



Lee Kong Chian
School of
Business

Inaugural SMU Maritime Workshop 2021

21 May 2021

Workshop Chair:

LIM Yun Fong

Associate Professor of Operations Management

MPA Research Fellow

Lee Kong Chian School of Business

Singapore Management University

Talk 1 – 3:30-4:15pm

Title: Container Terminal Operations: Research and Developments

René B.M. de Koster, Erasmus University

Abstract:

Container terminals have changed over the last decades. They have increased in size, in variety of processes handled, in information processing ability, in internal transport systems used, and in degree of automation. In this talk, I focus on developments in container terminal operations, how such operations can be modelled, and the insights that can be obtained from such models. New developments include, for example, faster quay cranes with multiple trolleys, new types of transport vehicles capable of automated driving and lifting of containers, automated stacking cranes with multiple cranes sharing the rails, extended gates, and appointment and identification systems for trucks. The models that have been developed over time focus on aspects like layout planning, berth allocation, ship stowage planning, scheduling of quay cranes, transport vehicles, and stack cranes, and stack assignment. In spite of all modelling efforts, the progress of technology requires a sustained effort of researchers to evaluate and compare strategies, operating policies, and system choices.

Speaker Bio:

René (M.) B.M. de Koster is a professor of Logistics and Operations Management at Rotterdam School of Management, Erasmus University, and chairs the department Technology and Operations Management. He holds a PhD from Eindhoven University of Technology. He is the 2018 honorary Francqui Professor at Hasselt University. His research interests are warehousing, material handling, terminal operations, and behavioral operations. He is the founder of the [Material Handling Forum](#) and is author / editor of 8 books and over 240 papers in books and academic journals. He is associate editor of *Transportation Science*, *Service Science*, and *Operations Research*.

Talk 2 – 4:15-5:00pm

Title: Pushing New Frontiers in Digitalisation, Decarbonisation and Talent through Partnership with The Maritime Industry

Tan Woei Tyng, MPA

Abstract:

With the ongoing disruptions and challenges to shipping, there is a need for maritime businesses to transform their operations to remain relevant and resilient. As a global hub port and leading international maritime centre, MPA will continue to partner the industry to spearhead developments in the areas of digitalisation, decarbonisation, and on building future-ready maritime talent in support of the industry's transformation.

Speaker Bio:

Ms Tan Woei Tyng is the Director of the International Maritime Centre Division at the Maritime & Port Authority of Singapore. The division is responsible for developing strategies and working with industry partners to grow Singapore's attractiveness as a location for maritime businesses. Another key role of the division is the curation and organisation of the annual Singapore Maritime Week, a platform to connect people with ideas globally. An accountant by training, Woei Tyng started her career as a tax consultant with Arthur Andersen and Ernst & Young, before joining MPA.