



Cyprus
University of
Technology

Faculty of Management
and Economics

Master's Thesis

**SAFETY IN SHIPPING AND HOW AUTONOMOUS
VESSELS CAN IMPROVE IT**

Pavlos Loizou

Limassol, May 2022

CYPRUS UNIVERSITY OF TECHNOLOGY
FACULTY OF MANAGEMENT AND ECONOMICS
DEPARTMENT OF COMMERCE, FINANCE AND SHIPPING

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Cyprus University of Technology

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I would like to express my appreciation to my supervisor Dr. Photis Panayides for his kind assistance and help with my thesis. His guidance was vital and this paper would have not been completed without his supervision.

ABSTRACT

This study entitled «Safety in shipping and how autonomous vessels can improve it» has been prepared by Pavlos Loizou, a student of Cyprus University of Technology under the supervision of Dr. Photis Panayides.

Following the global improvement of technology, especially in all means of transportation, shipping industry is becoming a part of this development and the introduction of autonomous vessels is already under the microscope of companies in shipping, and not only.

‘Safety first’, is written on any vessel sailing in the seas and is the first and most important rule that must be followed by the crew, master of the ship and the company which operates or owns the vessel. There are hundreds of regulations and codes created over the last century that aim for the best safety of staff on board and off shore of the vessel. Now, with the addition of autonomous vessels, all these regulations have to be reviewed and even recreated in order to comply with the new era of shipping, when and if the time comes.

This research aims to indicate the overall safety of autonomous vessels, as well as conventional vessels, and how it can be improved over the years. In addition, few other important factors and risks are stated, such as influence in labour, risk of not having crew on board, piracy and cyber attacked will be analysed.

In order to be able to observe the overall thinking in the shipping industry regarding autonomous vessels, a questionnaire was sent to several companies. After analysing the answers a more concentrated result was created that concerns whether automation of vessels is or will be easily accepted.