Digitalization of Indonesian Offloading Management Systems from FPSO to Shuttle Tanker

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A b s t r a c t

Artificial Intelligence has experienced significant improvements, including its use in sustainable maritime security. This journal discusses the development of information systems that are interconnected and real time providing reports to all parties who need information. Overall, we find that the potential for oil sabotage is always present in the delivery of tankers from FPSO to shuttle tankers. The concept of integrated FPSO offloading management to tankers implies minimizing the potential loss of cargo. At the same time, the intelligent technology most often used to control maritime security is the Automatic Integrated System.

1. Introduction

The oil and gas industry in Indonesia is facing pressure to improve operational efficiency and safety. In this context, digitalization is a promising solution, especially in offloading management from FPSO to Shuttle Tanker. This article aims to review the extent to which digitalization has been implemented in the offloading management system in Indonesia. In the era of globalization and advances in information technology, the oil and gas industry in Indonesia faces major challenges to provide adequate innovation to increase operational efficiency. One of the crucial aspects in the oil supply chain.

This journal discusses in depth the process of digitizing the demolition management system in the Indonesian oil and gas industry, especially from FPSO to Shuttle Tanker. This analysis involves the application of the latest technologies such as the Internet of Things (IoT), big data analytics, and artificial intelligence (AI) to detail the expected positive impacts of implementing these digital solutions.

Through critical discussions of recent developments and practical approaches in various projects, this journal aims to provide a comprehensive view of the challenges, benefits and opportunities associated with the digitalization of offloading systems in the context of oil and gas companies in Indonesia. It is hoped that the resulting conclusions can provide in-depth insight to stakeholders, researchers and industry practitioners in facing the ongoing digital revolution in the Indonesian energy sector.

2. Methods

This study uses a descriptive analytical approach to collect data from various sources, including literature, interviews with industry experts, and historical data analysis. The data was then analyzed to identify the level of digitalization adoption in offloading management in Indonesia.

3. Results and discussion

The research results show that the oil and gas sector in Indonesia has adopted a number of digital solutions in offloading management. The use of