## Streszczenie w języku angielskim

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Title of the doctoral dissertation: Process maturity and service quality as components of management in maritime container terminals.

The doctoral dissertation addresses the issue of identifying the relationship between process management and service quality, using the example of maritime container terminals in Poland. The research problem defined in the study is the association between the level of process maturity and service quality.

The main objective of the study is to assess the process maturity of maritime container terminals and the quality of services they offer. The achievement of the main purpose is subordinated to eight partial objectives.

The dissertation puts forth a hypothesis regarding the direct impact of the level of process maturity on service quality in maritime container terminals.

The scope of the research is related to the analysis of activities and functioning of maritime container terminals in terms of process management. The subject scope covers the Tri-City maritime container terminals and their relationships with shipping lines, land transport companies, and freight forwarding companies. The temporal scope of the research covers the years 2021-2022.

The thesis consists of five chapters. In the first chapter, the identification of management areas in organizations was conducted. Subsequently, an analysis of the process approach was carried out, along with the systematization and classification of process definitions based on Polish and foreign literature, as well as the identification of process evaluation measures. The following subchapter characterized the concept of process maturity and presented selected models for its assessment. Due to the fact that the level of process maturity of an organization is related to the quality of implemented processes, the next subchapter is devoted to systematizing the definition of the terms quality and service quality. The final part of this chapter focused on the presentation of the SERVQUAL method, the most frequently used method for service quality assessment.

In the second chapter, the role of the maritime container terminal in intermodal supply chains was identified first. The connections between individual links in the chain were highlighted, emphasizing the central and crucial nature of the terminal. In the further part, elements of infrastructure and technical equipment were characterized in the context of shaping the level of process maturity and service quality.

In the third chapter, the role of processes and services in shaping the efficiency of terminal operations was presented, analyzing the efficiency and performance indicators of the facility found in the literature. Additionally, a comparative analysis of technical and performance aspects of selected container terminals in Asia, Europe, and Poland was conducted, highlighting the dominant role of process maturity in shaping service quality and efficiency. The second part of this chapter focused on the systematization and critical analysis of the current state of knowledge in the research on the service quality of maritime container terminals.

Chapter four concerns the presentation and evaluation of research methods for process maturity and service quality of maritime container terminals. In the first part of the chapter, the concept of a multi-criteria model for assessing the process maturity of maritime container terminals was presented, followed by a description and delineation of the boundaries of three maturity levels. In the subsequent part, a hierarchy of criteria for assessing process maturity in the proposed model was established.

In the second part of the chapter, the DEMATEL fuzzy method was discussed for determining cause-and-effect relationships among the components of the studied system. Subsequently, a method for evaluating the service quality of maritime container terminals based on the SERVQUAL method was presented.

In the final chapter, which is the most extensive part of the thesis, the results of the empirical study were presented, aiming to assess the process maturity of maritime container terminals and compare it with the evaluation of service quality provided to maritime carriers, land transport companies, and freight forwarders.

In the conclusion, the main findings from the conducted research were presented, along with recommended actions, encountered research limitations, and further research directions.

Keywords: process maturity, service quality, maritime container terminal, process maturity assessment model