

THE 13TH POMS-HK INTERNATIONAL CONFERENCE



PROF. CHUNG PIAW TEO

Provost's Chair Professor

Executive Director of the Institute of Operations Research
and Analytics (IORA)

National University of Singapore

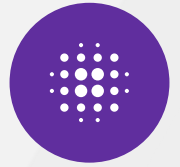
**Topic: Digital Aviation in the Post Covid Era -
Opportunities and Challenges**

ABSTRACT

The Covid-19 pandemic has brought the global economy, especially the airline industry, to an unprecedented standstill. The volatile external environment has created new challenges for operations and forced airlines worldwide to re-examine their practices and prepare themselves for the journey to recovery. This talk review some of the recent work undertaken by the NUS-SIA Digital Aviation Corp Lab, in collaboration with Singapore Airline, on issues ranging from seat comfort, pilot training, employee wellness, and revenue management.

In particular, for operations in the post covid era, "Sense-Infer-Adapt" has become a crucial capability for airlines to navigate the new environment. We discuss several projects that we have embarked on this topic, from an easy-to-implement changepoint detection algorithm to provide alerts and tune parameters in a commercial forecasting system, to data driven demand calibration and online resource allocation. We will show several applications of this approach in airline pricing and revenue management.

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BIOGRAPHY

Chung Piaw TEO is Provost's Chair Professor and Executive Director of the Institute of Operations Research and Analytics (IORA) in the National University of Singapore. Prior to the current appointments, he was Head of Department, Acting Deputy Dean, Vice-Dean of the Research & Ph.D. Program as well as Chair of the Ph.D. Committee in the NUS Business School.

He was a fellow in the Singapore-MIT Alliance Program, an Eschbach Scholar in Northwestern University (US), Professor in Sungkyunkwan Graduate School of Business (Korea), and a Distinguished Visiting Professor in YuanZe University (Taiwan).

He was elected INFORMS Fellow in 2019.

He is currently serving as a department editor for MS (Optimization), and a former area editor for OR (Operations and Supply Chains). His main interest is in service and manufacturing operations, supply chain planning, discrete optimization, and machine learning.

He has served on several international committees such as the Chair of the Nicholson Paper Competition (INFORMS, US), member of the LANCHESTER and IMPACT Prize Committee (INFORMS, US), Fudan Prize Committee on Outstanding Contribution to Management (China). He is also on the advisory board of various institutions, from the ESD Pillar in SUTD, ISEM in NUS, and also previously the School of Management in USTC, and the Business School in Hong Kong PolyU.