The Future of Maritime Digital Applications/IoT Trends: 2020

Valour Consultancy plans to expand upon its well-received maritime connectivity and hardware report, examining present and future of maritime digital applications on connected vessels, evaluating the key IoT trends and potential ROIs for the "Digital Connected Ship".

The modern ship has a plethora of main power, navigation, support and other ancillary systems. Far from being just a vessel with a motor for transporting goods across the ocean, the modern container ship, cargo vessel, bulk carrier or oil or gas tanker, requires powerful sophisticated engines with advanced ancillary machinery that needs – starting compressors, oil pumps and cooling systems, fuel transfer and feed pumps, exhaust monitoring, fuel centrifuges, oil/water separation plants and more.

In addition, there are requirements for bilge and ballast water treatment, tank level monitoring, mooring and anchoring controls, deck cranes, transfer pumps, fire safety systems, heating systems, refrigeration and air-conditioning systems, asset monitoring plus all the electrical distribution and control needed for steering and navigation.

There may easily be over two hundred different systems onboard a vessel or energy platform and, in all likelihood, they will have been purchased from over 200 different vendors either by the shipyard, who assembles them, or by the ship-owner that fitted them. On the bridge, there are four or five different control systems that look after portions of this equipment, and more systems which are stand-alone such as firefighting and ventilation control.

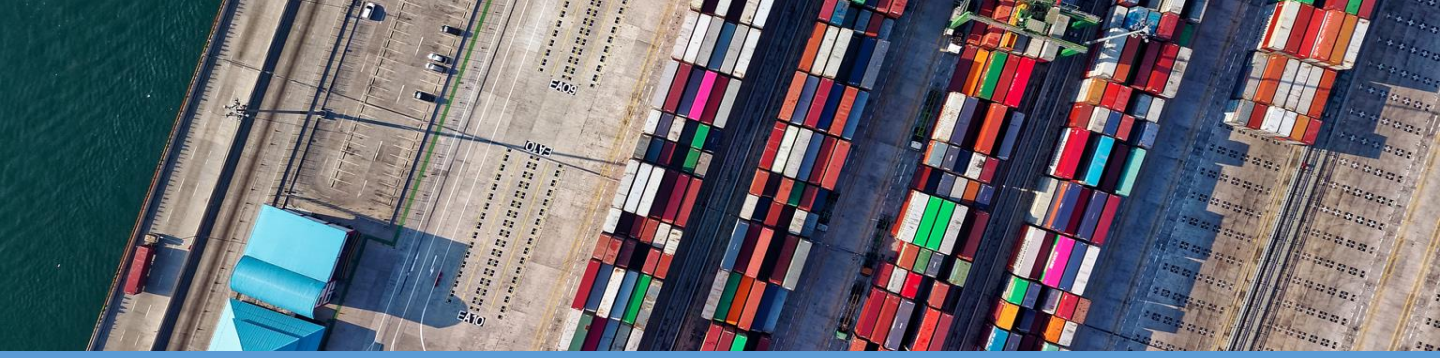
The report will cover the technical requirements of digital control and will detail the expected future development of this burgeoning market taking into account the growing number of IoT solutions being offered by maritime providers. Furthermore, Valour Consultancy will explore the new business models being deployed by maritime service providers, and technology companies expanding their service offerings.

Valour Consultancy aims to profile the most notable companies and their solutions in detail; present and future roadmap plans, unique service and product features, recent business activities and merger and acquisitions in the industry. Forecasts for revenues, license or platform sales and potential service subscribers extend from 2018 to 2028 segmented by geographic region and key applications.

Valour Consultancy invites you to participate in this research, influence the scope and receive a substantial discount on the price of the final report. Further information on this participant program can be found on page 5, while pages 2-4 explain the scope of this research in more detail.

Questions to be answered

- How many maritime digital applications, solutions and services were sold or trialled and sold in 2018?
- What is the global market value of these services to maritime vessels in 2018?
- Which maritime digital applications hold the most promise? How will they change in the future?
- How big is the digital component and communication service market and how will it progress in the future?
- How are these solutions developing and are there any key milestones that need to be overcome?
- Which applications hold the most potential for digital interconnectedness?
- Where will the commercial digital ship market be in 10 years?
- Which types of digital interconnectedness will be the most successful and why?
- Which are the most interesting and unique case studies of the use of the digitally connected ship?
- How are companies changing the maritime industry's attitude digitally-connected vessels, and how will this generate more business opportunities?
- Will the increased deployment of digitally connected vessels be credited to a particular country or region? And if so, why?
- How big will component and service provider revenues be for specialist vessels be by 2028?
- What is the impact of these new connectivity solutions for service providers and satellite operators?
- Which countries and ruling bodies have created policies or regulations for digital interconnectedness?
- What are the latest regulatory and technical requirements for research and commercial digital connectiveness and how will they change in the future? How will this impact the market?
- Which other industries could the digital connection be related to?
- Do digitally connected ships need to be connected 24/7/365?
- How do each of the subsystem services vary and what are the expected returns of investment?



Proposed Research Content

It is proposed that the report will be organised into the following chapters:

Chapter 1 – Introduction, Scope and Methodology

Contains the report scope and explanations as to what is included and excluded from the research. All definitions used are presented in a clear and concise manner, alongside the exchange rates used in our analysis and the base year and forecast methodologies employed.

Chapter 2 – Technology Overview

Concentrates on the technical aspects of maritime digital applications, solutions and services, and provides a comprehensive overview and compendium of the different types of solutions from scrubbers to thrusters. This includes system and network types, developments in key enabling hardware and relevant standards and regulations. Full list of systems will be included after report scope is agreed.

Chapter 3 – Market Statistics and Trends

Quantifies the number of digital applications, solutions and services deployed by vessels out to 2028 with new applications and uses that could influence future take up of IoT technologies supporting this data. Data is segmented by geographic region, maritime market segment and type of IoT solution – this definition will be clarified during the scoping of the report.

Statistics also show the cost of providing connectivity for the solution, cost savings from various applications and service revenues from offering connectivity to passengers (where applicable). An examination will also be made of key electrical and network components.

Chapter 4 – Competitive Environment

Looks at the competitive environment of those offering digital maritime applications, services and solutions. Assessment of new IoT service and product developments, key partnerships, business models and strategies as well as a presentation of market shares of technology provider solutions.

Need something not mentioned here? Our participant program allows you to tailor the scope to your requirements. See page 5 for details.

Proposed Scope

The diagram below offers a visual summary of the quantitative analysis to be included in this report. 10 year forecasts will be provided for all segmentations from 2018 until 2028 in terms of installed base, annual installations, annual USD $ revenues, ASPs and penetration rate.

CONNECTED VESSELS:

- Subscribers / Revenue (per million USD) / Average revenue per License or Platform (ARPL)

MARKET SEGMENTATION

Geographical region

Asia-Pacific
EMEA
North America
Latin America

Market segment

Fishing
Leisure
Merchant
Offshore platforms
Passenger ships

Types of Solutions –

Platforms, Remote Assistance, M2M, Data Analytics, others

Systems

Engine monitoring
Fuel transfer
Oil pumps
Starting compressors
Cooling systems
Fuel centrifuges
Feed pumps
Transfer pumps
Electrical Distribution
Steering and Navigation
Radar and Radio
Navigation Lights
Control of Mooring/Anchoring
Thrusters and Maneuvering
Lifeboats and Safety Equipment
Fire Safety Systems

Loading and Stability
Sea-tight Doors and Hatches
Collision Avoidance
Scrubbers
Exhaust Monitoring
Oil/water Separation
Bilge/Ballast Water Treatment
Tank Level Monitoring
Hull Corrosion Suppression
Stress and Strain Monitoring
Sewage-Treatment
Fresh Water Makers
Heating Systems
Refrigeration and Air-Conditioning Systems
Deck Cranes

Market shares – Service providers, Technology providers and compendium of Govt. /Authority bodies' initiatives

Participant program and report costs

By taking part in our participant program, clients can:

- Modify the report scope to meet specific market research requirements
- Benefit from having advanced access to market estimates and forecast data
- Take advantage of a 15% discount on the report price (see table below)
- Receive a presentation of the report findings by one of our consultants

There are no additional costs or commitment associated with the participant program. Clients need only complete the order form below before 11th October 2019. After this point, the report will only be available at the non-participant price.

License	Currency	Participant Price (exc. VAT)	Non-Participant Price (exc. VAT)
Single User (only the licensed individual can use the report)	GBP	£3,300 ☐	£3,882 ☐
Site (anyone at a specific company location can use the report)	GBP	£3,960 ☐	£4,659 ☐
Divisional (anyone in a specific team/division can use the report)	GBP	£4,554 ☐	£5,358 ☐

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