IAME 2020 Conference

Special Session on “Maritime Digital Business Technologies: Challenges and Applications”

Session Organisers:

Ioannis N. Lagoudis, University of Piraeus
Ioannis N. Theotokas, University of Piraeus
Mohamed M. Naim, Cardiff University
Okan Duru, Nanyang Technological University

Call for Papers

The IAME2020 special session on “Maritime Digital Business Technologies: Challenges and Applications” in Hong Kong, China, follows the successful special session on “The Conundrum of Digital Transformation in the Maritime Industry” organized during the IAME2019 conference in Athens, Greece. The special session in Athens attracted 7 full papers and 5 extended abstracts organized in two sessions. Among the topics covered were additive manufacturing (Kostidi and Nikitakos, 2019), autonomous ships (Adland et al., 2019), blockchain applications (El Khadiri and Acciaro, 2019; Galvao and Mileski, 2019; Lambrou et al., 2019; Henesey, 2019), big data analytics (Andersen et al., 2019), drone applications (Stein, 2019) and e-challenges in liner shipping (Chan et al., 2019; Fanam et al., 2019; Anwar et al., 2019). The sessions also hosted a paper by Wang et al., (2019) related to the impact of the technological advancement of the Panama Canal to maritime supply chains (For paper details from IAME2019 refer to https://www.dept.aueb.gr/sites/default/files/isfm/ENTYPO_FINAL_2.pdf).

The IAME2020 special session aims at furthering existing academic literature in the research area of digital business technologies where studies are still limited. Apart from the IAME Conference related papers the works of, Nikitakos and Lambrou (2007) on e-business maritime services, Lee at al. (2016) on e-transformation practices on ports, Fruth and Teutebrg (2017) on digital studies on maritime logistics, Choi et al. (2018) on container tracking applications and Bartholdi et al. (2019) on truck performance at container terminals through GPS applications, are present.

The new business environment, where the need of global supply chains for seamless flow for goods and services increases impetuously, demands the maritime industry to offer higher value to users. Digital business technologies, which enable the handling of data, are essential to the future business models since data is growing in velocity, volume and variety (Nguyen, et al., 2018; Larson and Chang, 2016). Decisions on spare part management, bunkering, maintenance and more, demand for real time systems, which will enable decision makers to make data driven decisions during the entire life cycle of the assets from the newbuilding phase all the way to scrapping. For this reason, such systems require well-structured data lakes, quality data and visual simplicity (Kwon, Lee and Shin, 2014). In addition, man-machine harmonization is key to the success of such systems with training and skill development being critical (Jin et al., 2015).
For the IAME2020 conference in Hong Kong, China, we seek full paper contributions and extended abstracts referring to any sector of the maritime industry, which will increase our understanding in any but not limited to the following issues:

- Conceptual business models in digitalization
- Digitalization of payment systems
- Cryptocurrency systems and applications
- Human resource management and digitalization
- Big data and data analytics models
- Predictive maintenance systems
- Machine learning
- Digital system representations (Digital Twin)
- Blockchain applications
- Supply chain visibility in shipping
- Additive manufacturing systems in the maritime digital space
- Case studies in digital applications
- Decision-making challenges with the use of business analytics (e.g. spares, inventory, chartering, supplies, bunkering)
- Cyber security models
- Building Information Modeling
- Policy making and public governance for digital solutions
- National and international regulations in the maritime digital space
- Maritime technology management
- Environmental technologies for shipping
- Digital solutions for ship safety and security
- Productivity gain with the 21st century technologies
- Maritime technology management
- Manpower evolution in the digitalization era
- Human Resources Management in digitalization era
- Environmental technologies for shipping
- Digital solutions for ship safety and security
- Productivity gain with the 21st century technologies

Potential contributors are asked to submit an abstract following the regular submission schedule as published on the IAME2020 conference website at https://www.polyu.edu.hk/fb/IAME2020/submission/submit-a-paper. You can opt for a full paper or extended abstract. During the uploading of the abstract kindly mention that the abstract is related to the special session. You are invited to concisely follow the author guidelines of IAME2020 which can be found online. It would be helpful if you could also inform the session organizers on the submitted abstract via e-mail to gtheotokas@unipi.gr, ilagoudis@unipi.gr, naimmm@cardiff.ac.uk and okanduru@ntu.edu.sg.
References


