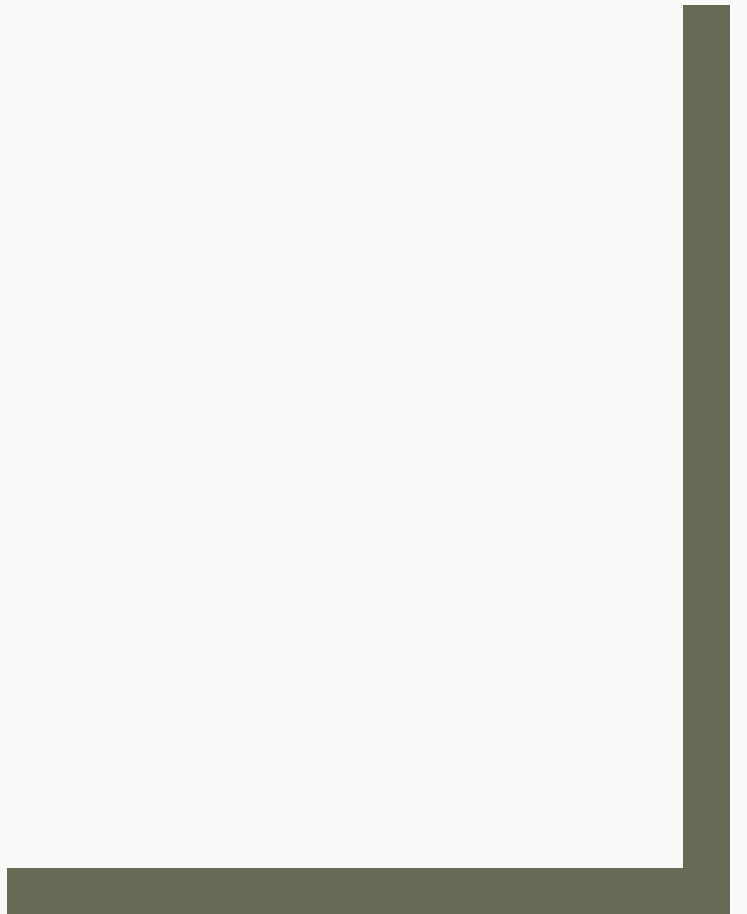
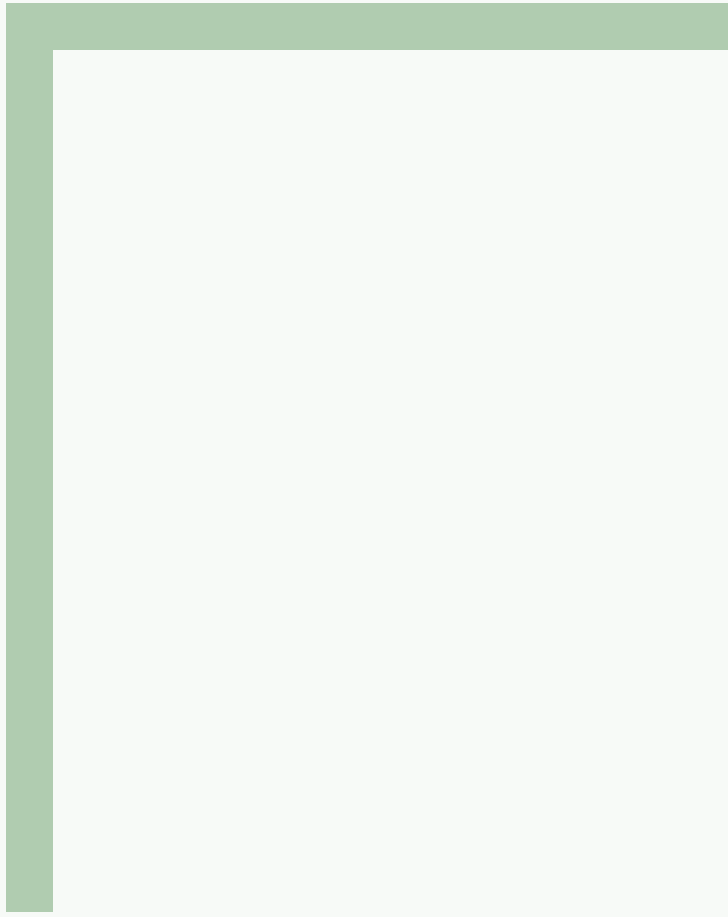




# *Open Up To The World Of* **TRADING AND MARITIME**

## **Annual Report 2020**



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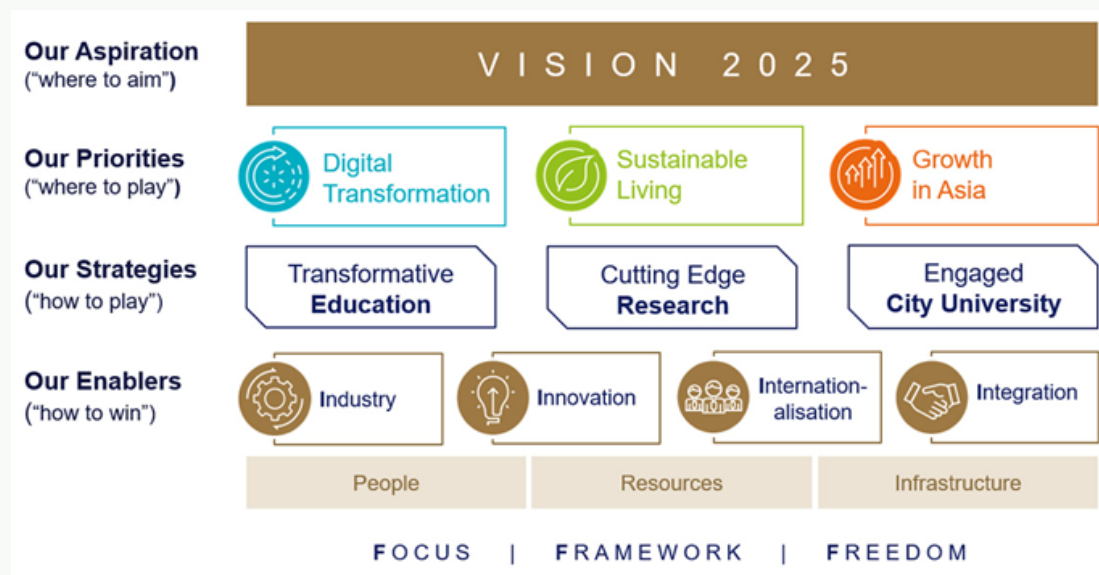
# Singapore Management University



The Singapore Management University (SMU) is a premier university in Asia and is internationally recognised for its world-class research and distinguished teaching. Established in 2000, SMU's mission is to generate high impact leading-edge research and produce creative and entrepreneurial leaders for the knowledge-based economy. SMU's emphasis on industry-centric and interdisciplinary learning is also widely recognised.

## SMU 2025: GROWING IMPACT, CULTIVATING CHANGE

Together, this constitutes our university strategic plan. It gives us focus, provided in the form of a framework of strategies and enablers, with specific strategic and enabling initiatives to carry through the Vision, within which there is freedom to come up with new ideas and initiatives.



## THE INTERNATIONAL TRADING INSTITUTE

The International Trading Institute at Singapore Management University (ITI@SMU) was formed as part of a tripartite initiative between the government, through the Enterprise Singapore (ESG), leading industry partners and the Singapore Management University. The first trading institute in the world to be set up within a university, it is Singapore's premier platform for leadership and talent development in the areas of maritime knowledge and international trading.

ITI@SMU's key objectives are:



**Creating value for partners by growing a pipeline of talent for the trading and maritime value chains**



**Strengthening Singapore's position as a trading and maritime hub through ecosystem partnerships**



**Leading the development of new lifelong learning programmes and initiatives for the sustainability of the trading and maritime sectors**

ITI@SMU continues to position itself as a strategic asset for the nation's trading and maritime sectors and will be constantly exploring new and exciting possibilities on how to create value and impact for her stakeholders.





## **Annie KOH**

Vice President, Business Development

V3 Group Professor of Family Entrepreneurship

Professor of Finance (Practice)

Academic Director, Business Families Institute and International Trading Institute

PhD International Finance, New York University, 1988

M Phil International Finance, New York University, 1985

Bachelor of Social Science & Economics (Hons) National University of Singapore, 1976

Monetary Authority of Singapore Scholar, 1975

## **The International Trading Institute Team**



Melinda TAN  
[melindatan@smu.edu.sg](mailto:melindatan@smu.edu.sg)



Sarah GRANT  
[sarahgrant@smu.edu.sg](mailto:sarahgrant@smu.edu.sg)



Jolene TAN  
[jolenetanfr@smu.edu.sg](mailto:jolenetanfr@smu.edu.sg)

2020 marked the year of the COVID-19 putting a halt to daily life. With staying home and social distancing highlighting the need for digital technology to keep us all connected, it will also be the year remembered for profound changes in communication behaviour.

ITI@SMU continued our efforts to deliver impactful value for the trading and maritime sectors. In this report, you will read about the eventful programmes that were part of our efforts to develop and grow Singapore's trading and maritime ecosystem.

All that we have accomplished would not have been possible without our friends and partners from fellow educational institutions, industry, and the government who continued to believe in us. We would like to extend heartfelt thanks and appreciation for all their unwavering efforts and support in journeying together with us throughout 2020.

We hope that you will enjoy reading this report as much as we have enjoyed putting it together.



**Joe Zhe ZHANG**

**(Finance Area Coordinator)**

Associate Professor of Finance

Ph.D. in Finance,

University of Iowa

**Profile of Associate Professor Zhang**

Access URL <https://bit.ly/34FgJ46>



**ZHENG Zhichao Daniel**

**(Operations Management Area Coordinator)**

Assistant Professor of Operations

Management

Ph.D.in Management,

National University of Singapore

**Profile of Assistant Professor Zheng**

Access URL <https://bit.ly/3oIWZVA>

All that we have achieved in the past year would not have been possible without the strong and unwavering support of our industry partners who walked together with us in our journey to develop Singapore's trading and maritime ecosystem. We would like to acknowledge these partners which include some of the strongest and most established names in industry.

ABN Amro Bank N.V.
Adani Global Private Limited
Bunge Asia Private Limited
Cellmark Asia Private Limited
China Oriental Singapore Private Limited
Diamond Gas International Private Limited
Emirates National Oil Company (Singapore) Private Limited
ExxonMobil Asia Pacific Private Limited
Golden Agri International Private Limited
GS Caltex Singapore Private Limited
Itochu Petroleum Co (Singapore) Private Limited
Klaveness Asia Private Limited
Koch Refining International Private Limited
Lee Foundation
LH Trading Private Limited
Lianfeng International Private Limited
Lobb Heng Private Limited
Mercuria Energy Trading Private Limited
PetroChina International (Singapore) Private Limited
Petron Singapore Trading Private Limited
Phillips 66 International Trading Private Limited
PTT International Trading Private Limited
Rhodium Resources Private Limited
SABIC Asia Pacific Private Limited
Shell Eastern Trading (Private) Limited
SK Energy International Private Limited
Sumifru Singapore Private Limited
Swiss Singapore Overseas Enterprises Private Limited
Wilmar International Limited





In partnership with Lee Kong Chian School of Business (LKCSB), ITI@SMU supports and oversees the International Trading Track (ITT) and Maritime Business & Operations Track (MBOT).

These specially designed programmes are curated to equip our students with the necessary skills and knowledge required to hit the ground running when they join the trading and maritime sectors. Both programmes were designed by taking in the inputs of various stakeholders, including industry, government agencies and university academics. Such contributions have been invaluable in ensuring that the ITT and the MBOT continue to remain relevant to stakeholders from both sectors.

The ITT and MBOT learning experience includes a mix of classroom sessions and experimental learning opportunities. Classroom sessions are taught by university professors and industry professionals which ensure academic insights are well balanced with practical examples provided by practitioners from the working world.

A unique aspect of the ITT and MBOT are the various experimental learning opportunities provided by ITI@SMU. These play a key role in the development of student talent as they allow students to develop first hand knowledge of the intricacies of the two sectors.

Such learning opportunities include Industry Study Missions (ISMs), site visits to companies operating in the trading and maritime internships, and talks delivered by industry practitioners.

ISMs play a crucial part in the students' learning journey as they provide an opportunity to observe and learn about the various operational nuances when operating on the ground. In 2020, due to Covid-19, we had to put all overseas and local visits on hold to safe guide our students' well being and safety. Once the situation improve, ITI@SMU will continue to arrange and provide a myriad of learning opportunities for the students to visit as many world class development.

To augment classroom learning, the students also had the opportunity to attend a series of guest lectures covering topics that had an impact on the trading and maritime sectors through ITI@SMU's Industry Speaker Series.

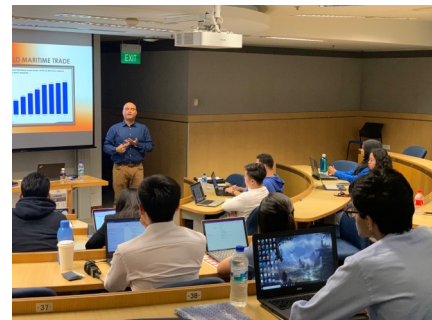
These practitioners led sessions are designed to augment the knowledge that students learn in the classroom. Lecture topics covered a variety of subjects and included topics on technology, risk, and liner shipping amongst many others.

To ensure that the students on the ITT and MBOT benefit from a holistic learning experience, ITI@SMU organises a variety of networking events and guest lectures to complement the knowledge that students acquire in the classrooms. However, from May 2020, due to Covid-19 and the government advice on safe distancing, we could not organise any site visits and face to face networking events in 2020.

### **CHANGING GEOPOLITICAL RISKS AND THE IMPACT ON SHIPPING TRADE FLOWS (30 JANUARY, 3 AND 6 FEBRUARY 2020)**

ITI@SMU invited Mr Punit Oza, Director, Klaveness Asia Pte Ltd, to share in detail about his thought given to the impact on trade and shipping from geopolitical risks and events.

In this session, the students learned to vault the knowledge as old-school mentoring is virtually non-existent. It also ignited a “spark” in the minds of future decision makers, as the course is a practical and not theoretical one.



### **DIGITALISATION IN THE SHIPPING INDUSTRY (31 JANUARY 2020)**

The digital revolution is transforming the world. Data is being generated, shared, stored, and analysed in amounts and at speeds that are increasing exponentially every year. In today's context, the data we create, access, and control is having an increasing impact both on how we live and on how the industry performs.

Mr Vivek Kumar, Managing Director at Western Bulk, shared how digitalization and the use of data have huge impacts on the shipping industry. Ships have become sophisticated sensor hubs and data generators, producing and transmitting information from anywhere, often in real-time. At the same time, advances in satellite communications are improving connectivity, allowing for massive increases in the volumes of data transferred at ever-lower cost. Students were also privileged to view the real-life system used by Western Bulk.

## Global Container Shipping

Industry Speaker Session by Hapag-Lloyd

SMU, Singapore | February 7, 2020



### CONTAINER LINER (7 FEBRUARY 2020)

Liner shipping is the service of transporting goods by means of high-capacity, ocean-going ships that transit at regular routes on fixed schedules. There are approximately 400 liner services in operation today, most providing weekly departures from all the

ports that each service calls. Liner vessels, primarily in the form of container ships and roll-on/roll-off ships, carry about 60 per cent of the goods by value moved internationally by sea each year.

In this session by Mr Lars Christiansen, Senior Managing Director at Hapag-Lloyd, the students had an overview of the global liner trade with a focus on ASEAN. Students learned the latest trends and disruptions for the container liner shipping industry and the adoption of digital technology in the container liner trade using current real-life examples.

## MARITIME MERCHANTS SOCIETY KNOW-THY-COMMODITY 2020



Dear Alumni/Guests,  
  
You are invited to the Know-Thy-Commodities primer presentations.

Researched Markets:  
Gold  
LNG  
Hogs

Venue: TBC

Date: 6<sup>th</sup> March,  
7:00PM – 9:00PM

### KNOW THY COMMODITIES 2020 - PRIMER AND NETWORKING (6 MARCH 2020)

Every semester, the SMU Maritime Merchant's Society Student's Club organizes the "Know-thy-Commodity" event. This student led event is supported by the ITI@SMU with the audience comprising of our Industry Partners, Trainers as well as SMU ITT and MBOT students, SMU students and SMU alumni.

The students formed three teams and researched on Gold, LNG and livestock in particular hogs. Each group presented on their research findings comprising of the history, demand and supply trading strategies, valuation and overall outlook. ITT Alumni also shared more information with regards to the International Trading Track. The audience took the opportunity to ask the team questions regarding their presentation. The night ended with a networking dinner with the students taking the opportunity to bond with the industry partners and alumni.





### Credit Mitigations in Trade Finance

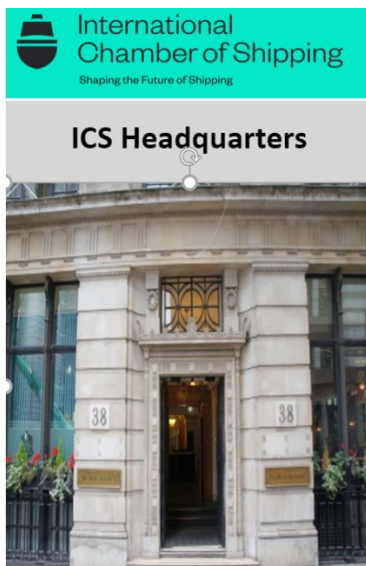
Mark Tan

March 2020

### TRADE INSURANCE IN TRADE FINANCE (6 MARCH 2020)

Trade Credit Insurance is the type of insurance provided to trading companies who wish to protect their receivables from credit risks. Trade Credit insurance can be a risk management tool to safeguard against non-payment of goods, invoices or other debts. It is often termed as credit insurance and differentiated from other forms of credit products. Credit insurance plays a huge role in international trade, as these types of transactions are usually larger and have more risk associated.

ITI@SMU invited Mr Mark Tan, Managing Director, and Head of the Commodities Group at ING to speak about Trade Insurance in Trade Finance. He was a guest speaker in the speaker series on 6th March 2020 that covered what trade insurance is and how does it work, the benefits of trade insurance as well as how to trade insurance can work with trade finance.



### THE NEXT WAVE - THE FUTURE OF INTERNATIONAL TRADING (13 MARCH 2020)

ITI@SMU invited Mr Esben Poulsson, Chairman, and International Chamber of Shipping Director to speak about the Future of International Trading at a speaker series.

The session covered the regulatory challenges facing the Maritime industry against a background of a challenging trading environment, and the impact of fast-changing technologies. Students also had the opportunity to ask Mr Esben burning questions with regards to the industry and a chance to purchase and get a copy of his book autographed.



### WEBINAR: COVID19 ON GEOPOLITICS AND THE IMPACT ON SHIPPING ROUTES (6 MAY 2020)

ITI@SMU was privileged to have Mr Punit Oza, Director, Klaveness Asia Pte Ltd, to be the inaugural speaker for our Industry Speaker Webinar Series. The session covered many crucial current issues that were close to heart who had an interest in the global economy and trade. The presentation elaborated on how issues such as geopolitics, demographics, economic imperialism, and technology have had an impact on global trade. It was clear that stakeholders in the ecosystem had to embrace the new normal where change is constant, and inaction could no longer be an option.



### WEBINAR: DIGITALIZATION & MARITIME SUPPLY CHAINS (28 AUGUST 2020)

ITI@SMU invited Mr Tim Polson, Asia-Pacific Business Development Manager, Klaveness Digital. The session gave students an insight into digitalization in the maritime industry, which is the next key trend. The session provided students with general coverage of the Maritime Industry in the context of digitization, the trends to watch out for, and aim to give students some commercial insights to help them improve academic work, and find the maritime career that best suits their capabilities.

Choosing your major?

*Which major should I take?*

*What can I learn from this major?*

**LKCSB FACULTY CAN HELP**

<b>Communication Management</b> Tracy Loh	<b>Entrepreneurship</b> Kenneth Goh	<b>Finance</b> Aurobindo Ghosh Chiraphol New Chiyachantana Karen Gan
<b>Marketing</b> Seshan Ramaswami (Term 1) Patricia Lui (Term 2)	<b>Operations Management</b> Joyce Low Feng Guiyun	<b>Organisational Behavior &amp; Human Resources</b> Rani Tan Ma Kheng Min
<b>Quantitative Finance</b> Zhao Yibao	<b>Strategic Management</b> Cyndi Zhang Whitney Zhang	<b>Sustainability</b> Ted Tschang

Visit us at:  
<https://business.smu.edu.sg/business/programmes/bachelor-business-management/academic-advisors>

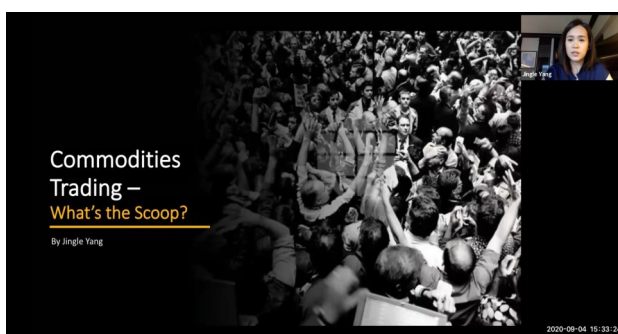
SMU SINGAPORE MANAGEMENT UNIVERSITY

Lee Kong Chian School of Business

**bondue**  
SMU BUSINESS SOCIETY

### KNOW THY MAJOR TALKS - FINANCE SESSION AND KNOW THY MAJOR - OM MAJOR (MBOT) (1 & 3 SEPTEMBER 2020)

ITI@SMU participated in the Lee Kong Chian School of Business, Know Thy Major Series on the Finance and Operations Management Majors organized by the Bondue, SMU Business Society (a student club). The session started at 7pm with an opening address by the Academic Development Director of Bondue, followed by sharing from the Major's Course Advisors, Professor Annie Koh from ITI, Academic Club, and ended with a Q&A session at 9pm. The sessions provided the students with the knowledge to select their majors.



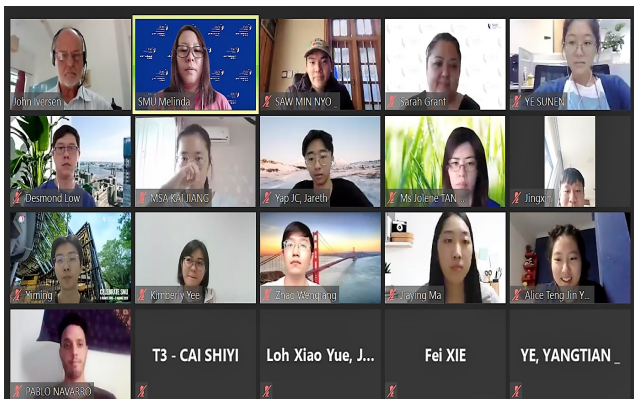
### WEBINAR: COMMODITIES, WHAT'S THE SCOOP? (4 SEPTEMBER 2020)

ITI@SMU invited Ms Jingle Yang, Senior Commodities Trader, Olam. Her session was more of a personal sharing with a few anecdotes that helped her reached her current career as a trader, and why she left her job in the banking industry. Jingle walked the students through a typical day of a trader and helped the student understand the job requirements, the usual working schedules, as well as the pressure of a profit-driven environment. She stressed the suitability of female traders in the field and how she could juggle both the job and being a mother to a child with special needs.



### WEBINAR: SUSTAINABILITY, WORKING TOWARDS A LOW CARBON FUTURE (9 & 10 SEPTEMBER 2020)

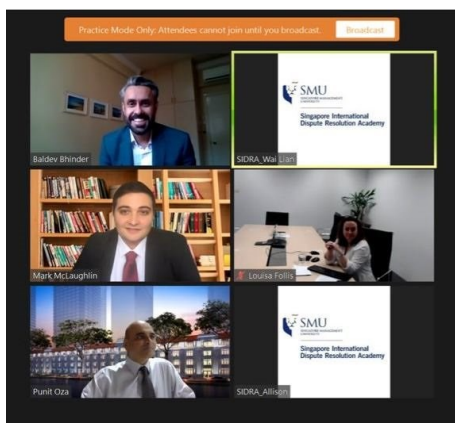
ITI@SMU invited speakers from Shell for the guest lecture series on sustainability. Shell's input on the global energy crisis and LNG as a marine fuel. Shell shared with the students their carbon footprint ambition is to have a net-zero carbon emission. They highlighted their involvement in the LNG market, as they are the largest global LNG bunkering network. The students learned how LNG could be a more cost-competitive, cleaner form of fuel with proven technology, and it can be safe and reliable for the supply chain. Shell has given students an analytical perspective on the issues that the world is facing. Changing the energy mix of the world to 80% renewable energy is an immediate action that everyone should take to minimize carbon footprint.



### WEBINAR: PROJECT LOGISTICS, WHAT'S THAT ABOUT (11 SEPTEMBER 2020)

ITI@SMU invited John Iversen to talk about Project Logistics. In this session, the students learned the difference between project logistics and container logistics. He highlighted that project logistics typically centres shipments of one-off large dimensional and heavy cargo, which needs to be transported using specialized equipment, and often engineering is required.

Whereas, container logistics is a 'nickels and dimes' business with a high quantity of smaller items being transported within complex systems. In his talk, he demonstrated through case studies on the planning required for each shipping under Project Logistics.



### SIDRA-ITI WEBINAR - BELT & ROAD INITIATIVE: MARITIME SILK ROAD (17 SEPTEMBER 2020)

ITI@SMU and the Singapore International Dispute Resolution Academy (SIDA) were pleased to present a webinar on the Belt and Road and the Maritime Silk Road on 17 September 2020. It was a very engaging discussion with Baldev Bhinder, Punit Oza, Louisa Follis, and Mark McLaughlin. The students learned about the commercial perspectives on the BRI concerning trade and business, dispute resolution, and future developments.

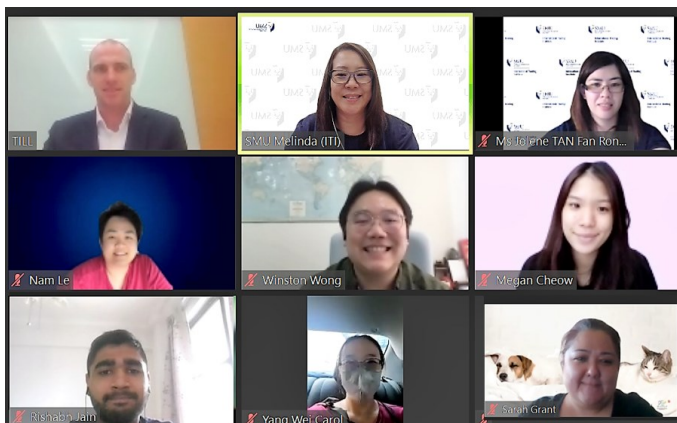




### WEBINAR: FINANCIAL RISK MANAGEMENT (28, 30 SEPTEMBER & 1 OCTOBER 2020)

ITI@SMU invited Patrick Markey, Managing Director of Sierra Vista Resources Pte. Ltd to deliver a three days session on Financial Risk Management. Students learned about the comprehensive background of derivatives and risk management tools, hedging and risk management verse speculation. Pat also got the students to

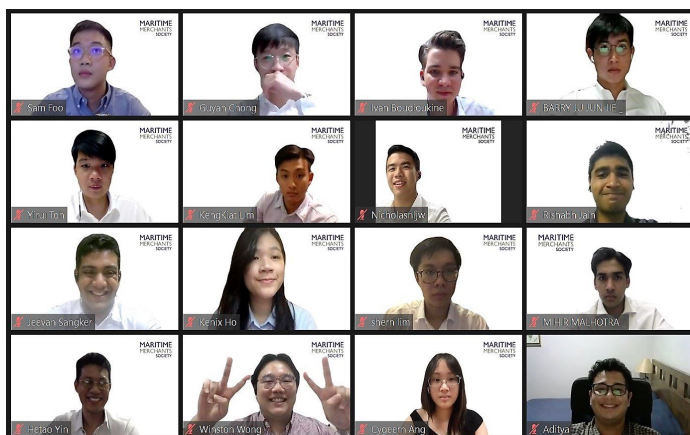
understand the basic derivative Building Blocks such as Swaps, Future, and Options, as well as the different risk management hedging strategies. The session included case studies and group exercises by applying risk management principles. The student discovered new trends in the trading marketplace.



### WEBINAR: CONTAINER SHIPPING: DIVE INTO THE DYNAMICS OF SHORT SEA SHIPPING. (2 OCTOBER 2020)

ITI@SMU invited Till Ole Barrelet, Managing Director of CNC, the Intra-Asia shortsea specialist of the CMA CGM Group to speak with students about Container Shipping: Dive Into the Dynamics of Short Sea Shipping. The seminar provided an overview of the regional container trades and the different players in the market. Till

explained the main characteristics and dynamics of the short sea trades, and students learned how they differ from those of the traditional deep-sea trades.



### WEBINAR: KNOW THY COMMODITIES 2020 - PRIMER PRESENTATION AND NETWORKING SESSION (16 OCTOBER 2020)

The "Know-thy-Commodity" event was organised by the SMU Maritime Merchant's Society Student's Club. ITI@SMU supported the student-led event comprising of our Industry Partners, Trainers as well as SMU ITT and MBOT students, SMU students and SMU alumni. The students formed two teams

researching on Crude Oil and Lithium. Each of the group presented their research findings comprised of the history, demand and supply trading strategies, valuation and overall outlook. The audiences asked the teams questions and offered comments about their presentations. Our ITT and MET Alumni also shared information about the International Trading Track and Maritime Business and Operations Track.

Non-Credit  
Courses /  
Industry  
Speaker  
Sessions

- Geo-political Risks and Their Impact on Shipping Trade Flows (Jan 2020)
- Digitalisation in the Shipping Industry (Jan 2020)
- Container Liner Shipping (Feb 2020)
- Future of Shipping (March 2020)
- Credit Mitigations in Trade Finance (March 2020)
- Impact of Covid19 on Geopolitical Risks (May 2020)
- Digitalisation & Maritime Supply Chains (Aug 2020)
- Sustainability: Working Towards a Low-Carbon Future (Sep 2020)
- Commodities, What's the Scoop (Sep 2020)
- Project Logistics – What's that About? (Sep 2020)
- Financial Risk Management (Sep 2020)
- Container Shipping – Dive into the Dynamics of Short Sea Shipping (Oct 2020)

Experiential  
Learning

- Know-Thy Commodity (March 2020)
- Know-Thy Major (Sep 2020)
- Know-Thy Commodity (Oct 2020)
- Internship Opportunities (Ongoing)

Outreach for  
students

- Networking with CBS Students (Jan 2020)
- Info Session to Finance Students (Sep 2020)
- Info Session to Operations Management Students (Sep 2020)



Bon Seah  
Junior Trader - COFCO International  
Graduated in May 2018

Quote by

Bon Seah, who pursued the ITT/MET:

"The SMU ITT/MET curriculum is tailored to equip the next generation with the right mindset and skillset to add sustainable value into the global trading hub of Singapore. I have been blessed with many opportunities to have found a profession that challenges me everyday."



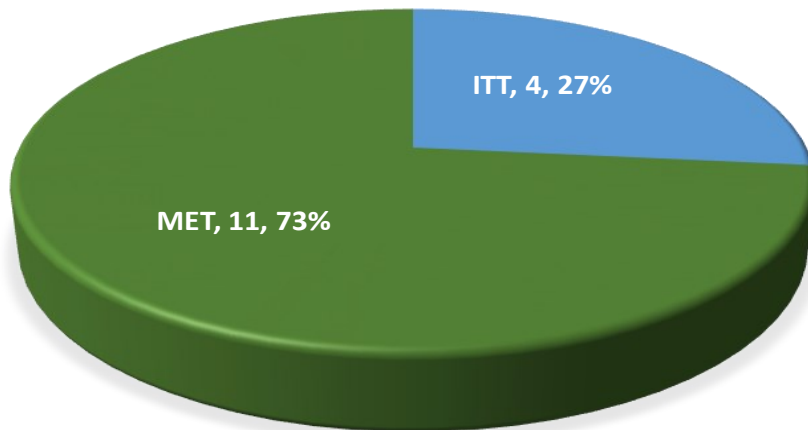
[Photo: Undergraduates from SMU's Maritime Economics Track and Maritime Business Operations Track (MBOT)– (from left) Tan Jing Yi, Foong Lai Yi, Aditya Rayakar, Vivian Tay Ya Wen and Goh Zhong Hui.]

Quote by

Goh Zhong Hui, who pursued the MET:

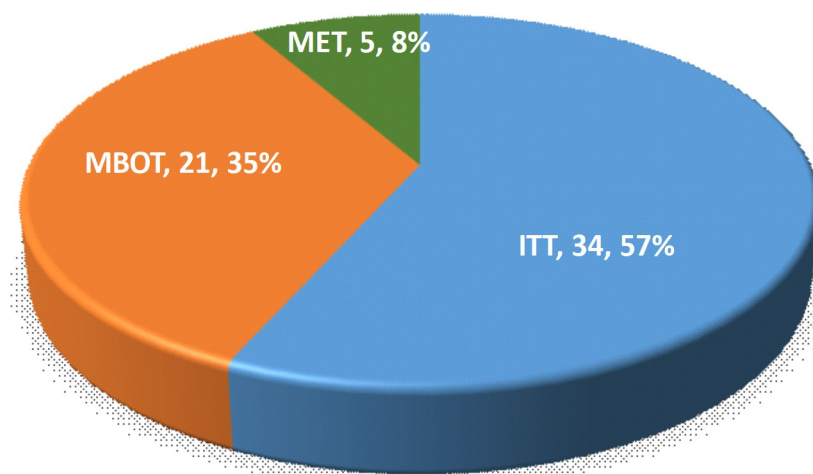
"The vastness of the maritime industry and its role as one of the pillars of the global economy piqued my interest to pursue a career in this line of work. As a final year student who is about to begin my career, this scholarship brings exposure and provides a platform for me to connect with like-minded individuals who are eager to excel."

## 2020 - ITT and MET Graduation Record



Total: 15

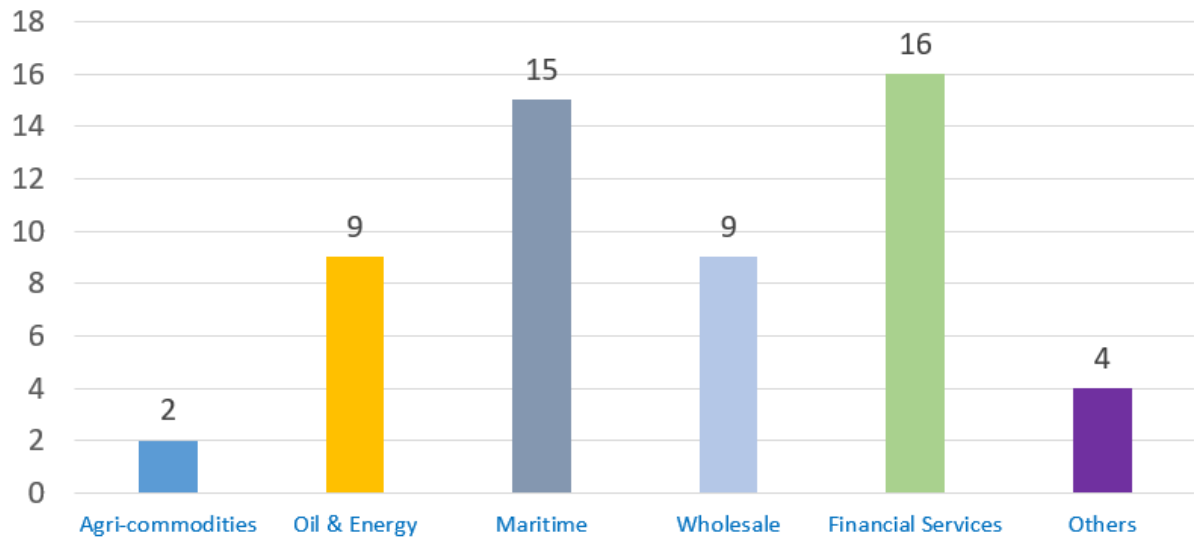
## Active Students AS of 30 October 2020



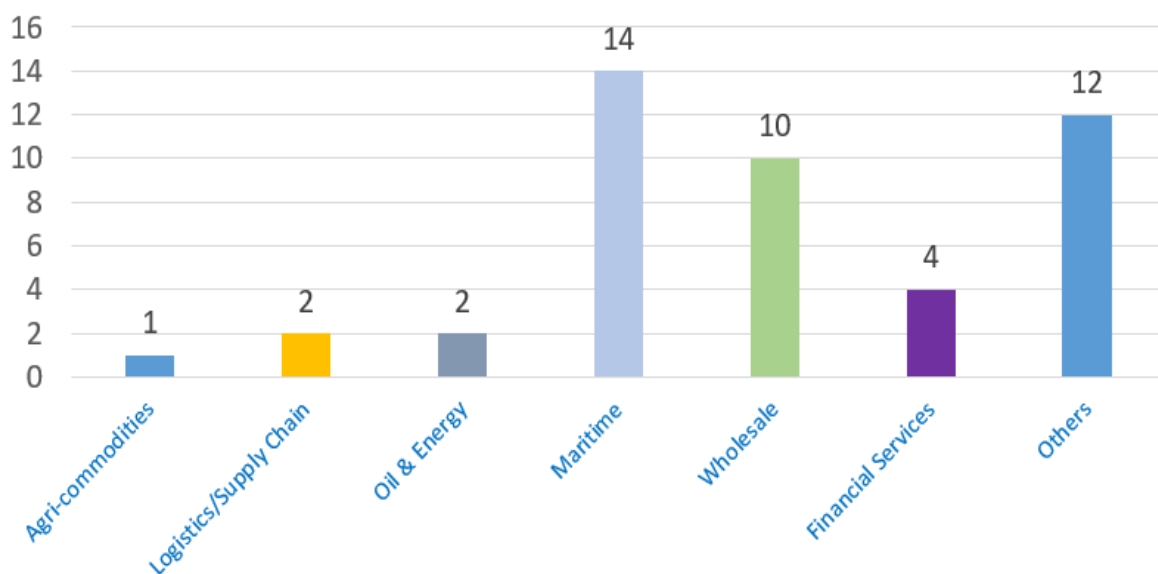
Total: 60

## 2019/ 2020 Internship by Sectors

ITT Internship (Total: 55)

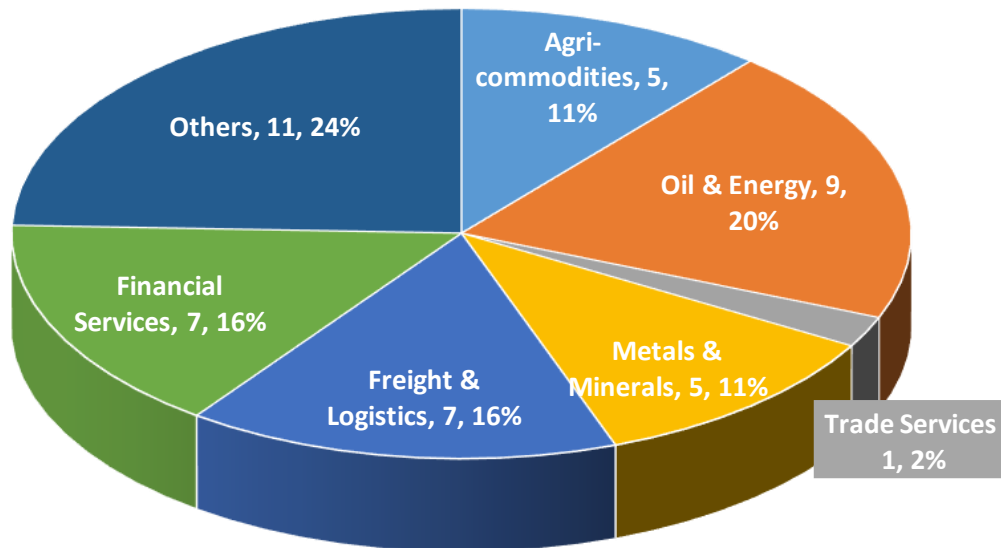


MET/ MBOT Intership (Total: 45)

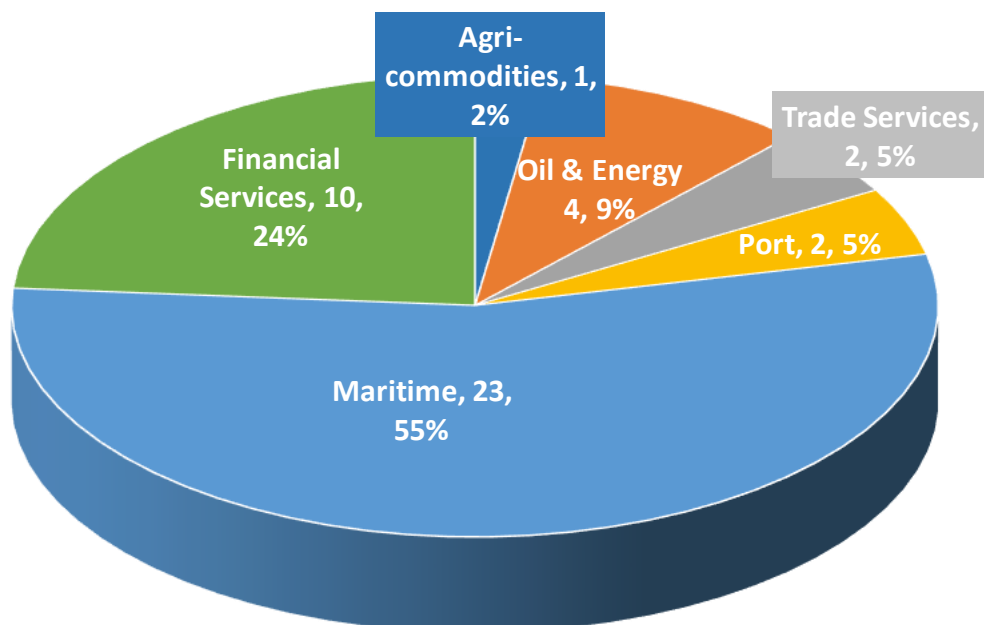


## 2019/ 2020 Graduates Placement

### ITT Graduates Placement (Total: 45)



### MET Graduates Placement (Total: 42)





## MaritimeOne Scholarship Recipients

Our SMU students participated in the MaritimeOne Scholarship, and the following four are the MaritimeOne Scholarship Recipients.





## Joyce LOW Mei Wan

Assistant Professor of Operations Management (Education)

Maritime and Port Authority of Singapore (MPA) Research Fellow .

### Profile of Assistant Professor LOW

Access URL <https://bit.ly/3828YY5>

**ITI@SMU:** Tell us something about yourself.

**Prof Joyce Low:** I am an Assistant Professor in Operations Management under the education track. My research interest lies primarily in the field of Maritime Operations, Aviation Management and Transportation Economics.

**ITI@SMU:** What does the MPA Research Fellowship mean to you?

**Prof Joyce Low:** Over the last decade, I have been working on topics pertaining mainly to port competitiveness and inter-port competition. MPA Research Fellowship provides me with the opportunity to explore other maritime-related areas beyond my existing research areas.

**ITI@SMU:** What areas of research are you working on funded by the MPA Fellowship?

**Prof Joyce Low:** Currently, I am looking into smart ports.

**ITI@SMU:** Why do you think a MBOT Track is important for the students and faculty like yourselves?

**Prof Joyce Low:** The maritime industry is a significant one that contributes 7% to Singapore's GDP. MBOT track imparts domain knowledge on important business operational management aspects of the maritime sector through courses such as port-focal logistics and maritime operations, shipping business, logistics and transportation and business analytics to our students. In addition, students will be introduced to maritime related industry job roles through non-credit classes taught by industry practitioners that range from tanker chartering and ship brokering to applications of data analytics and how robotics and automation are applied in the maritime sector. They will also have opportunities to gain industry exposure through internships, overseas Industry Study Missions and local site visits where they learn about the various operational intricacies which provide maritime companies with their competitive edge.

The MBOT track gives recognition to faculties like me who are working on specialized areas in maritime operations management. Having the MBOT track confirms that maritime has its place in the university, and this is helpful when we talk to our international research collaborators.

**ITI@SMU:** Moving forward, what would you like to work on with the industry?

**Prof Joyce Low:** It would be the harnessing of technology, to further improve the operations efficiencies and enhance the competitiveness of the maritime sector.



## Marcus ANG Teck Meng

Associate Professor of Operations Management (Education)

Maritime and Port Authority of Singapore (MPA) Research Fellow, 2019 - 2020.

### Profile of Associate Professor ANG

Access URL <https://bit.ly/2Gkgz9b>

**ITI@SMU:** Tell us something about yourself.

**Prof Marcus Ang:** I am a faculty of the Operations Management department in the Lee Kong Chian School of Business (LKCSB). Integrating my research with industry practices and teaching has always been my passion.

**ITI@SMU:** What does the MPA Research Fellowship mean to you?

**Prof Marcus Ang:** The MPA Research Fellowship gives me an opportunity to look at research problems under the maritime area. It has also prompted me to look at ways to convey these to students in my teaching.

**ITI@SMU:** What areas of research are you working on funded by the MPA Fellowship?

**Prof Marcus Ang:** I am looking at the capacity management problem in ports.

**ITI@SMU:** Why do you think a MBOT Track is important for the students and faculty like yourselves?

**Prof Marcus Ang:** It gives some funding to the faculty to do some related research. These research can be beneficial to the students when converted to case studies.

**ITI@SMU:** Moving forward, what would you like to work on with the industry?

**Prof Marcus Ang:** With the current technology in the business landscape, business analytics has become a necessary component for companies to maintain a competitive advantage. I hope to work on data-related problems and derive interesting insights which benefit the research community and the industry.

**Chair/Professorship/Fellowship Title:** MPA Professor in Maritime Business

**Faculty Name:** Professor Henrik Sornn-Friese

**Faculty Title/School:** Visiting Professor, Lee Kong Chian School of Business

The Lee Kong Chian School of Business (LKCSB) at SMU would like to thank MPA for their kind support towards the setting up of the MPA Chair in SMU. In AY19/20, Professor Henrik Sornn-Friese was appointed as the Distinguished Visiting Professor to:

- ✓ Teach one maritime related course for the undergraduate programme.
- ✓ Help resident faculty in building maritime expertise by collaborating in research and developing educational material, especially with the LKCSB MPA research fellowship holders.
- ✓ Provide mentorship for the existing faculty teaching maritime courses in improving the content and delivery of their courses.
- ✓ Conduct a seminar to introduce the state-of-the-art maritime issues in practice and in academia to SMU faculty.

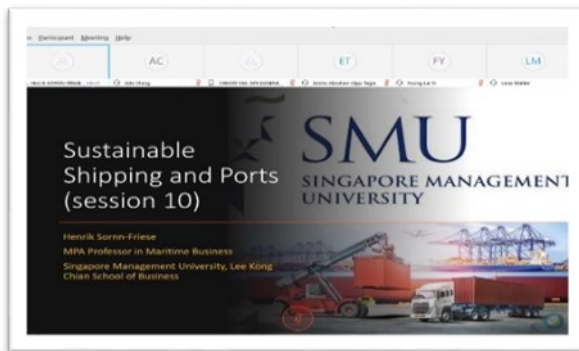
With inputs from MPA, LKCSB was honoured to invite Professor Henrik Sornn-Friese to be the first MPA Professor in Maritime Business for AY2019/20.



### **Professor Henrik Sornn-Friese**

Henrik Sornn-Friese is currently the Associate Professor of Strategy and Innovation at Copenhagen Business School (CBS). He is also the Director of CBS Maritime, a strategic platform at CBS for developing research, teaching and counselling on the maritime industry. Professor Henrik is also board member of MDC (Maritime Development Centre) and member of Danish Maritime's think tank on Sustainable Development. He is Co-director of The Green Shipping project between 19 universities in Asia, Europe and North America and co-founder of Maritime Research Alliance. The latter is a new initiative for bringing together Danish

universities, maritime academies and marine engineering schools in collaborative research on decarbonisation, automation, and data-driven growth in the maritime industries. His research focuses on economic geography (industry clusters, business eco-systems, trade and connectivity), strategy (capabilities, commercialization, company growth, organizational change, business model innovation, industry evolution) and business history. He is author or co-author of several books about shipping and numerous articles in leading international journals. His works on the Danish maritime cluster has influenced contemporary Danish maritime policy.



## Sustainable Shipping and Ports

With Professor Henrik's expansive knowledge of the maritime field, LKCSB was privileged to have him teach the undergraduate module "Sustainable Shipping and Ports". This module covered topics such as sustainability in shipping and ports, ship recycling and innovation for sustainability shipping.



The class comprised of students from SMU and the CBS exchange programme. It addressed the sustainability imperative for shipping and ports and the various solutions that are available to the different stakeholders. Students who attended the course developed a deeper understanding of the impact of the climate and the environment on shipping and ports and were

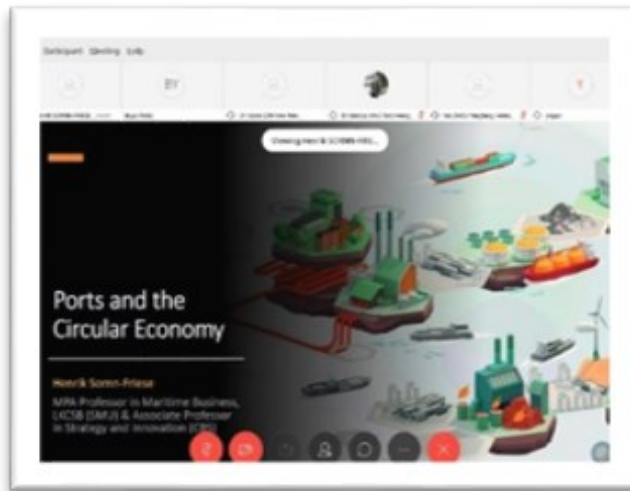
able to identify and evaluate different technological and organizational solutions to specific sustainability challenges.

*I really enjoyed Professor Henrik's style of teaching because to me it was the perfect mix of in class and self-taught learning. He motivated us to have in class discussions, which really helped do widen one's horizon and get to understand and learn more opinions and possibilities on certain topics and developments. The group work helped to get different perspectives and adapt those into one big conclusion. This also helped to be more critical, but at the same time be open minded to summarize texts from our homework and take them a step further and to critically analyse them with possible new solutions."*

**Lene Mahler, CBS Exchange Student, 2020**







### Ports and the Circular Economy

Professor Henrik also shared his knowledge on "Ports and the Circular Economy". Due to the current Covid-19 pandemic, this was conducted as an online seminar on Friday, 03 April 2020 with LKCSB faculty and other invited guests joining in the session.

Participants learnt that there is a clear transition towards a circular economy (CE), where materials and components

are reused or recycled at the end of their lifecycle (EOL). Ports as transport nodes and as locations for logistics and manufacturing activities will be affected; the transition towards CE will lead to a decline of volumes of non-renewable primary resources (de Langen and Sornn-Friese, 2018), and non-fossil maritime transport flows will be impacted if supply chains move from current globalized and linear structures to more localized and circular ones. The trend towards circularity also offers an opportunity for ports to diversify by attracting circular activities (Carpenter et al., 2018).

In an overview of new investments in circular manufacturing activities in ports in Europe, based on primary data from organizational reports and official webpages, participants were shown the (slow) development of circular activities in ports. Professor Henrik also shared how it is relevant to assess if and how the circularity trend affects the role and business model of port authorities, as developer of a port cluster, building a framework for analysing the consequences of CE on the business models of port authorities, and applying the framework to the Port of Amsterdam (PoA), which is leading in the transition of European ports towards CE.

Professor Henrik also met up and shared his knowledge with faculty members, post-graduate students and the undergraduates. His sharing has enabled both the students as well as the LKCSB faculty members to develop a deeper understanding on international shipping and ports.



## Mentorship

Professor Henrik has provided his invaluable inputs to the “Port-focal Logistics and Maritime Operations” UG course to improve its content and delivery. “Port-focal Logistics and Maritime Operations” course is a new course developed as a core module for students in the Maritime Business and Operations Track. The course recognizes that port operations is a complicated business dealing with a wide range of cargoes with specific handling and storage requirements, a number of disparate activities such as the movement of ships, containers, and other cargo, the loading and unloading of ships and containers, and customs activities. The “Port – Focal Logistics and Maritime Operations” course aims to equip students with knowledge on port operations and how ports can provide value in the modern supply chain involving shipping lines, stevedores, port operators and the regulators. While the course focuses on port operations and the role of port in a seaborne supply chain, it also attempts to introduce technicalities such as ship design and port navigation to the students.

## Research Collaboration

Two faculty members, Professor Lieven Demeester and Prof. Joyce Low are exploring the *role of ports in the circular economy*. They are investigating the impact of new recycling technologies and regulatory environments on the trade flows of waste streams (such as paper, plastic, ferrous and non-ferrous metals) by sea. The estimation of growth in regional or global shipments is of particular concern in the investigation. As the topic of circular economy and the role of the port fits nicely into the expertise and research interest of Professor Henrik, some sharing and exchanging of ideas and domain knowledge sessions have been initiated. SMU is also exploring into possible research collaborations with Professor Henrik and CBS, in general.

Related to this, discussions to take over the institutional partnership in Green Shipping Project (GSP) from School of Economics and to transfer it to Lee Kong Chian School of Business are underway. GSP is managed jointly by Copenhagen Business School (CBS) maritime, the Centre for Transportation Studies at the Sauder School of Business (SSB), University of British Columbia (UBC), and Simon Fraser University. This is a six years project (of which three years have now gone by) in partnership with 19 top-universities in Asia, Europe and North America, as well as, many maritime companies and organizations. The researchers involved in the partnership come from different disciplines and research fields including business, economics, economic geography, political science, and engineering. Many of these researchers are leaders within their fields. In addition to the very strong international network, the partnership offers some funding opportunities to partners, based on annual project proposal. Funding could cover data purchases, hiring of research assistants, workshops and conferences etc. Proposals go through an approval procedure, carried out by the project management team consisting of Professor Henrik (the MPA chair in AY 2019/2020), Professor David Gillen from SSB (as the director and principal investigator), associate Professor Peter V. Hall from the Urban Studies Program at Simon Fraser university (as the co-director) and research director Jane Lister (also from SSB). Participations in the workshops organized under this project provides opportunities for SMU to showcase the maritime research activities in our group. The partnership is also likely to open up avenues for international research collaboration.

## Gearing Up in an Age of Rapid Changes

# Human Capital Development for Industrial Transformation

In an era of rapid technological advancement, business leaders have to adapt to ensure that their organisations are not left behind. Globally, universities have realised the importance of this and introduced new programmes to ensure that the talent they develop are able to adapt to the ever evolving business environment. In this article, Prof. Annie Koh, Vice President, Office of Business Development, Singapore Management University (SMU), and Prof. Chiu-Ling Lu, Associate Dean of Industry-Academia Development, College of Management, National Taiwan University (NTU), will discuss how education methods have evolved to meet the needs of industry.

Written originally in Chinese by Fu Kuo-Chang, President of the NTU EMBA Alumni Journal Committee

The rapidly evolving business environment has seen many new technologies being introduced and quickly surpassed by even newer innovations. In the face of these developments, businesses face new challenges which require them to evolve continuously in order to survive and sustain their operations. Consequently, securing the right talent is of high importance to these organisations as they face these disruptive issues. In this article, Prof. Annie Koh and Prof. Chiu-Ling Lu will share how universities can approach the issue of human capital development, facilitate sustainability, and help support business transformation to meet the demands of this new operating environment.

### Singapore Management University (SMU)

#### Talent, Technology, and Trust: Key to Securing Talent Pipelines for Industry



workforce that is able to meet a country's strategic economic objectives. Prof. Koh shared that to address these challenges, companies will require talent that is equipped with both soft and hard skills. This will require them to not only possess a deep understanding of the industries that they are working in, but also be able to undertake a wide spectrum of varied roles

Modern higher education is no longer about the memorising and regurgitating of facts from textbooks. Universities now have to collaborate closely with various stakeholders in their efforts to develop a nimble and adequately equipped

within their organisations. To cultivate such competitive talent, universities, governments, and industry have to develop a relationship that is based on Talent, Technology, and Trust.

### Talent

Prof. Koh notes: "A university existing in an ivory tower can never produce excellent talent. The key purpose of a university education is to ensure that new generations of the workforce are equipped with relevant skills and knowledge to create value for the economy in the future. To meet this objective, the Singapore Management University (SMU) has been actively working with industry, government, and academia in its journey to develop the talent of tomorrow."

Singapore is a global trading hub with trade accounting for 12 percent of the its GDP. In partnership with the private and public sectors, it founded the International Trading Institute (ITI@SMU) in 2008. Through ITI@SMU, students on its trading programme benefit from a unique education. In addition to the traditional 'for-credit' courses, the curriculum also includes 'non-credit' courses where professionals with deep industry experience share from their knowledge and experience. In addition, local site visits, overseas Industry Study Missions, and internships with established trading companies provide the students with experiential learning opportunities.

### Technology

The technological transformation that is taking place has resulted in significant disruptions to the global economy. Many traditional jobs have been replaced by artificial intelligence (AI), digitalisation, and automation solutions. As a result, skills that are relevant to these



technologies will be essential for the talent of the future. To ensure that the students are future ready, SMU started offering courses on data analytics, block chain, and AI applications.

#### Trust

Trust and cooperation between various stakeholders is also key to industrial advancement as digitalisation accelerates globalisation. To this end, ITI@SMU offers various programmes on how to develop trust in business, internationalisation, and cross-cultural sensitivity to help students cultivate the skills they require for international roles.

#### College of Management, NTU Building the Talent Supply Chain



Apart from being a top-tier research institute, the College of Management also plays a leading role in industry-academia applications and talent development. Prof. Lu shared that the university regularly organises

transdisciplinary programmes, talks by professionals, and corporate site visits to ensure that its students keeps pace with the latest industry developments. In partnership with the Career Development Office (CARDO) and Service for Executive Education Development (SEED), the College also helps equip talent at all levels, ensuring a robust supply of management talent for Taiwan's economy.

#### Entry-Level Talent

CARDO is an important platform that connects students with companies. Amongst its many initiatives is the provision of multi-career development education which help students design blueprints for their future and create specific study plans that provide roadmaps which lead towards their life goals. CARDO also helps corporate partners formulate campus recruitment strategies in support of their manpower needs. It also partners with businesses to organise career programmes each year. This includes the TAIDA Internship Program (TIP), the Talent Cultivating Program (TAP), Career Talks, Elite Salon, and the Occupation Workshop.

#### Mid-Level Talent

To help business meet their need for mid and senior level talent, SEED offers the Customised Specific

Programme (CSP) which offers basic to comprehensive management knowledge programmes. Prof Lu remarked, "Courses typically offered by HR departments tend to be piece-meal and do not provide holistic training. CSP on the other hand provides comprehensive tailored programmes that are able to meet the needs of different companies." Today the CSP has been adopted many reputable domestic and foreign companies to train their executives with the number of corporate partners continuing to growing steadily.

#### Top-Level talent

For senior level executives and company founders, regular corporate training may be inadequate for their needs. Prof. Lu remarked, "For many company leaders seeking further self-development opportunities, programmes offered by their HR department often fail to deliver. The Global Executive Program (GEP) offered by NTU was established to meet this need." Company founders and their senior executives can now benefit from programmes that provide international experiences through programmes that have been developed in partnership with world-class business schools. This allows them to establish business networks and gain insights into local customs and cultures, providing them with deeper insights on how they can best execute their strategies to develop these foreign markets.

Taiwan is an island that is populated by many small-and-medium sized enterprises (SMEs) and Singapore is a globally recognized economic power. Both countries will have to continuously re-invent themselves and develop workforces that are able to meet the demands of the new dynamic business environment. Innovative business programmes will have to be continuously developed and evolve to ensure a supply of talent that is ready to meet the challenges of the future.



Prof. Annie Ko

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Prof. Chiu-Ling Lu

Professor, Department of International  
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Associate Dean of Industry-Academia  
Development, College of Management,  
NTU

Book Title	Anticipating and Preparing for Emerging Skills and Jobs
Series Title	
Chapter Title	Anticipating and Preparing for the Future—One Example from Higher Education: The Singapore Management University (SMU) Experience,
Copyright Year	2021
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**Professor Annie Koh contributed to a chapter in the Book Titled “Anticipating and Preparing for Emerging Skills and Jobs”.**

### **Abstract of the chapter**

#### **“Anticipating and Preparing for the Future—One Example from Higher Education: The Singapore Management University (SMU) Experience,**

Universities need to view themselves as strategic assets of the country to build impact. They should play the role of being academic entrepreneurs working closely with industry to create not just a one-size-fits-all pool of talent. Today's employers demand that the future workforce be equipped with a mix of hard and soft skills, as well as deep knowledge and flexibility, to take on multifunctional roles in their organizations. In the past 10 years, the Singapore Management University (SMU) was increasingly aware of such challenges faced by companies and have experimented with different initiatives and innovative programs to stay relevant, focusing on talent, technology, and trust, working in public-private partnership with government and industry.



### **Annie KOH**

V3 Group Professor of Family Entrepreneurship  
 Professor of Finance (Practice)  
 Vice President, Business Development  
 Academic Director, Business Families Institute  
 Academic Director, International Trading Institute

### **Profile of Annie KOH**

Access URL <https://bit.ly/2TKbSsf>

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**Cases**

Bold and Responsible Leadership in Uncharted Waters: The Future of BW Tankers  
by Annie Koh, Flocy Jos.

Available at <https://cmp.smu.edu.sg/case/3956>

## the year in review

### MEDIA LINKS

16 March 2020



Use Metrics Wisely: There's more to the economy than dollars and cents

<https://bit.ly/38amZ6o>

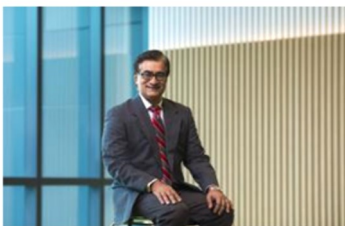
27 April 2020



Singapore Management University and Tradeteq to develop quantum computing credit scoring for trade finance

<https://bit.ly/3jTBw8z>

20 May 2020



Dealing with global supply chain breaks

<https://bit.ly/3mPKvJJ>

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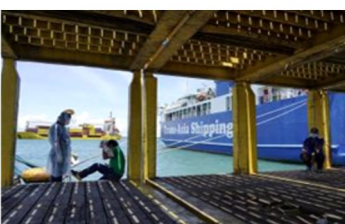
1 September 2020



SMU law professor appointed as appeal arbitrator of Multiparty Interim Appeal Arbitration Arrangement

<https://bit.ly/368gfmW>

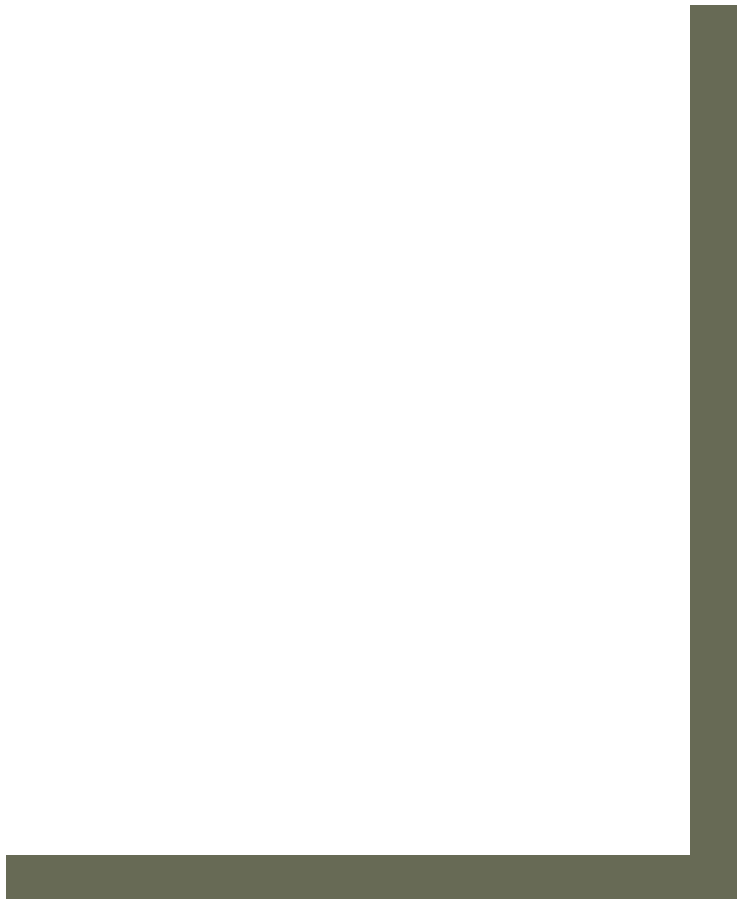
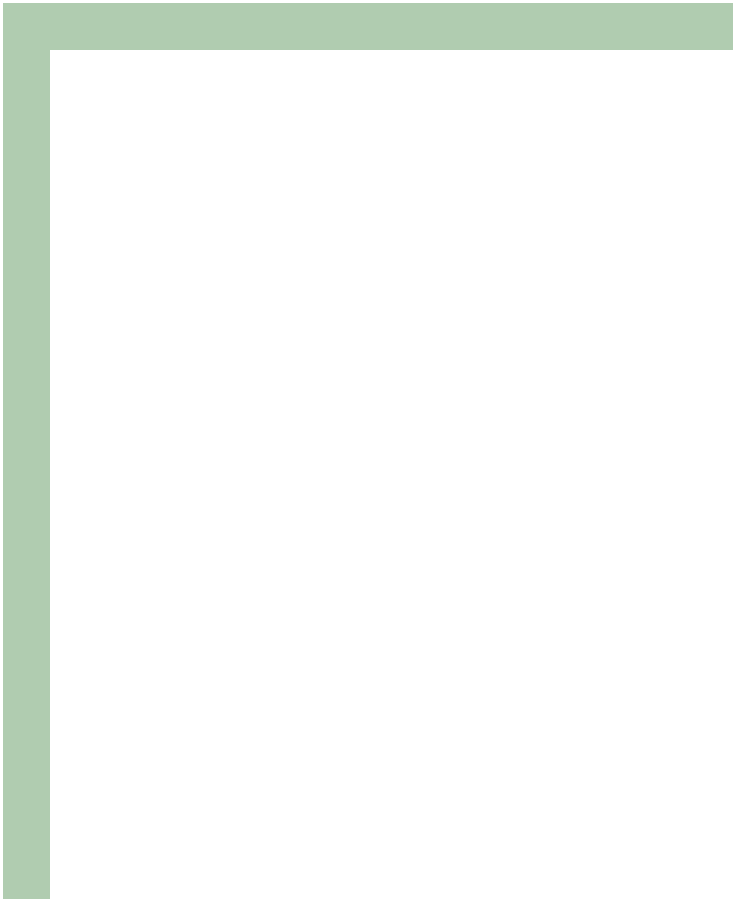
5 October 2020



SMU faculty awarded Social Science Research Council (New York) Rapid-Response Grant on Covid-19 and the Social Sciences

<https://bit.ly/3jWIDx8>







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