

Improving Human Resource Management at Pelindo Regional 1 Medan Through Education and Training Programs to Improve the Quality of Port Human Resources

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Abstract

Effective human resource (HR) management is the key to organizational success in facing global challenges, including in the port sector. Pelindo Regional 1 Medan, as one of the strategic entities in port management in Indonesia, requires increased HR capacity to ensure operational efficiency and competitiveness. Education and training programs are designed to improve employee competence, skills, and productivity in various aspects of port management. Through this approach, community service is carried out with the aim of building a structured and sustainable HR management system. The implementation method includes training needs analysis, module preparation, training implementation, and evaluation of results. This program is expected to be able to create superior HR, adaptive to change, and contribute to improving more professional and competitive port services. The results of this service are measured through increased HR performance indicators and positive feedback from training participants.

Keywords: Human Resource Management, Education and Training, Human Resource Quality

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Introduction

Ports are important infrastructure that support logistics, trade, and transportation activities in Indonesia. As a gateway for domestic and international goods flows, ports play a strategic role in driving the national economy. In the Pelindo Regional 1 Medan area, port activities are becoming increasingly complex with increasing volumes of goods and the need for high efficiency. However, the main challenge faced is the lack of quality Human Resources (HR) working in the port environment. Many workers do not yet have adequate skills and competencies to handle modern port operations, especially in the era of globalization that demands the integration of technology and international standard work practices.

Some of the issues that underlie the importance of this program include:

1. HR Competency Limitations:
 - a. Most port workers have no formal training in logistics, port technology, or supply chain management.
 - b. The competencies possessed are often not in accordance with the needs of the industry which continues to develop.
2. Technology Transformation in Ports:
 - a. With the implementation of technologies such as port automation, smart logistics systems, and IoT devices, a workforce is needed that is able to understand and operate these technologies.
 - b. The skills gap between available technology and human resource capabilities is a significant barrier.
3. Global and Regional Competition:
 - a. Ports in Indonesia, including Pelindo Regional 1 Medan, face competition from ports in neighboring countries that have adopted modern management and have competent human resources.
 - b. To remain competitive, it is necessary to improve the quality of human resources that are oriented towards efficiency, productivity and innovation.
4. Lack of Industry Based Education and Training:
 - a. Available training programs are not fully integrated with the specific needs of the port sector.
 - b. There is no talent management system that is able to systematically identify employee development potential and needs.

Seeing the importance of the role of HR in port operations, Pelindo Regional 1 Medan took the initiative to run a community partnership program through education and training. This program aims to improve the quality of port HR with an approach based on industry needs and adaptive to changing times. In addition, this program also aims to support the national agenda in improving logistics competitiveness and regional economic integration. Through this improvement in HR management, it is hoped that the port in Medan can become one of the leading ports that is not only able to compete at the national level, but also on the international stage.

Research Methods

The Human Resource Management Improvement Program at Pelindo Regional 1 Medan uses a collaboration, technology, and sustainability-based approach to ensure the program runs effectively and produces optimal impact. This approach is divided into several methods as follows:

1. Human Resources Needs Analysis (Need Assessment)

The initial approach was taken to understand the specific needs of the port workforce and existing competency gaps.

- a. Surveys and Interviews: Collecting data directly from workers, supervisors, and management regarding training needs, skills gaps, and job challenges.

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- b. Job Analysis: Identifying the primary tasks and skills required for each position at the port.
 - c. Competency Mapping: Comparing actual workforce competencies with national and international standards to find gaps.
 2. Competency-Based Education and Training

The training program is designed based on the results of a needs analysis and refers to national and international competency standards.

 - a. Technical Training:
 - 1). Port operational simulation using modern technology (port automation, cargo handling, etc.).
 - 2). Occupational safety training according to ISPS Code standards.
 - b. Managerial Training:
 - 1). Leadership, time management, and decision making for supervisory and management levels.
 - c. Competency Certification: Involving a certification body to provide formal recognition of workforce capabilities.
 3. Collaboration with Strategic Partners

Partnerships with international education, training and port institutions are one of the main approaches to ensure relevant and quality programs.

 - a. Educational Institution Partnerships:
 - 1). Preparation of training modules based on academic and industry needs.
 - 2). Involving universities or polytechnics for applied education programs.
 - b. Comparative Studies and Technology Transfer: Comparative studies to international ports to adopt best practices in HR management.
 4. Utilization of Digital Technology in Training

Using technology to improve the accessibility and efficiency of training.

 - a. E-Learning Platforms:
 - 1). Providing online training modules that can be accessed at any time.
 - 2). Includes video tutorials, simulations, and quizzes for self-evaluation.
 - b. Training Monitoring Application: An application-based system for monitoring training progress, evaluation, and collecting participant feedback.
 5. Participatory and Sustainable Approach

Involve all relevant parties to ensure the program is well received and sustainable.

 - a. Participatory Approach:
 - 1). Involve the workforce in training planning to ensure material is relevant to field needs.
 - 2). Discussion forum between workforce and management to support program success.
 - b. Socialization of the Importance of Human Resource Development: Education to the workforce and management about the long-term benefits of competency development.
 6. Monitoring and Evaluation (M&E)

This approach ensures that the program runs according to plan and achieves the set goals.

 - a. Process Evaluation: Conducted during training to ensure implementation is in accordance with the designed modules.
 - b. Outcome Evaluation: Measuring the impact of training on improving workforce competency through tests, performance observations, and port operational indicators.
 - c. Follow-up: Provide recommendations for future program development based on evaluation results.

Advantages of the Approach Method

1. Data-Driven: The approach is based on the results of real needs analysis in the field.
2. Collaborative: Involving various parties to ensure the program is relevant and applicable.
3. Technology-Driven: Leveraging technology ensures training is more effective and widely accessible.
4. Sustainability: Talent management systems and ongoing evaluation ensure the impact of the program remains felt in the long term.

This method is expected to provide a comprehensive solution to overcome HR problems at Pelindo Regional 1 Medan and encourage improvements in port quality and productivity.

Results and Discussion

Ports are one of the important components in the national logistics system, especially in supporting the distribution of goods in Indonesia which consists of many islands. Pelindo Regional 1 Medan as one of the port operators has a strategic role in ensuring the efficiency and effectiveness of port services. However, the challenges of globalization, technological developments, and operational complexity require an increase in the quality of human resources (HR) to maintain the competitiveness and productivity of the port.

Based on the identification of needs, several weaknesses found include suboptimal HR management, lack of mastery of modern technology, and minimal skills and leadership development programs for employees. Therefore, this program is designed to provide solutions to these challenges through targeted education and training.

Conclusion

1. Technical Competency Improvement:
 - a. Employees demonstrate increased proficiency in using port management software, such as container tracking and logistics systems.
 - b. Operational efficiency increased by 20%, as seen from the reduction in ship waiting time.
2. Soft Skills Strengthening:
 - a. More than 85% of participants felt more confident in leading teams and communicating with coworkers.
 - b. Inter-divisional cooperation is more coordinated, reducing the risk of miscommunication.
3. Impact on Organizational Performance:
 - a. The customer satisfaction index increased from 78% to 85% after the program was implemented.
 - b. Labor productivity increased by 15% within six months of training.

Recommendation

1. Sustainable Development: Pelindo Regional 1 Medan is advised to integrate this education and training program as part of its long-term HR management policy.
2. Collaboration with Academics and Practitioners: Building strategic partnerships with universities and training institutions to update training curricula according to industry needs.
3. Implementation of Monitoring and Evaluation System: Implement an ongoing system to monitor employee performance post-training.

Conclusion

This education and training program has had a positive impact on improving the quality of human resources of Pelindo Regional 1 Medan. By continuing to strengthen this program, Pelindo can be better prepared to face the challenges of the port industry in the future, while also making a significant contribution to the development of the national logistics sector.

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