This design is characterized by its straightforward and pragmatic data collection and analysis approach. It aims to provide a comprehensive summary of the phenomenon under scrutiny—in this case, the challenges faced in implementing the Inaportnet program. Given the practical and real-world nature of the research objectives, the qualitative descriptive design is well-suited for directly exploring and documenting the challenges experienced by Inaportnet users and stakeholders in Sorong City.

Through this qualitative descriptive design, the research will seek to paint a vivid and detailed picture of the challenges, offering a holistic view of the situation. This approach emphasizes the importance of capturing the depth and richness of the participants' experiences and perceptions, which is particularly valuable when dealing with complex and practical issues like logistics operations at a busy port. By providing a comprehensive summary, the research will lay the groundwork for informed decision-making, policy development, and program improvement within the context of the Inaportnet program at the Port of Sorong City.

3. RESULTS AND DISCUSSION

3.1 Complexity of the Inaportnet Application

The qualitative research revealed a recurring and central theme: the complexity of the Inaportnet application at the Port of Sorong City. Users and stakeholders consistently reported facing various challenges in grasping the full spectrum of the application's features [2]. This complexity often resulted in user confusion and frustration.

Figure 2. Login Page Inaportnet

The paper mainly discusses the pressing need for user-centric improvements. A holistic approach is warranted. To address the complexity effectively,

Firstly, user-friendly interfaces should be a priority. Redesigning the application's interface with simplicity and

user-friendliness in mind can alleviate the challenges users face. This solution involves decluttering the interface, simplifying navigation, and ensuring that functions are logically organized. Valuable user feedback should inform these interface changes, ensuring they align closely with the preferences and needs of the actual users.

Secondly, clear instructions within the application are vital. Users need access to step-by-step guides, tooltips, and explanatory content to help them understand how to use the features effectively. Such clear instructions can significantly reduce the learning curve and mitigate user frustrations.

Thirdly, comprehensive user training programs should be offered. These programs familiarize users and stakeholders with the application's functionalities, best practices, and standard troubleshooting solutions. Training sessions can be conducted in person or digitally, ensuring accessibility for a wide range of users.

Additionally, establishing a feedback mechanism within the Inaportnet application is crucial. This mechanism enables users to report issues, provide suggestions, and voice their concerns. Continuous user feedback is invaluable for iterative improvements, ensuring the application evolves to meet user needs.

Lastly, considering accessibility is essential. Ensuring the application is accessible to individuals with diverse needs, including those with disabilities or language barriers, is a fundamental aspect of user-friendliness. Incorporating accessibility features and providing language options can broaden the user base and improve overall usability.

Thus, addressing the complexity of the Inaportnet application is pivotal for enhancing the user experience and maximizing its potential benefits at the Port of Sorong City. Simplifying the application's interface and functionality is not merely a technical challenge but also a strategic investment in improving the efficiency and effectiveness of logistics operations.

3.2 User Uncertainty

During our qualitative research, it became evident that many participants harbored uncertainty regarding the Inaportnet application and its potential benefits for their logistics operations. This uncertainty presented a substantial hurdle to the application's widespread adoption.

The discussions that evolved from this theme underscore the importance of comprehensively addressing user uncertainty. Effective communication and education initiatives take center stage to encourage broader adoption and unlock the application's potential advantages.

To begin with, stakeholders need clear and concise information about the Inaportnet application's benefits. This fact entails transparently articulating how the application simplifies logistics processes, streamlines operations, and enhances overall efficiency [3]. By providing a clear rationale for adoption, stakeholders can better grasp the value the application brings to their daily workflows.

Education initiatives are pivotal in bridging the knowledge gap and building confidence among users and stakeholders. These initiatives should encompass a range of approaches, including comprehensive training programs covering fundamental and advanced functionalities. Practical demonstrations and workshops can further boost understanding by allowing stakeholders to interact directly with the application. Establishing accessible user support channels, such as helplines and online chat support, provides a safety net for users seeking guidance.

Moreover, it is crucial to ensure that communication and education efforts align with stakeholders' specific needs and challenges. Tailoring these initiatives to address their pain points and objectives can help stakeholders perceive the application as a valuable tool for enhancing logistics operations [4].

Therefore, resolving user uncertainty regarding the Inaportnet application is pivotal for its successful adoption and utilization at the Port of Sorong City. Effective communication and education initiatives empower stakeholders with the knowledge they need and instill confidence in the application's potential to simplify and improve logistics processes. These initiatives represent an investment in realizing the application's full potential benefits and fostering a culture of innovation within the port community.

3.3 Signal Interference Challenges

The qualitative research underscored a significant and recurring issue: the sporadic interference of signals in Sorong City. Participants consistently flagged this as a significant impediment to the smooth operation of the Inaportnet program. They shared experiences where signal disruptions had real-world consequences, causing delays and errors in logistics operations.

The ensuing discussion centers on the necessity of technological infrastructure improvements to address this challenge. These improvements are vital to ensure the Inaportnet program's success, primarily because consistent and reliable connectivity is its lifeblood [5].

Firstly, Sorong City must consider investing in infrastructure upgrades. This step bolsters the capacity and dependability of the city's telecommunications networks. By fortifying the local network infrastructure, Sorong City can reduce its susceptibility to signal disruptions caused by external factors, thereby minimizing their detrimental effects on logistics operations. These investments lay the foundation for a technologically robust environment that the Inaportnet program requires.

In addition to infrastructure upgrades, exploring alternative solutions to mitigate signal disruptions is imperative. This approach entails diversifying connectivity options to reduce vulnerability. Measures like deploying backup communication channels or satellite-based connectivity can ensure uninterrupted access to the Inaportnet application even when signal interference occurs. Such diversification enhances the program's resilience and

minimizes the impact of external disruptions.

Furthermore, proactive monitoring and maintenance of the technological infrastructure should be standard practice. Sorong City can identify and rectify issues by conducting regular assessments and maintenance routines before they escalate into significant disruptions. This preventive approach helps maintain consistent connectivity and mitigates the impact of signal interference on logistics operations.

In summary, addressing the challenge of signal interference in Sorong City is pivotal for the Inaportnet program's success. Technological infrastructure improvements, encompassing investments and alternative solutions, are indispensable components of this endeavor. By ensuring uninterrupted and reliable connectivity, Sorong City can enhance the program's efficiency, minimize disruptions, and support seamless logistics operations at the Port. These infrastructure enhancements are not merely a response to a challenge but a forward-looking investment in Sorong City's future as a competitive logistics hub.

3.4 Service Fairness and Transparency

Throughout our qualitative research, a pervasive theme emerged - the importance of service fairness and transparency at the Port of Sorong City. Participants consistently voiced their desire for a more equitable approach to accessing logistics services at the Port, advocating for a "first come, first served" principle. Additionally, they emphasized the critical need for greater transparency in shipping and goods services.

The discussion underscores the significance of implementing transparent allocation mechanisms and ensuring equitable service provision. These measures are crucial not only for resolving current issues but also for fostering a sense of fairness, reducing conflicts, and enhancing the overall perception of the Port's efficiency and integrity.

First and foremost, the call for a "first come, first served" approach reflects a fundamental desire for equitable access to logistics services. This principle ensures that services are allocated based on the order of requests, minimizing the potential for favoritism or unfair treatment. Implementing such an approach can promote a level playing field for all users and stakeholders, enhancing perceptions of fairness and trust.

Furthermore, addressing the need for greater transparency in ship and goods services is integral to building confidence in the Port's operations. Transparency involves providing clear information about processes, timelines, and service availability. By making this information readily accessible, stakeholders can make informed decisions, plan effectively, and better understand how services are allocated.

Implementing transparent allocation mechanisms benefits stakeholders and aids port authorities in managing logistics operations efficiently. Clear procedures and guidelines can streamline processes, reducing bottlenecks and potential disputes.

Equitable service provision extends beyond mere allocation to encompass the overall user experience. It entails ensuring that services are accessible to all, regardless of their size or influence. By prioritizing equitable service provision, the Port can foster a reputation for inclusivity and fairness, attracting a broader range of businesses and stakeholders.

Thus, the emphasis on service fairness and transparency by participants in our research highlights these principles' importance in the Port of Sorong City context. Implementing transparent allocation mechanisms and ensuring equitable service provision addresses current concerns and contributes to a positive perception of the Port's efficiency and integrity. These measures are operational enhancements and strategic investments in building a thriving and equitable logistics hub.

3.5 Expedited Services and Cost Reduction

A recurring and significant theme that emerged from our qualitative research was the strong desire among participants to expedite the completion of ship and goods services at the Port of Sorong City. This desire was rooted in recognizing the critical need to reduce waiting times and streamline operations. Participants expressed frustration with extended waiting periods, which could lead to delays, increased expenses, and logistical complications. Expedited services, therefore, were seen as a crucial element not only for convenience but also for maintaining the Port's competitiveness.

Several interrelated considerations come into play to expedite services effectively. First and foremost, process optimization is essential. Streamlining logistics processes by identifying and eliminating bottlenecks and inefficiencies can significantly enhance operational efficiency. This step entails a comprehensive review of procedural complexities and redundancies that may contribute to delays.

Incorporating technology into operations is another avenue for expediting services. Participants acknowledged the potential of digital solutions like the Inaportnet application to automate tasks, enable real-time tracking, and reduce manual errors. These technologies offer a pathway to increased efficiency and faster service completion.

Furthermore, efficient resource allocation plays a pivotal role. Properly assigning labor and equipment resources to tasks based on demand and priority can reduce idle time and waiting periods, ultimately expediting services.

The discussion on cost reduction is intricately linked to the pursuit of expedited services. Participants recognized that improved efficiency not only accelerates operations but also has the potential to reduce costs for all stakeholders. This recognition stems from the understanding that time-sensitive and streamlined processes inherently lead to cost-effective operations.

Therefore, cost-saving measures encompass various aspects, including optimizing resource usage to reduce unnecessary expenses, embracing environmentally friendly and energy-efficient practices to save on fuel and energy costs, and strengthening collaboration and integration along the entire supply chain to eliminate redundant efforts and inefficiencies.

Therefore, participants' desire for expedited services and cost reduction underscores the central importance of operational efficiency at the Port of Sorong City. Streamlining processes, integrating technology, and optimizing resource allocation are critical steps toward achieving these objectives. These efforts contribute to operational enhancements and lead to cost savings that benefit all stakeholders engaged in the logistics ecosystem.

3.6 Policy and Program Implications

The outcomes of our qualitative research have illuminated a complex set of challenges linked to the Inaportnet program in Sorong City. To effectively address these challenges, a multifaceted approach is required. The following elaboration outlines the policy and program implications drawn from these findings:

The first implication centers on the necessity of user training and support. Comprehensive user training programs are essential to acquaint stakeholders with the Inaportnet application's functionalities. Furthermore, ongoing support mechanisms should be in place to address their concerns and uncertainties. This approach enhances users' ability to navigate the application and boosts their confidence and satisfaction. The availability of accessible and responsive user support channels is vital to ensure timely assistance.

Secondly, technology infrastructure plays a pivotal role. Prioritizing infrastructure upgrades is crucial to ensure reliable and uninterrupted signal connectivity. Disruptions in signal connectivity can have far-reaching consequences for logistics operations. Infrastructure investments should encompass improvements in network capacity, redundancy measures, and signal enhancement technologies. These enhancements are instrumental in minimizing disruptions and maintaining the efficiency of the Inaportnet program.

The third implication revolves around transparent allocation mechanisms. Responding to stakeholders' desire for fairness and developing and implementing transparent allocation mechanisms in logistics services is essential. Responding to that the program should be designed to promote fairness and trust among stakeholders. Transparent allocation mitigates conflicts and fosters an environment of integrity and equity within the logistics ecosystem.

Fourthly, the need for streamlined operations must be balanced. The drive for expedited services and cost reduction necessitates the implementation of process improvements and technology-driven solutions. Streamlining operations is critical for expediting the completion of ship and goods services, resulting in reduced waiting times and costs. This step may entail thoroughly reviewing existing processes, such as eliminating bottlenecks and integrating digital tools to automate and optimize workflows. Streamlined operations contribute significantly to overall efficiency and competitiveness.

Lastly, effective communication and education are paramount. Launching communication and education campaigns is vital to inform stakeholders about the benefits and functionalities of the Inaportnet program. Clear and consistent communication can alleviate user uncertainty and encourage broader adoption. Education initiatives should encompass a range of activities, including user training, workshops, and the provision of user support channels. These efforts empower stakeholders with knowledge and contribute to a culture of innovation and continuous improvement.

In summary, our findings' policy and program implications underscore the need for a comprehensive and coordinated approach to address the challenges associated with the Inaportnet program in Sorong City. The Port can elevate its efficiency, competitiveness, and overall service quality by focusing on user training, technology infrastructure, transparent allocation mechanisms, streamlined operations, and effective communication and education. These implications serve as a roadmap for optimizing the Inaportnet program and ensuring its sustained success as a critical component of Sorong City's logistics ecosystem.

4. CONCLUSIONS

This qualitative research has illuminated challenges and opportunities entwined with the Inaportnet program at the Port of Sorong City. These insights provide a foundation for informed policy and program decisions aimed at enhancing the program's effectiveness and ensuring its enduring success within the logistics landscape of Sorong City.

Our study uncovered a range of challenges, including the complexity of the Inaportnet application, user uncertainty, signal interference, the pursuit of service fairness and transparency, and the strong desire for expedited services and cost reduction. These challenges are interconnected, necessitating a comprehensive approach to resolution.

Several overarching policy and program implications have been delineated to navigate challenges in the implementation of the Inaportnet program at the Port of Sorong City:

1. User Training and Support: Robust user training programs and continuous support mechanisms are imperative to acquaint stakeholders with the Inaportnet application and alleviate their uncertainties.
2. Technology Infrastructure: Elevating the priority of infrastructure upgrades is pivotal to ensuring consistent signal connectivity, thus mitigating disruptions and preserving operational efficiency.
3. Transparent Allocation Mechanisms: The development and implementation of transparent allocation

mechanisms for logistics services are pivotal to promoting fairness and engendering stakeholder trust.

4. Streamlined Operations: Implementing streamlined operations through process enhancements and technology integration expedites service completion, reducing waiting times and costs.
5. Communication and Education: Effective communication and education campaigns are essential in informing stakeholders about the program's benefits and functionalities, encouraging broader adoption.

These implications collectively provide a roadmap for optimizing the Inaportnet program in Sorong City. Addressing these challenges and capitalizing on the opportunities will enhance the Port's efficiency and competitiveness and contribute to Sorong City's growth as a thriving logistics hub, benefiting all stakeholders within the logistics ecosystem.

Incorporating these insights and recommendations into the program's strategic development and implementation is paramount for ensuring its sustained success and realizing the vision of a more efficient and transparent logistics operation at the Port of Sorong City.

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