

IMPACT OF ARTIFICIAL INTELLIGENCE ON MARITIME INDUSTRY



Capt. Prabhat Nigam

Captain Nigam has over 37 years experience in the industry both at sea and ashore. During 25 years at sea he was Master on VLCC's, Product & Chemical tankers and Ro-Ro Car Carriers. During his time ashore from 2006 he has been closely associated with QHSSE, Auditing and Maritime Education & Training. Prabhat joined ASP in 2012 and is responsible for all training requirements in the ASP Group. He is a Lead Auditor of ISO 9001, 14001, 18001, ISM and ISPS and also the Examiner for Mates & Masters with Directorate General of Shipping and a member of the Board of Technical committee of IRS Captain Nigam is Extra Master, holds an honors degree in Nautical Science, MBA in Shipping & Logistics Management, Fellow of the Institute of Chartered Ship Brokers, UK and is currently pursuing a PhD in Nautical Studies from IMU.

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Abstract

During the last three centuries, three major industrial revolutions are usually mentioned. The first one related to the development of railroads and the steam engine in order to mechanize production. The second one related to electrical energy and the assembly line to develop mass production. The third revolution revolves around the emergence of electronics computers and the information technology to automate production. We are currently undergoing a new revolution that is linked to several phenomena such as nanotechnology, biotechnology, robotics, internet of things, 3D printing. The most disruptive phenomenon is the development of artificial intelligence (hereinafter referred as AI), that is presented as an innovation connected to the technological advances pertaining to information and data processing. Also in this area there are other inventions from the last century such as computers, internet, the world wide web—www- search engines, etc. The epicentre of the “Fourth Industrial Revolution” is the exponential increase of two factors: the storage capacity and processing speed of information and data. Massive volume of data and information cannot be efficiently processed by human beings. Therefore, artificial intelligence is the revolution of revolutions. Its current and potential development is due to the fact that it manages to equal or widely surpass certain cognitive capacities, by processing data and information more efficiently in increasingly more human activities.