

# UNPRME Sharing Information on Progress (SIP) 2022

20 April, 2022



SMU

SINGAPORE MANAGEMENT  
UNIVERSITY



**PRME** Principles for Responsible  
Management Education

an initiative of the 

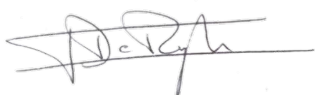
Lee Kong Chian  
School of  
**Business**

## Renewal of Commitment to the Principles of UNPRME

The Lee Kong Chian School of Business (LKCSB), Singapore Management University (SMU) is committed to the Principles of United Nations Principles for Responsible Management Education (UNPRME). We believe that business schools today have an important role to play in molding students into socially responsible leaders and in responding to the social and environmental challenges that the world is confronted with. Besides imparting these principles to our students, the University and the School also puts these principles to practice in our work environment.

Since the last Sharing Information on Progress (SIP), LKCSB has started many new initiatives on environmental responsibility, dramatically raising awareness among students and industry partners about its importance. LKCSB is proud to report on these developments.

We are proud to be a UNPRME member and hereby express our continued commitment to its six principles.



Professor Bert De Reyck  
*Dean*  
*Lee Kong Chian School of Business*



Lee Kong Chian  
School of  
**Business**



## Context: LKCSB and SMU

### About Lee Kong Chian of Business (LKCSB) at Singapore Management University (SMU)

Singapore Management University (SMU) was incorporated in 2000 and in 2004, received a S\$50-million gift (≈ US\$ 38-million) from the Lee Foundation for the School of Business, which was matched by the Singapore Government in the ratio of 3:1. In honour of this generosity, SMU renamed its business school to Lee Kong Chian School of Business (LKCSB) in perpetuity. LKCSB was modelled after the Wharton School of Business at the University of Pennsylvania — setting herself apart from other pre-existing universities through an interactive, seminar style pedagogy — shaping generations of mindful, well-versed business leaders and entrepreneurs who make a meaningful contribution to society.

The following table shows how some ranked programmes at LKCSB compared with others around the world, according to the Financial Times, the Shanghai-based Academic Ranking of Universities ('Shanghai Ranking'), and the University of Texas at Dallas (UTD) ranking.

How LKCSB is ranked	2021
Rank	World
Academic Subject – Management (by Shanghai Ranking)	36
Productivity of Quality Research (by UTD)	33
Research Rank (by FT, within MBA ranking)	43 <sup>⊛</sup>
Best EMBA Program (by FT)	28
Best MBA Program (by FT)	51 <sup>⊛</sup>
Post-experience Finance Masters (MWM, by FT)	4
Pre-experience Finance Masters (MAF, by FT)	41
Master of Management (MiM, by FT)	83

⊛ = 2022 ranking used instead of 2021

### LKCSB's Mission

*We create business knowledge, and nurture keen minds to lead organisations and serve society.*

LKCSB places priority in hiring the best international faculty (62% are non-Singapore Citizens, 95% have foreign professional or study experience) to publish high-impact research in world-leading, peer-reviewed academic journals. Through our world-class international faculty, LKCSB offers programmes across different levels: our flagship Bachelor's in Business Management (BBM) for undergraduates, Postgraduate Professional and Research Programmes.

LKCSB aspires to and works toward Singapore Management University's Vision 2025<sup>1</sup>:

*To be a world-renowned global city university, tackling the world's complexities, impacting humanity positively.*

It is in SMU's and LKCSB's interest to work towards the three key areas, and in this context, especially on Sustainable Living. LKCSB's efforts towards the United Nations Principles for Responsible Management Education (UNPRME) are further discussed in this report.

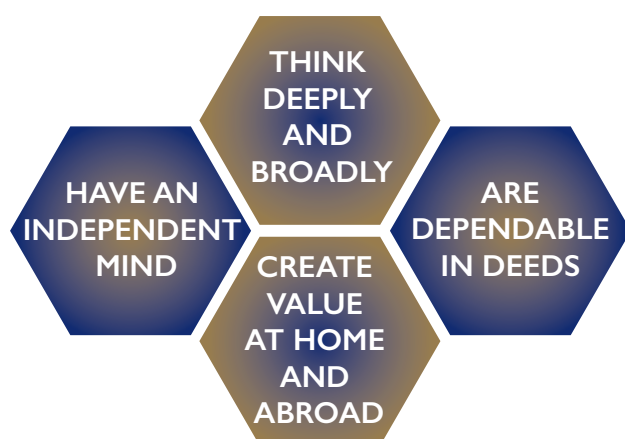
<sup>1</sup> Visit the Vision 2025 website [here](#).

## Principle I | Purpose

*We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.*

Since inception, LKCSB, SMU's first and flagship school has always evolved and adapted to the changing times. Our mission, by stating our unwavering intent to 'serve society', has society's best interests in mind. This also means always reviewing the course materials and discourse encouraged to ensure that the School, and most importantly our students who will enter the workforce, meet the myriad needs of various industries while upholding integrity and mindfulness. Global Citizenship is now incorporated as part of SMU's Graduate Learning Outcomes, and graduates are expected to create value at home and abroad, contributing to the global economy.

### MEANINGFUL IMPACT BY GRADUATES WHO



### SMU GRADUATE LEARNING OUTCOMES

DISCIPLINARY AND MULTIDISCIPLINARY KNOWLEDGE

INTELLECTUAL AND CREATIVE SKILLS

INTERPERSONAL SKILLS

GLOBAL CITIZENSHIP

PERSONAL MASTERY



**2001:** SMU LKCSB Bachelor's Students in Chiang Mai, Thailand helping Hui Yah School construct its new building and toilet.



**2019:** SMU LKCSB Master's Students teaching kids how to dance at a Childcare in Philippines during their Business Study Mission.

True to our founding purpose, since the early 2000s, LKCSB has strongly encouraged and facilitated student activities (both undergraduate and postgraduate) that give back to society – either locally or abroad. Our mission to serve society requires a significant portion of our graduates to have undertaken a number of hours of community service that serve to increase inclusiveness in our society, benefit financially disadvantaged groups in society, and to improve our environment.

In addition to the international exposure through a dedicated course or programme activity, many courses at LKCSB use specific contextual examples derived from real situations outside of Singapore. An analysis of 124 undergraduate and 58 postgraduate courses in Term I of AY2020-2021 offered at LKCSB shows that the majority of both undergraduate and postgraduate courses embed in them specific international contexts in South-East Asia, the Rest of Asia Pacific outside South-East Asia, Europe or the Americas.





# 959

Number of foreign exchange students hosted by SMU in AY2019/20



# 458

Number of LKCSB students going on exchange overseas in AY2018/19



# 294

Number of tertiary institutes in the world with which SMU has study exchange agreements



# 49

Number of countries and territories where SMU has study exchange agreements



# 38

Number of countries to which SMU students went on exchange in AY2019/20

The Bachelors of Business Management (BBM) programme has been the predominant host and origin of exchange students at LKCSB, who in turn are managed by the University's International Office. SMU maintains reciprocal agreements with around 294 universities in all corners of the world, with the list being updated on this website «<https://www.smu.edu.sg/global/partners>». All outgoing students on study exchanges have returned to Singapore in early 2020 because of the pandemic and outgoing exchanges are currently being revived.

As a testament to our Purpose, both our BBM and many Postgraduate Professional Programmes (PGPP) require an Overseas Exposure:

LKCSB Programme	Overseas Exposure
Bachelor of Business Management (BBM)	Required
MSc in Communication Management (MCM)	Required
Master of Human Capital Leadership (MHCL)	Required
MSc in Innovation (MI)	Required
MSc In Management (MiM)	Experienced through required course(s)
MSc in Quantitative Finance (MQF)	Optional
MSc in Wealth Management (MWM)	Required
Master of Business Administration (MBA)	Optional
Executive MBA (EMBA)	Required

As the following table shows, international content is embedded across our programmes – 33% of undergraduate and 14% of postgraduate courses at least feature specific contexts in ASEAN, Asia Pacific, Europe, and the Americas.

Featuring specific contexts in...	Undergraduate courses	Postgraduate courses
ASEAN outside Singapore	53%	22%
Asia Pacific outside ASEAN	60%	52%
Either of above	68%	52%
Europe	42%	45%
The Americas	47%	50%
All of the above	33%	14%
None of the above	28%	40%

ASEAN = Indonesia, Thailand, Malaysia, Singapore, Philippines, Vietnam, Cambodia, Brunei, Myanmar (Burma), Laos



Our dedication to sustainability and voluntary service is detailed later, under Principles 2 and 3.

Professor Emeritus Arnoud De Meyer and SMU President Lily Kong emphasising 'Global Learning'. During an Open House (prior to Covid-19).

## Principle 2 | Values

*We will incorporate into our academic activities, curricula, and organisational practices the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.*

Our values towards social responsibility since founding remain intact, as we adapt to the World's changing needs.

LKCSB adopts SMU's 'CIRCLE' values – Commitment, Integrity, Responsibility, Collegiality, Leadership, and Excellence, which guide LKCSB's approach towards ethics and social responsibility. Students at LKCSB can be nominated and win the SMU CIRCLE Award<sup>2</sup>, which recognises efforts to espouse its values.

**Commitment:** To adhere to an agreement and see through to completion

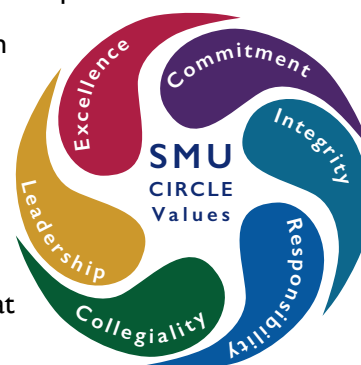
**Integrity:** To uphold honesty and truthfulness in oneself, and to others

**Responsibility:** To take ownership and accountability for one's actions

**Collegiality:** To value people and build positive and lasting relationships

**Leadership:** To lead and motivate one's peers to achieve long-term goals

**Excellence:** To strive to exceed personal and external benchmarks



LKCSB's approach to the Six Principles for UNPRME are in line with what is practiced across SMU.

On LKCSB's faculty are several recognized experts on the topic of social responsibility. Social responsibility is a required element in all degree programmes at LKCSB, often appearing as dedicated courses or projects.

During Orientation, incoming students are introduced to SMU's values, and how they translate into ethical behaviour. For instance, students are explained what constitutes plagiarism, and steps to avoid it; students are told about copyright and there is a limit on the physical number of pages that can be photocopied. Assignments submitted through the electronic platform *eLearn* incorporates a function called Turnitin, which automatically identifies elements possibly copied from previous assignments and/or sources on the internet. Students are therefore trained to be vigilant in properly citing phrases quoted from elsewhere in their assignments. Students supporting experiments with human subjects will also have to undergo the Collaborative Institutional Training Initiative (CITI) programme on research ethics and compliance.

To inculcate a strong sense of social responsibility, LKCSB's BBM students are required to undertake at least 80 hours of community service before graduation. Each student in the BBM cohort who ordinarily graduated in 2020 performed on average 136 hours of community service, with 45% of the cohort having performed more than 50% in excess of the graduation requirement. This shows that many LKCSB students have become internally motivated to undertake community service projects. Students in other degree programmes are required to be exposed to the concept of social responsibility, and many also undertake hours of community service before graduation.

Many of these community projects are organised and led by students but coordinated by SMU's Centre for Social Responsibility<sup>3</sup> (C4SR). Two-thirds of the graduate survey respondents from the BBM programme agreed or strongly agreed that i) their community service experience improved their understanding of the needs of society (Class of 2018) and, ii) their SMU experience led to them having a keener sense of responsibility for individual and collective actions (Class of 2020). Students in postgraduate programmes are welcomed to take part in these projects as well, and many will be required to take part in at least one such project from AY2021 onwards. Other students in postgraduate programmes are required to take part in activities on social responsibility run for their own cohorts.

Some examples of community projects students undertake in Singapore are shown in the following pages:

<sup>2</sup> Read more about the SMU CIRCLE Award [here](#).

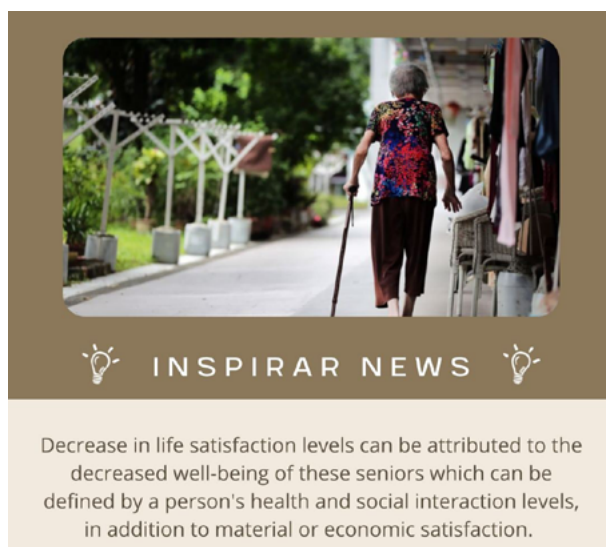
<sup>3</sup> <https://www.smu.edu.sg/campus-life/community-service/centre-for-social-responsibility>





# POVERTY SIMULATION EXERCISE

*Kidleidoscope – a series of projects that engage with children from disadvantaged backgrounds and to showcase their talents within.*



*Inspirar – a series of projects that engage with the greying population in Singapore (left a social media post by Inspirar; right, SMU Inspirar Team).*



## RENEWAL OF COMMITMENT TO THE PRINCIPLES OF UNPRME



**starringSMU** – a series of projects that engage with individuals with special needs, such as those with Down's Syndrome and special mobility needs



**Project Namaste** – teaching English to and interacting with school children in Nepal and Northern India





**Project Gazaab** – aims to alleviate poverty by helping youths in lower-income communities in Nepal start their own micro-enterprises



**Project Xin Yuan** – a series of projects that engage with physically challenged students from the Guangzhou English Training Centre for the Handicapped and Guangdong Peiying Vocational School, China





**SMU Pendeza** – a series of activities to support a girls' orphanage in Kenya by developing educational programmes and creating a social enterprise



**Project Hua Tat** – installing water filters and teaching English language in Northern Vietnam

A number of SMU students also took part in interacting remotely with foreign workers living in locked-down dormitories in Singapore, who collectively saw the bulk of covid-19 infections in Singapore (not pictured). LKCSB has since the previous UNGC report promoted greater environmental responsibility by offering new sustainability courses and major, and embedded sustainability in every degree programme (see *Principle 3 | Method*). Increasing numbers of students have begun to take sustainability courses. For instance, at least one new course on sustainability has been offered three times in the past academic year to cater to students' demand for it. Meanwhile, LKCSB has been able to convince a number of large financial firms to contribute financially toward a new Singapore Green Finance Centre (SGFC). These all show that LKCSB's initiatives to promote greater environmental responsibility have been paying off.



## Principle 3 | Method

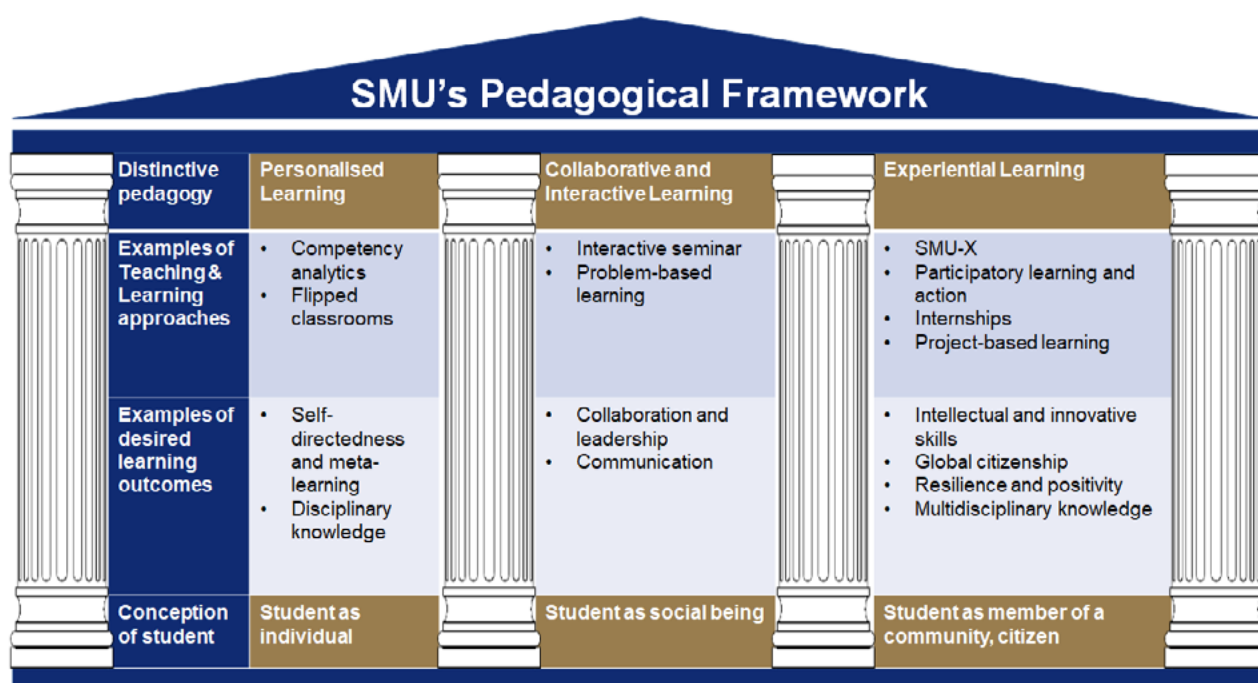
*We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.*

### SMU's Pedagogical Framework – Responsible Leadership and Global Citizenry

LKCSB follows SMU's Pedagogical Framework as illustrated below. The SMU Pedagogical Framework places the student and his/her outcome at its core through effective teaching and sees it through the multiple identities and roles the student plays – as an individual, as a social being, and more importantly, as a member of their community by being a Global Citizen.

As the diagram illustrates, interactive learning through multi-disciplinary knowledge and collaboration with industries is embedded in our pedagogy to ensure that we “nurture keen minds” and that our students become Responsible Leaders who would eventually “lead society”, as stated in our mission.

LKCSB's work on social responsibility remains intact, and we strive to maintain our work both locally and internationally as demonstrated in Principle 2.



### Embedding Sustainability throughout programmes at LKCSB

Since the last report, LKCSB has started embedding Sustainability throughout various degree programmes. In time, a dose of Sustainability will also appear in all courses, not just courses specifically focusing on this topic. Since 2019, LKCSB began offering Sustainability as a second Major to the flagship undergraduate Bachelor of Business Management program, in tandem with many new courses on the topic of Sustainability. Since 2019, students in the Master of Science in Management have been able to undertake a concentration of studies in Sustainability. Starting in 2021-22, all degree programmes at LKCSB require students to have some exposure to Sustainability, and this will in time expand from environmental sustainability to business sustainability.

LKCSB is accredited by various accreditation organizations such as the Association to Advance Collegiate Schools of Business (AACSB) International and the European Foundation for Management Development Quality Improvement System (EFMD EQUIS), which co-convened the drafting process with the UN Global Compact and endorsed the final document of PRME<sup>4</sup>.

4 <https://www.unprme.org/history-of-prme>

### **i. Sustainability as a second Major in our flagship undergraduate programme**

Undergraduates in the flagship Bachelor of Business Management (BBM) programme are now able to choose Sustainability as a second Major, alongside other Majors such as Finance and Marketing. This move significantly raised the profile of environmental sustainability among a new generation of students.

Alongside this new second Major, new undergraduate courses have been developed, including:

- Sustainability Management and Governance
- Sustainable Entrepreneurship Practicum
- Climate Change: Global and Local Solutions
- Corporate Sustainability and Business Development
- Organisational Aspects of Sustainable Innovation
- Sustainable Entrepreneurship
- Sustainable Finance
- Sustainable Growth in ASEAN: Singapore, Malaysia, and Indonesia
- Sustainable Marketing
- Sustainable Operations
- Sustainable Shipping and Ports
- Sustainability Law and Policy
- Sustainability Study Mission (Asian Studies or Globalisation)

### **ii. Sustainability for postgraduate students**

Postgraduate students at LKCSB can choose to complete an elective course dedicated to some aspects of environment sustainability, including the following:

- Sustainable Finance
- Sustainable Growth in ASEAN
- Sustainable Impact
- Sustainable Operations
- Sustainability and Metrics
- Sustainability Management and Governance
- Sustainable Marketing
- Sustainability Study Mission

Students in the Master's of Science in Management (MiM) programme, a general management degree, can choose to complete a subset of these courses and be recognised as having completed the requirements for the Sustainability concentration track.

Both Undergraduate and Postgraduate students are exposed to concepts in environmental sustainability through some embedded content in one of their courses or programme activities.



## Promoting greater environmental responsibility through supporting student-led activities

Two such examples of student-led activities are described below.

### i. SMU GROW

SMU GROW<sup>5</sup> is a university-wide programme that since 2015 has involved students, staff and faculty in cultivating change through experiential and reflexive learning centred on urban farming. SMU dedicates land on campus to SMU GROW to grow 50 kinds of edible plants in the heart of Singapore city. Continued to be supported by LKCSB, this programme promotes sustainable urban living by demonstrating its endless possibilities and potential, creates global awareness on environmentalism, food production, consumption and security, and provides for under-privileged members in our community through sharing and inspiration. LKCSB has also begun sourcing corporate gifts from produce, such as dried flowers, herbs, and jams.

Over the years, SMU GROW has continued in their efforts to promote environmental sustainability. Since late 2018, SMU GROW has organised 'Save the Uglies' market, a 'flea-market' at the SMU basement where students, staff, and faculty can shop for produce (at discounted-prices) that would otherwise be rejected before they are deemed fit to be sold at the supermarkets.

In 2019, SMU promoted SMU Ecofest<sup>6</sup> that featured talks, workshops, and a humble flea market featuring SMU alumni-founded sustainable businesses, such as reusable Freedom Cups<sup>7</sup> used for women in menstruation.

### ii. SMU VERTS

SMU Verts<sup>8</sup> in 2019 ran a series of activities to raise awareness on recycling (with a big focus on e-waste). For example, students can drop by Li Ka Shing Library and exchange their unwanted consumer electronics for a 'mystery gift' (i.e. a plant-able pencil) and participate in a quiz on their knowledge on sustainability.



SMU VERTs having a vegan picnic at the SMU Campus Green  
Photo: SMU Vivace Website.



SMU Ecofest 2019 organised by SMU GROW  
Photo: SMU GROW Facebook Page.

5 Visit SMU GROW's website [here](#).

6 This [post by SMU GROW](#) on Facebook highlighted the SMU Ecofest 2019.

7 Freedom Cups was featured on the [UN SDG Blog](#) in 2018.

8 Visit SMU VERT's student club page [here](#).

## Principle 4 | Research

*We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.*

### **Promoting greater environmental responsibility through Research**

LKCSB aims in its mission to create business knowledge – research based on the creation of knowledge implicitly takes precedence over application of knowledge, or replication studies. Academic journals that are widely respected by academia worldwide are mostly interested in original studies where new business knowledge is created and codified. Like many other leading business schools, LKCSB historically uses publications as a measure of knowledge creation.

Overall, LKCSB has been highly regarded in terms of its research reputation. LKCSB was ranked the world's 33<sup>rd</sup> in terms of productivity of quality research by the University of Texas Dallas in 2021. LKCSB was ranked the world's 43<sup>rd</sup> in terms of research by UK-based Financial Times Newspaper.

In line with our mission to create business knowledge and nurture keen minds, LKCSB's main research interests often have societal impact in mind. Some form of outreach is expected if research funds from governmental organisations are used. Often, the outreach can take the form of a compilation of report, or having some sanitised, stylised version of it being made available to the public or disseminated via academic publications.

Most research-active LKCSB faculty members also take on responsibilities of reviewers at academic conferences and/or journals. These are typically unpaid positions and often unrecognised because of the double-blind nature of academic reviews in the field of management research.

LKCSB faculty members are mindful to minimize their negative impact on the environment while conducting research. SMU Libraries subscribe to the electronic versions of many academic journals, saving faculty and students the time to access physical ones. Turning off lights when they leave meeting rooms, choosing electronic alternatives to printing on paper, and choosing to subscribe to electronic journals over paper ones are examples of how faculty members contributes to improving environmental sustainability while conducting research.

Some faculty members do specialise their research on ethics, social responsibility and environmental sustainability and engage themselves beyond the academic world and putting their ideas and theories into practice. All of the discipline areas in LKCSB have published some work that aligns itself with most of the United Nations Sustainable Development Goals (UN SDGs).

Examples of articles or case studies written by LKCSB-faculty and affiliates in line with UN SDGs are shown on the following pages.



## UN SUSTAINABLE DEVELOPMENT GOAL 1: NO POVERTY



**Heli WANG**

Janice Bellace Professor of Strategic Management;  
Dean, Post-Graduate Research Programmes

SMU-20-0040

### HAYMAN MICROFINANCE: CSR IN MYANMAR

*Strong CSR says, 'do good for people and the planet, as long as you can do so without sacrificing profits'.*

- Muhammad Yunus, Founder of Grameen Bank<sup>1</sup>

At the annual global forum of the microfinance industry held in Thailand in January 2020, Sultan Marenov, Executive Chairman and Managing Director of Hayman Microfinance (Hayman) made a strong pitch to international investors. Hayman was looking to partner with one of the big financial institutions to strengthen its funding and growth capability over the long term. While the presentation had triggered a lot of interest, two months later, Marenov was yet to close a deal.

Established in 2014 as a 100% owned subsidiary of Hayman Capital Pte. Ltd., a Singapore-based international investment and financial group, Hayman provided financial solutions to the low-income strata and rural population of Myanmar who had limited or no access to banking services. Having opened up to the global market only in 2011, the Myanmar economy's financial services industry was in a nascent stage, with low penetration of public sector banks, and the presence of microfinance institutions (MFIs) limited to small-scale and transient operations run by local bodies or non-government organisations (NGOs).

In 2015, Hayman acquired government approval for both loans and deposits, and facing little competition to begin with, it grew rapidly to become a 25-branch strong company with a loan portfolio of US\$29 million, 129,000 active borrowers, and 155,000 depositors by March 2020. While its product attributes, targeted marketing approach, trained work force, and effective delivery were some of the key factors that contributed to its success, a small but an integral component of its business model was also its corporate social responsibility (CSR) thrust in the areas of health, education, safety, and environment. The company's approach towards its CSR obligations went beyond what was mandated by the Myanmar government and its shareholders, and Hayman had established a dedicated department with full-time resources to plan and execute its social commitments with the same diligence as its commercial operations. This had paid off well in creating goodwill and earning the company much needed credibility and trust among the locals, particularly the under privileged section of the society - the primary target market for microfinance.

From 2017 to 2019, Myanmar's appeal as an underserved financial market had grown substantially, and an increasing number of international banks and large-scale MFIs began to

**Heli WANG**, Janice Bellace Professor of Strategic Management and Dean of Post-Graduate Research Programmes at LKCSB, authored a Case study with an accompanying Teaching Note on [Hayman Microfinance: CSR in Myanmar](#).

The Case Study demonstrates how Hayman Microfinance provides financial solutions to the low income population in Myanmar and how embedding Corporate Social Responsibility (CSR) can create sustainable competitive advantage.



**Changcheng SONG**

Associate Professor of Finance

### Financial Illiteracy and Pension Contributions: A Field Experiment on Compound Interest in China

Changcheng SONG  
Singapore Management University

I conduct a field experiment to study the relationship between peoples' misunderstanding of compound interest and their pension contributions in rural China. I find that explaining the concept of compound interest to subjects increased pension contributions by roughly 40%. The treatment effect is larger for those who underestimate compound interest than for those who overestimate compound interest. Moreover, financial education enables households to partially correct their misunderstanding of compound interest. I structurally estimate the level of misunderstanding of compound interest and conduct a counterfactual welfare analysis: Lifetime utility increases by about 10% if subjects' misunderstanding of compound interest is eliminated. (JEL D03, D14, J26, O16)

Received February 17, 2016; editorial decision December 21, 2018 by Editor Stijn Van Nieuwerburgh. Authors have furnished an Internet Appendix, which is available on the Oxford University Press Web site next to the link to the final published paper online.

The inadequacy of retirement savings in the United States is a common, and at times controversial, theme in the literature (Venti and Wise 1997; Lusardi 1999; Lusardi and Mitchell 2011; Scholz, Seshadri, and Khitatrakun 2006). Two strands of literature seek to explain this phenomenon. One, which focuses on the lack of information and financial sophistication, stresses the importance of financial literacy and financial education; the other attributes undersaving to self-control problems and procrastination.<sup>1</sup>

I thank the editor, Stijn Van Nieuwerburgh; two anonymous referees; and Liang Bai, Nicholas Barberis, Stefano DellaVigna, Keith Froot, Frederico Furan, Lorenzo Gaiotti, Benjamin Handel, Iwan Horst, David Iaffeo,

**Changcheng SONG**, Associate Professor of Finance at LKCSB authored a Journal Article at the *Review of Financial Studies* on [Financial illiteracy and pension contributions: A field experiment on compound interest in China](#), along with the misunderstanding surrounding compound interest and how it can be beneficial.

The article surrounds the issue with Financial Illiteracy and the importance of retirement savings, especially amongst the low-income and average households.



## UN SUSTAINABLE DEVELOPMENT GOAL 2: ZERO HUNGER



**Edson KIEU**

Graduate of SMU LKCSB  
PhD in Business, Strategy & Organisation



Review

### Tackling Regional Climate Change Impacts and Food Security Issues: A Critical Analysis across ASEAN, PIF, and SAARC

Md Saidul Islam <sup>1,\*</sup> and Edson Kieu <sup>2,3</sup>

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**Abstract:** Climate change and food security issues are multi-faceted and transcend across national boundaries. Therefore, this paper begins with the premise that regional organizations are optimally positioned to address climate change and food security issues while actively engaging global partners to slow down or reverse current trajectories. However, the potential of regional organizations to play a central role in mitigating these vital concerns has not been realized. In this paper, we focus on three regional organizations—the Association of Southeast Asian Nations (ASEAN), the Pacific Islands Forum (PIF), and the South Asian Association for Regional Cooperation (SAARC) and set out to investigate the multifaceted obstacles that impede regional organizations' ability to effectively cope with these problems. We qualitatively review the efficacy of policies and examine the connections between politico-economic processes that affect the development, cooperation, and execution of regional policies. In doing so, we review regional policies using five key criteria: (i) planning, (ii) implementation, (iii) cooperation, (iv) legal obligation and (v) international contribution. Our findings suggest that regional organizations face fundamental problems in the implementation of extensive policies due to the lack of cooperation and legal obligation between member nations-states that stems from fundamental prioritization of national development agendas over regional cooperation.

**Keywords:** climate change; food security; regional organizations; ASEAN; PIF; SAARC

**Edson KIEU**, a PhD Graduate of Strategic Management at LKCSB, co-authored a journal article at the *Sustainability Journal*, published by Multidisciplinary Digital Publishing Institute (MDPI) on [Tackling regional climate change impacts and food security issues: A critical analysis across ASEAN, PIF, and SAARC](#).

The article takes a multi-faceted approach by reviewing policies that bind the current state of affairs.





# UN SUSTAINABLE DEVELOPMENT GOAL 3: GOOD HEALTH AND WELL-BEING

**TAN Wee Liang**, Associate Professor of Strategic Management at LKCSB, published a Case Study with an accompanying Teaching Note on [A bitter pill for pharmaceutical counterfeits: Behind China's serialisation technology](#).

The Case looks into China's pharmaceutical serialisation using cryptography-based authentication and traceability technologies – and how this can be applied to anti-counterfeiting solutions on e-commerce.

**ZHENG Zhichao Daniel**, Associate Professor of Operations Management at LKCSB co-authored a Journal Article at *Medicine* on [A simple new scoring system for predicting the mortality of severe acute pancreatitis: A retrospective clinical study](#).

Through retrospective data between 2009-2017, the article suggests a new, simple method for predicting mortality rate for patients facing severe acute pancreatitis.

**Changcheng SONG**, Associate Professor of Finance at LKCSB co-authored a Journal Article at *Management Science* on [Information avoidance and medical screening: A field experiment in China](#).

The article seeks to investigate whether high-risk individuals avoid a disease test due to information avoidance.

SMU-21-0009

## A BITTER PILL FOR PHARMACEUTICAL COUNTERFEITS: BEHIND CHINA'S SERIALISATION TECHNOLOGY

*People don't die from carrying a fake handbag or wearing a fake shirt. They can die from taking counterfeit medicine.*

— Howard Zucker, Assistant Director General, World Health Organization<sup>1</sup>

When the Hong Kong stock market opened on January 23, 2014, it was ostensibly like any other ordinary day for CITIC 21CN Technology Company Limited (CITIC), a listed firm that operated the state-owned pharmaceutical monitoring platform in China. But by closing time, its end-of-day share price leaped by 372% and soared to HK\$3.92 (US\$0.51)<sup>2</sup>, from the previous trading day.<sup>3</sup>

CITIC, along with its largest shareholder, Chen Xiaoying, was thrust into the global limelight when the Alibaba Group, the world's largest e-commerce firm, announced the acquisition of the company for HK\$1.3 billion (US\$170 million).<sup>4</sup> The deal saw the CITIC Group, the parent company of CITIC, and Chen reap huge returns as their stock valuations rose nearly five-fold, up from US\$87 million to US\$409 million for the Group, and from US\$4 million to US\$400 million for Chen.<sup>5</sup>

In 2006, CITIC was commissioned by the China Food and Drug Administration (CFDA) to develop and manage a proprietary system overseeing the quality and safety of pharmaceutical products in the country; it was known as the Electronic Product Monitoring and Controlling System (EPMCS). This was part of China's move towards pharmaceutical serialisation to safeguard public health. By the time EPMCS was launched by the Chinese government, CITIC became a veritable monopoly in the domestic pharmaceutical anti-counterfeit market.

With EPMCS, the regulatory authority could monitor the production, circulation, and consumption of prescription drugs within the entire pharmaceutical supply chain. Additionally, EPMCS, the centralised repository of comprehensive pharmaceutical data, supported the authorities in the tracing and prompt recall of questionable drugs circulating in the market. Besides, consumers could also authenticate medicine classified as basic drugs almost instantaneously by scanning a product barcode with their mobile phones.

For almost a decade, Chen had led the company in developing and enhancing EPMCS. As Chen looked back, she wondered what more could have been done to enhance EPMCS. What other anti-counterfeiting technologies could be used to tackle the growing number of counterfeiters? Should the system adopt the latest blockchain technology? Should more efforts be dedicated to



**TAN Wee Liang**  
Associate Professor of  
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Observational Study

**Medicine**  
OPEN

## A simple new scoring system for predicting the mortality of severe acute pancreatitis

### A retrospective clinical study

Lei Wang, MD<sup>1\*</sup>, Yan-Bo Zeng, MD<sup>2</sup>, Jia-Yun Chen, RN<sup>3</sup>, Qian Luo<sup>2</sup>, Rowan Wang, PhD<sup>4</sup>, Ruijie Zhang<sup>5</sup>, Daniel Zheng, PhD<sup>6</sup>, Yuan-Hang Dong, BM<sup>7</sup>, Wen-Bin Zhou, MD<sup>8</sup>, Xiaoping Xie, PhD<sup>4\*</sup>, Yi-Qi Du, MD<sup>9,10</sup>, Zhao-Shen Li, MD<sup>11,12</sup>

**Abstract**  
It is critical to accurately identify patients with severe acute pancreatitis (SAP) in a timely manner. This study aimed to develop a new simplified AP scoring system based on data from Chinese population.  
We retrospectively analyzed a consecutive series of 688 patients diagnosed with SAP at the Changhang hospital between 2009 and 2017. The new Chinese simple scoring system (CSSS) was derived using logistic regression analysis and was validated in comparison to 4 existing systems using receiver operating characteristic curves.  
Six variables were selected for incorporation into CSSS, including serum creatinine, blood glucose, lactate dehydrogenase, heart rate, C-reactive protein, and extent of pancreatic necrosis. The new CSSS yields a maximum total score of 8 points. The cut-offs for predicting mortality and severity (discriminating moderately SAP from SAP) were set as 6 points and 4 points respectively. Compared with 4 existing scoring systems, the area under the receiver operating characteristic of CSSS for prediction of mortality was 0.838, similar to acute physiology and chronic health evaluation II (0.844) and higher than Ranson's score (0.702,  $P < .001$ ). bedside index of severity in acute pancreatitis (0.615), and modified computed tomography severity index (MCTSI) (0.738). For predicting SAP severity, CSSS was the most accurate (0.838), followed by acute physiology and chronic health evaluation II (0.805), Ranson's score (0.702), MCTSI (0.680), and bedside index of severity in acute pancreatitis (0.570). Further, the accuracy of predicting pancreatic infection with CSSS was the highest (0.634), similar to that of MCTSI (0.615).  
A new prognostic scoring system for SAP was derived and validated in a Chinese sample. This scoring system is a simple and accurate method for prediction of mortality.

**Abbreviations:** APACHE-II = acute physiology and chronic health evaluation, AUC = area under curve, BISAP = bedside index of severity in acute pancreatitis, CI = confidence interval, CSSS = Chinese simple scoring system, CT = computed tomography, LDH = lactate dehydrogenase, MD = medical doctor, MRI = magnetic resonance imaging, MSAF = moderately severe acute pancreatitis, ROC = receiver operating characteristic, SAP = severe acute pancreatitis.

**Keywords:** disease severity, mortality, prognostic scoring system, severe acute pancreatitis

Editor: Abdelhakim Belkacem

WZ, ZB, and CY contributed equally to this work.

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The authors have no conflicts of interest to disclose.



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7-2021

## Information avoidance and medical screening: A field experiment in China

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11-2020

**Effect of renin-angiotensin system inhibitors on acute kidney injury among patients undergoing cardiac surgery: A review and meta-analysis**

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**Citation**  
ZHOU, Han; XIE, Jingui; ZHENG, Zhichao; OOI, Oon Cheong; and LUO, Haidong. Effect of renin-angiotensin system inhibitors on acute kidney injury among patients undergoing cardiac surgery: A review and meta-analysis. (2020). *Seminars in Thoracic and Cardiovascular Surgery*. 1-25. Research Collection Lee Kong Chian School Of Business.  
Available at: [https://ink.library.smu.edu.sg/lkcsb\\_research/6668](https://ink.library.smu.edu.sg/lkcsb_research/6668)

**ZHENG Zhichao Daniel**, Associate Professor of Operations Management at LKCSB co-authored a Journal Article on [Effect of renin-angiotensin system inhibitors on acute kidney injury among patients undergoing cardiac surgery: A review and meta-analysis](#).

The study attempts to find some links between Acute Kidney Injury, Cardiac Surgery and Therapy. It also calls on further studies to be done in the area to verify their conclusion.



## UN SUSTAINABLE DEVELOPMENT GOAL 4: QUALITY EDUCATION

**Timothy CLARK**

Provost; Professor of  
Strategic Management

### COVID-19 and Management Education: Reflections on Challenges, Opportunities, and Potential Futures

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#### Introduction

COVID-19 is having profound impacts on tertiary education globally. Border closures, cuts to aviation capacity, mandatory quarantine on entering a country, restrictions on mass gatherings, and social distancing all pose challenges to higher education (HE) institutions. Business Schools (BSs) have larger and more internationally diverse cohorts of students and staff, generating particular challenges, but also often have more mature digital and remote education capabilities that enable responses to COVID-19. Therefore, exploring emergent evidence on how BSs are likely to be affected by COVID-19 over the short, medium, and long term is of significant importance to our community. In this commentary, we share a perspective on the impacts of COVID-19 that draws upon our experience as leaders of BSs in Asia, Australia, and the United Kingdom. Our reflections are limited by our experiences and we acknowledge both our partiality and the diverse broader impacts of COVID-19 on business and society.

#### COVID-19 and Business School-Stakeholder Relations

concentration of cases in a small number of countries (China, Japan, South Korea). In the UK and parts of Asia, the pandemic emerged mid-way through the academic year, and so manifested initially in challenges associated with navigating end-of-cycle teaching and assessment. In Australia, the crisis emerged at the beginning of a new academic year, and the initial focus lay with serving Chinese students that were prevented from returning to Australia. Subsequently, outbreaks increased exponentially across countries, and impacts broadened to encompass all on-campus teaching, international student activities, and pastoral support. COVID-19 also impacted student recruitment and attempts to maintain financial sustainability through the crisis. BSs rapidly adapted pedagogy and assessment. Currently, BSs are contemplating a more planned and structured adaptation to a "new normal".

#### COVID-19 and students

Students are perhaps the BS's most affected stakeholder throughout the pandemic and were at the forefront of BS's minds when designing and implementing responses. Students in the later stages of their courses are concerned to understand the impacts of COVID-19 on their restoration and

**Timothy CLARK**, Provost at LKCSB, co-authored a Journal Article on [COVID-19 and management education: Reflections on challenges, opportunities, and potential futures](#) at the *British Journal of Management*.

The article commented on the the challenges posed by Higher Education Institutes, in particular Business Schools, based on leadership experiences in Asia, Australia, and United Kingdom.

**Howard THOMAS**

Professor Emeritus of  
Strategic Management  
and Management Education

Singapore Management University  
Institutional Knowledge at Singapore Management University

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2-2021

**Examining business school leadership**

Julie DAVIES  
Ewan Ferlie  
Heather McLAUGHLIN  
Howard THOMAS  
Singapore Management University, [howardthomas@smu.edu.sg](mailto:howardthomas@smu.edu.sg)

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**Citation**  
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Available at: [https://ink.library.smu.edu.sg/lkcsb\\_research/6831](https://ink.library.smu.edu.sg/lkcsb_research/6831)

**Howard THOMAS**, Professor Emeritus of Strategic Management and Management Education and Director, Academic Strategy and Consulting Unit at LKCSB, shared his thoughts, along with other Experts on [Examining business school leadership](#) at the *European Foundation for Management Education (EFMD) Webinar on Business School Leadership*.

The Webinar addresses key challenges that Business Schools have always faced and the future forward.



## UN SUSTAINABLE DEVELOPMENT GOAL 5: GENDER EQUALITY

**Roy CHUA**, Associate Professor of Organisational Behaviour & Human Resources at LKCSB, authored a series of Case Studies with accompanying Teaching Notes on [Women@Work](#).

The series are written in an Asian context of what Women go through at work, with examples both women and men should be able to relate to, and provided basic frameworks and strategies that can better help and empower women at work, applicable across different cultures.

SMU-20-0022

### WOMEN@WORK: FANG (A)

I enjoyed painting and making arts from a very young age. Getting admitted to one of the finest Art schools in the world was quite natural and easy for me. I was always at the top of my class since my undergraduate study in animation design and I recently received my Ph.D. in Art and Culture study from a well-regarded university. After getting my doctoral degree, my career started to take off in multiple directions. Now I feel like a "Slash" with multiple professional identities.

During my undergraduate study, I had made several short animations that were inspired from my personal experiences and feelings. I have taken these "babies" of mine to multiple film festivals, local and international, and they have won me more than a hundred awards. My reputation started to grow in the animation film industry.

Now I own a design studio, "Fang Design", with a group of four to five junior animators. My studio takes all kinds of orders from customers, for example, designing a cartoon logo or making animated advertisements. The business is lucrative and growing very fast. I should be able to expand it to a 10-person team next year.

Soon after I received my doctoral degree in Art and Culture study at a local university, I was invited to join an Art school as a lecturer. Being in academia means that I need to take on responsibilities such as teaching, research, and service in the department.

At the same time, given my diverse experiences, some friends working in the ministry of culture approached me to co-write a book reflecting the development of animation design and its future directions. I feel honoured and excited to be involved in this meaningful project.

I am a perfectionist when it comes to work. I also have enjoyed working on all of the projects undertaken so far. My philosophy is that if I cannot devote one hundred percent to a project, I would rather not start it at all. This work ethic keeps me established in all fields. However, as my reputation grows, more work opportunities arise. I am starting to struggle with managing my workload.

Once at a film festival, I met one of the "founding fathers" of modern animation. I still remember that after he viewed my work, he said to me, "Fang, you are a natural artist, you should continue working on your animation films, and you will have a promising future soon."



**Roy CHUA**

Associate Professor of OBHR; Associate Dean; Academic Director, Doctor of Innovation and Doctor of Business Administration



## UN SUSTAINABLE DEVELOPMENT GOAL 7: AFFORDABLE AND CLEAN ENERGY

**LIM Kian Guan**, OUB Chair Professor of Quantitative Finance at LKCSB, authored a Journal Article at the *Journal of Shipping and Trade* on [Financial performance of shipping firms that increase LNG carriers and the support of eco-innovation](#).

The article looks into the diversification of Liquefied Natural Gas (LNG) by a Shipping Company and proved that choosing a cleaner fossil fuel option results in higher profitability and better operational efficiency.

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11-2020

### Financial performance of shipping firms that increase LNG carriers and the support of eco-innovation

Kian Guan LIM  
Singapore Management University, kglim@smu.edu.sg  
Michelle LIM

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LIM, Kian Guan and LIM, Michelle. Financial performance of shipping firms that increase LNG carriers and the support of eco-innovation. (2020). *Journal of Shipping and Trade*, 5, 1-25. Research Collection Lee Kong Chian School Of Business.  
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**LIM Kian Guan**

Professor of Quantitative Finance/Finance;  
OUB Chair Professorship (2010-Present)  
Interim Dean 2008-09

**Reddi KOTHA**, Associate Professor of Strategic Management at LKCSB, authored a Case Study with accompanying Teaching Note on [One room at a time: SensorFlow's sustainable energy management system for the hospitality industry](#).

The Case follows SensorFlow, a Start-Up offering Internet-of-Things (IoT) powered Energy Management Solution (EMS) aimed at the Hospitality Industry. Through the lens of entrepreneurship and innovation, the Case seeks to share the creation and capturing of value.

SMU-21-0020

### ONE ROOM AT A TIME: SENSORFLOW'S SUSTAINABLE ENERGY MANAGEMENT SYSTEM FOR THE HOSPITALITY INDUSTRY

It was the last week of June 2020. Saikrishnan Ranganathan, the co-founder and CEO of SensorFlow Pte Ltd (SensorFlow), stepped out of his house for a run and some fresh air. The evening sun was still shining bright and hot in tropical Singapore. Not many joggers were on the track, and it had been like that for the last few months since the COVID-19 pandemic struck. Ranganathan's thoughts went back to the virtual meeting that he had had with Max Pagel, the co-founder and CTO of SensorFlow, just a while ago. As it was almost the end of the first six months of 2020, they had discussed the half-yearly results of their company. SensorFlow was an early-stage start-up offering an IoT-powered Energy Management Solution (EMS) to the hospitality sector in Southeast Asia. The pandemic had shut down the global economy, and the hospitality industry had been dealt a debilitating blow with occupancy rates declining to unprecedented levels. Consequently, SensorFlow's growth rate had slowed, and the duo had to rejig their plans.

Designed to automate and optimise energy consumption in hotel rooms, SensorFlow's smart wireless energy management solution (EMS) was targeted at hospitality industry operators such as hotels, resorts and serviced apartments. It combined the use of IoT and AI technology to collect real-time data on room occupancy and guest behavioural insights, and automatic decision making of heating, ventilation and air condition (HVAC) systems for maximised energy conservation. By tracking real-time data, the smart solution also helped properties monitor energy consumption trends and make better-informed operational decisions based on big and real data. It triggered alerts on detecting and predicting heating and cooling system equipment faults and facilitated preventive maintenance. Based on the occupancy data gathered, the system also provided insights for optimising housekeeping routes as well as other guest services planning and operations for enhanced guest satisfaction.

Overall, the solution helped the operators to reduce energy consumption and save operational costs without compromising guests' comfort as it could be easily retrofitted into existing systems without disruption or downtime. Other similar solutions available in the market could not be retrofitted and the cost and time taken for installation, even in new buildings or during building renovations, were high. Since the number of existing properties was much larger compared to new builds, SensorFlow's solution stood out among its competitors in this market as it was retrofittable and non-disruptive, which were major competitive advantages.



**Reddi KOTHA**

Associate Professor of Strategic Management;  
Academic Director, Master of Science in Innovation;  
Lee Kong Chian Fellow





# UN SUSTAINABLE DEVELOPMENT GOAL 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE



**Bert De REYCK**

Dean, Lee Kong Chian  
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informs MANUFACTURING & SERVICE OPERATIONS MANAGEMENT  
Articles in Advance, pp. 1-22  
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## Finalist-2019 M&SOM Practice-Based Research Competition Forecasting Airport Transfer Passenger Flow Using Real-Time Data and Machine Learning

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Available online 10th March 2020

Keywords: airport transfer passenger flow; machine learning; real-time data; forecasting

**Abstract.** Problem definition: Airports and airlines have been challenged to improve decision making by predicting accurate arrival and departure times. We develop a novel predictive system that produces forecasts of transfer passenger flows at an airport. In the first phase, the system predicts the distribution of individual transfer passenger connection times. In the second phase, the system samples from the distribution of individual connection times and produces distributional forecasts for the number of passengers arriving at the immigration and security areas. Academic/practical relevance: To our knowledge, this work is the first to apply machine learning for predicting real-time distributional forecasts of passenger flows at an airport using passenger level data. Better forecasts of these forecasts can help optimize passenger experience and improve airport resource deployment. Methodology: The predictive system developed is based on a regression tree combined with spatial-based simulation. We generalize the tree method to predict distributions, moving beyond point forecasts. We also formulate a novel method-based forecasting problem and decision making by applying the new predictive system. Results: We show that, when compared with benchmarks, our two-phase approach is more accurate in predicting both connection times and passenger flows. Our approach also has the potential to reduce monetary costs at the immigration and security areas. Managerial implications: Our predictive system can produce accurate forecasts frequently and in real time. With these forecasts, an airport's operating team can make data-driven decisions, identify late passengers, and assist them to make their connections. The airport can also update its re-scheduling plans based on the prediction of passenger flows. Our predictive system can be generalized to other operations management domains, such as hospitals or theme parks, in which customer flows need to be accurately predicted.

Handling Editor: Dr. Yael Gruenke-Cockayne

Supplementary material: The online appendix is available at <https://doi.org/10.1016/j.sbsom.2020.01.001>

Keywords: airport transfer passenger flow; machine learning; real-time data; forecasting

1. Introduction

Passengers often experience delays when traveling through airports, especially at immigration and security. These delays are caused in large part by the volatility and uncertainty in arrival patterns of passengers. Airports and airlines have long invested in optimizing and controlling aircraft arrivals and departures (Barbath and Cohen 2004, Lohapatant and Barbath 2016, Lan

2016). For example, flights traveling through Heathrow, the busiest airport in Europe, have at least 30% connecting passengers (Heathrow Airport 2020). Missed connections are the third leading reason for filing a complaint (MacDonald 2016). Better predictions of the time passengers need to traverse the airport can help minimize

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**LIANG Hao**

Associate Professor of  
Finance; Lee Kong Chian  
Fellow

SMU-20-0005

## Ant Financial: The Road to Financial Inclusion in China through QR Codes and Technology-as-a-Service

*I think digital finance will have a crucial role for sustainable development because it's scalable, inclusive, bottom-up, and spreads very quickly.*

— Dr. Chen Long, Ant Financial's former Chief Strategy Officer

January 2020, Ant Financial made the news headlines again as the tech giant was named the world's most valuable fintech unicorn.<sup>1,2</sup> It was little wonder as Ant Financial's market worth had soared to US\$150 billion after one of the largest funding rounds as of 2018.<sup>3</sup>

Established in 2014, Ant Financial (as well as its competitor Tencent) was instrumental in transforming the bulk of the nation's transactions from cash to digital payments. Within a span of five years, Ant Financial rose to lead China's US\$7 trillion third-party mobile payment market with a 54.2% share.<sup>4</sup>

Gong Jing, a Senior Expert at Ant Financial Research Institute, recalled an amusing story of a robbery that went viral on Chinese social media. Two cousins had robbed the cashiers at three convenience stores but to their dismay, looted only a total of 1,800 yuan (US\$262) of cash.<sup>5</sup> Chinese netizens were quick to react with sarcastic comments that robbers in China would need to find a new 'occupation' since cash transactions were becoming rare. Ironically the robbery took place in the city of Hangzhou in East China, where Ant Financial was headquartered.

Ant Financial had attributed its success to its dedication to financial inclusion through the use of digital technology. Positioning itself as a techfin (not fintech) company, its two-pronged approach towards inclusive finance was grounded on implementing Quick Response (QR) Merchant Growth Plan and providing technological digitization services to commercial banks.

Launched in May 2018, the QR Merchant Growth Plan aimed to enable 100 million small and micro businesses to transact and receive payments from customers who scanned QR codes on their mobile phones. The Plan was subsequently extended to a multi-product suite designed to improve merchant welfare and social development. In its drive to deepen financial inclusion, Ant Financial

<sup>1</sup> A unicorn was a privately-held company valued above US\$1 billion.

<sup>2</sup> Boston Research Institute, "Huanan Global Unicorn List 2019", October 21, 2019.

<sup>3</sup> Ant Financial, "Ant Financial 2018 Annual Report", October 21, 2019.

<sup>4</sup> Ant Financial, "Ant Financial 2018 Annual Report", October 21, 2019.

<sup>5</sup> Ant Financial, "Ant Financial 2018 Annual Report", October 21, 2019.



**Patricia LUI**

Senior Lecturer of  
Marketing

SMU-20-0047

## ZENXIN ORGANIC: FROM BRICK AND MORTAR TO DIGITAL RETAIL

In July 2020, Sengwee Tai, Executive Director of ZENXIN Organic (Zenxin), gazed at the dark clouds racing up the mountain, enveloping its summit in a serene mist. The steaming cup of kopi-O<sup>1</sup> sat patiently on his desk, as he contemplated on the current situation. Uncertain times were looming over niche enterprises like Zenxin as the spread of the COVID-19 pandemic widened its impact over millions of lives globally. Economically, brick and mortar retail businesses worldwide were one of the worst hit. Zenxin was an organic food producer, selling fresh and packaged organic produce in Southeast Asia. Although the company had an online store, the bulk of its sales came from retail supermarkets and its brick and mortar stores. Given the predicted long-term effects of the pandemic, an effective digital strategy was the need of the hour. Sengwee knew that to survive in the existing market, he had to improve his firm's digital marketing strategy quickly.

Zenxin was established in 2001 in Johor, Malaysia, as an organic farm, producing items such as vegetables, fruits, and fertilizers. The company grew its business gradually in Southeast Asia, using a 'farm to fork', supply-based approach building partnerships with supermarkets and establishing its own brick and mortar retail stores to grow its consumer base. The firm expanded into China in 2010, where it focused mainly on organic dry food products that it sourced from a select pool of suppliers. In 2018, Zenxin also set up its online organic store with attractive bundled product offerings and convenient home delivery services for end consumers. Over the years, the company tried to create brand awareness of its products through both brick and mortar retail and online channels. Its net sales revenue saw consistent growth from 2014 onwards, experiencing a spike of 19.2% in 2017 and 8.7% in 2018.

Zenxin's brick and mortar retail model flourished and in 2020 the firm became the leading organic fresh producer and supplier in Southeast Asia. The company's operations comprised more than 300 hectares of farmland, a pool of sales distributors (supplying directly from the farms to more than 100 supermarkets), 14 brick and mortar retail stores, and a recreation park in Johor, Malaysia. It supplied a wide selection of organic produce with over 200 varieties of organic products with affordable price points.

Nevertheless, driving sales for organic produce continued to be a challenge, and the company hoped to achieve further growth by integrating its online and offline marketing strategies. Moreover, the current pandemic, had thrown a spanner in the works, and Sengwee was unsure of a specific strategy that was effective enough to deal with all the challenges that the company had faced in the past three months. These included temporary disruption of distribution channels, closure of retail stores during lockdown, lower sales volume, and uncertain demand. Zenxin was trying hard to improve its current Wordpress based organic store through

**Bert De REYCK**, Dean at LKCSB, co-authored a Journal Article at *Manufacturing & Service Operations Management* on [Forecasting airport transfer passenger flow using real-time data and machine learning](#).

The researchers collaborated with Heathrow Airport and developed a predictive system to improve passengers' transfer times accurately. This work is the first to apply machine learning for predicting real-time forecasts in the airport.

**LIANG Hao**, Associate Professor of Finance at LKCSB, co-authored a Case Study with accompanying Teaching Note on [Ant financial: The road to financial inclusion in China through QR codes and technology-as-a-service](#).

The Case Study demonstrates how financial technology can provide financial inclusion to micro-businesses in China's lower tier cities. Through this, the study shows that profitability and social impact can be achieved simultaneously.

**Patricia LUI**, Senior Lecturer of Marketing at LKCSB, authored a Case Study with accompanying Teaching Note on [Zenxin Organic: From brick & mortar to digital retail](#). The Case Study addresses key challenges that an incumbent, Organic Produce business based in Singapore, Zenxin, faces when it decides to get into digital retail and its market expansion into China. A pre-cursor to the study is when LKCSB MSc in Management students went to Zenxin's farm in Malaysia to appreciate the business and recommended digital marketing strategies.

**CHIRAPHOL New Chiyachantana**, Associate Professor of Finance at LKCSB, co-authored a Case Study with accompanying Teaching Note on [\*Sinwattana: Raising capital through crowdfunding\*](#).

The Case Study follows a Singaporean protagonist and her journey in helping Small Medium Enterprises in Thailand achieve the capital they need through crowdfunding. The Case Study aims to demonstrate how financial inclusion through technology can be made possible in a competitive market.

**LIANG Hao**, Associate Professor of Finance at LKCSB, co-authored a Case Study with accompanying Teaching Note on [\*Pinduoduo: Driving e-commerce in rural China to improve farmers' livelihoods\*](#).

The Case Study documents the rise of Pinduoduo, an e-commerce shopping platform in China and how they've helped farmers in rural China with entrepreneurship training and improved their livelihoods. The study also aims to lessen the friction between social impact and the pursuit of profitability.

SMU-21-0025

## SINWATTANA: RAISING CAPITAL THROUGH CROWDFUNDING

*The unique value of crowdfunding is not money, it's community.*

– Ethan Mollick, Professor at Wharton University<sup>1</sup>

In January 2021, Kwek Hong Sin, founder of Sinwattana, a crowdfunding platform, was walking to an event in Siam Paragon shopping mall in Bangkok, Thailand. Despite the growth of digitalisation and e-commerce, the mall remained a popular destination for locals and tourists alike. It included an experiential art gallery, an aquarium as large as three Olympic-sized swimming pools, and a replica city that allowed children to role play various occupations. The mall was a manifestation of Thailand's robust entrepreneurial spirit. She headed toward the atrium, where one of her clients was holding a roadshow to raise capital. The event would allow potential investors to meet with the issuer and discuss the company's business plan.

Within ASEAN<sup>2</sup>, Thailand was a large country that experienced strong economic growth driven by industrialisation. After the Asian Financial Crisis, the country fell into a recession and many banks had to tighten their lending requirements. With the establishment of the ASEAN Economic Community (AEC), Thai businesses had to deal with the increased competition arising from free trade. However, they also had the opportunity to expand regionally.

Companies in Thailand were faced with a changing business landscape and many challenges that could be mitigated by adequate funding. Banks were unwilling to assume the risks associated with making multiple smaller loans to SMEs that lacked collateral and long operational track records. Kwek felt that Thai specialty stores had innovative entrepreneurs with good products and services, and that their challenges could be met through crowdfunding.

Despite the additional challenge of being a foreigner, Kwek quickly attained a Foreign Business License and was certified by the Board of Investment in Thailand. In 2018, Sinwattana was the first online equity crowdfunding platform approved by the local regulators. Sinwattana offered three types of crowdfunding – social (donation and reward), equity and debt – to meet the local capital raising needs. In 2020, Kwek collaborated with five partners to improve the crowdfunding process.

As Kwek continued to walk through the mall, she was confident that Sinwattana could impact Thai society positively. After successfully completing several crowdfunding projects, she was confident of the industry's prospects. However, she wanted to collaborate with regulators and financial institutions to help the industry grow. Her long-term plan was to establish a regional crowdfunding network and helping the smaller businesses within the ASEAN region.



**CHIRAPHOL New Chiyachantana**

Assistant Professor of Finance

SMU-20-0043

## PINDUODUO: DRIVING E-COMMERCE IN RURAL CHINA TO IMPROVE FARMERS' LIVELIHOODS

May 2020. A daily routine of Lin Xinyi's lockdown life during the Covid-19 pandemic was to water a mango tree. Joining tens of millions of users who logged in everyday, Lin, Executive Director of Sustainability and Agricultural Impact at Pinduoduo, had been nurturing her virtual tree on Duo Duo Orchard, an in-app mini-game within the Pinduoduo shopping platform. "I have been watering this mango tree for the longest time, and now I'm at 99.6% completion. When I'm finally done, I will get a box of real mangoes delivered to me", said Lin, who was based in Shanghai and eagerly anticipating the arrival of the fruits.

Headquartered in Shanghai, China, Pinduoduo's motto – "Together, More Savings, More Fun" espoused the essence of its brand name. Imagine going to Costco and Disneyland at the same time – except virtually, of course. That was the kind of customer experience Colin Huang, the founder and CEO of Pinduoduo, had wished to create, and over 600 million users in China would have agreed that he succeeded, as they accessed the app daily to snap up deals, share products with friends, and play games.

Founded in 2015 and listed on Nasdaq three years later, Pinduoduo's colourful history of unprecedented growth to become the second-largest e-commerce platform in China in terms of number of users had attracted global attention. With a market valuation of an estimated US\$63 billion<sup>3</sup>, Pinduoduo closed the first quarter of 2020 with a stellar performance by achieving RMB 1.16 trillion (US\$162 billion)<sup>3</sup> in gross merchandise volume (GMV) over the past twelve months. Notably, Pinduoduo's market valuation had inched closer to its rival, JD.com (which was valued at US\$68 billion).<sup>4</sup>

Since its early days, the young tech giant had been adept at manoeuvring its way in the e-commerce space. It made a swift pivot from direct sales to a marketplace model, and continued to innovate by integrating games into otherwise quotidian online shopping. Along the way, it made meaningful impact to rural revitalisation efforts by enabling millions of farmers to tap into a wider consumer base through e-commerce. By bypassing unnecessary intermediaries, farmers could offer fresh produce to consumers more directly and at a better price for both. Through its Duo Duo Farm initiative, Pinduoduo also aimed to raise farmers' incomes in poverty-stricken counties through training in both agronomic knowledge and e-commerce knowhow.



**LIANG Hao**

Associate Professor of Finance; Lee Kong Chian Fellow



# UN SUSTAINABLE DEVELOPMENT GOAL 10: REDUCED INEQUALITIES

**Gokhan ERTUG**, Associate Professor of Strategic Management at LKCSB, co-authored a Journal Article at the *Academy of Management Discoveries* on [\*Do coaches in the National Basketball Association actually display racial bias? Replication and extension.\*](#)

The study expands on several previous works on racial bias in the National Basketball Association (NBA) and present their findings.

## DO COACHES IN THE NATIONAL BASKETBALL ASSOCIATION ACTUALLY DISPLAY RACIAL BIAS? A REPLICATION AND EXTENSION

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6-2020

**Transparency and fairness in organizational decisions: An experimental investigation using the paired ultimatum game**

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**Jared NAI**, Assistant Professor of Strategic Management at LKCSB, and **Reddi KOTHA**, Associate Professor of Strategic Management at LKCSB co-authored a Journal Article at *Strategy Science* on [Transparency and fairness in organizational decisions: An experimental investigation using the paired ultimatum game](#).

The Study attempts to show that transparency may be better than secrecy when it comes to what employees receive from their employers.



**LIANG Hao**

Associate Professor of Finance; Lee Kong Chian Fellow

RESEARCH COLLECTION LEE KONG CHIAN SCHOOL OF BUSINESS

**Globalization and affordability of microfinance**

**Benny Li LIANG** University of Massachusetts Lowell  
**Hao LIANG**, Singapore Management University

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Journal Article

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1-2021

**Abstract**  
We study how globalization can differentially affect financial inclusion through the lens of microfinance. Based on an institutional logic perspective, we argue that MFI embody both social logic and market logic with regard to provision of affordable microfinance loans. Specially, social logic is amplified by greater social globalization and the stronger presence of non-profit organizations (NPOs) in the microfinance industry. In contrast, economic globalization catalyzes MFI's market logic, leading to weaker or greater affordability of microfinance, depending on the relative strength of the profit-maximizing motive and moral competition. We test these predictions by focusing on MFI interest-rate setting and using longitudinal data from 2010 MFI observations across 50 countries from 2003 to 2012. We find that country-level social globalization measure is negatively associated with the average MFI loan interest rates and that country-level economic globalization measure has an inverse U-shaped relationship with the average MFI loan interest rates. These results support our hypothesis and suggest a more nuanced view on how globalization affects affordability of microfinance.

**Keywords**  
Economic globalization, Financial inclusion, Institutional logics, Microfinance, Non-profit organizations, Social globalization

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**LIANG Hao**, Associate Professor of Finance at LKCSB, co-authored a Journal Article at the *Journal of Business Venturing* on [Globalization and affordability of microfinance](#).

The study demonstrates how globalization can affect financial inclusion through the lens of Microfinance and suggests that a more nuanced view is to be taken on the issue.



## UN SUSTAINABLE DEVELOPMENT GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES



**Changcheng SONG**

Associate Professor of Finance

High Sex Ratios and Household Portfolio Choice in China\*

Wenchao Li<sup>1</sup>

Changcheng Song<sup>2</sup>

Shu Xu<sup>3</sup>

Junjian Yi<sup>4</sup>

December 23, 2019

**Abstract**

This paper studies how high sex ratios (more men than women) affect household portfolio choice. Using data from a nationally representative Chinese household finance survey, we find that a 1 standard deviation increase in the sex ratio would raise the stock market participation rate by 2.9 percentage points or 52.2 percent for families with a son relative to families with a daughter. Our estimates imply that rising sex ratios explain around 10 percent of the significant growth in China's stock market size in recent decades.

**Key words:** Household portfolio choice; High sex ratios

**JEL Codes:** G11; D1; D91

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**Changcheng SONG**, Associate Professor of Finance at LKCSB co-authored a Journal Article at the *Journal of Human Resources* on [High sex ratios and household portfolio choice in China](#).

The study shows how gender imbalance (preference for first-born male) affects household portfolio choice in China through multiple variables such as the socioeconomic status of Chinese families.

**ZHOU Yangfang Helen**, Associate Professor of Operations at LKCSB co-authored a Journal Article at *Manufacturing and Service Operations Management* on [Smart charging of electric vehicle: An innovative business model for utility firms](#).

The study aims to make the charging of electric vehicles more cost and environmentally efficient amidst the varying emissions that could occur.

### Smart Charging of Electric Vehicles: An Innovative Business Model for Utility Firms

Owen Q. Wu • Şafak Yücel • Yangfang (Helen) Zhou

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McDonough School of Business, Georgetown University, Washington, D.C., United States  
Lee Kong Chian School of Business, Singapore Management University, Singapore

Forthcoming in *Manufacturing and Service Operations Management*

April 2021

**Problem Definition:** By providing an environmentally friendly alternative to traditional vehicles, electric vehicles will transform urban mobility, particularly in smart cities. In practice, once an electric vehicle is plugged in, the charging station completes charging as soon as possible. Given that the procurement cost of electricity and associated emissions vary significantly during a day, substantial savings can be achieved by smart charging—delaying charging until the cost is lower. In this paper, we study smart charging as an innovative business model for utility firms.

**Practical Relevance:** Utility firms are already investing in charging stations and they can achieve significant cost savings through smart charging.

**Methodology:** We consider a mechanism design problem in which a utility firm first announces pairs of charging price and completion time. Then, each customer selects the pair that maximizes their utility. Given the selected completion times, the utility firm solves the optimal control problem of determining the charging schedule that minimizes the cost of charging under endogenous, time-varying electricity procurement cost. We assume that there are ample parking spots with chargers at the charging station.

**Results:** We devise an intuitive and easy-to-implement policy for scheduling charging of electric vehicles under given completion times. We prove that this policy is optimal if all customers arrive at the station simultaneously. We also characterize the optimal pairs of charging price and completion time. By using real electricity demand and generation data from the largest electricity market in the U.S., we find that cost and emissions savings from smart charging are approximately 20% and 15%, respectively, during a typical summer month.



**Helen ZHUO**

Associate Professor of  
Operations Management

**Thomas MENKHOFF**, Professor of Organisational Behaviour & Human Resources at LKCSB authored a book published by World Scientific on [Catalyzing Innovations for a Sustainable Future](#).

The book leans on Menkhoff's expertise and selected written works on Innovation and Urban Sustainability through multiple approaches – e.g. Strategy, Knowledge Management and Governance, with examples from Singapore, Germany, and Spain.



**Thomas MENKHOFF**

Professor of Organisational  
Behaviour and Human  
Resources



## UN SUSTAINABLE DEVELOPMENT GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

**Heli WANG**, Janice Bellace Professor of Strategic Management and Dean of Post-Graduate Research Programmes at LKCSB, co-authored a journal article at *Regional Studies* on [Geographical influences on the relationship between corporate philanthropy and corporate financial performance](#).

The study found that perceptions surrounding Corporate Social Responsibility (CSR) vary across different regions and how this affects corporate financial performance.

### Geographical influences on the relationship between corporate philanthropy and corporate financial performance

Jane Lu<sup>a</sup>, Xueji Liang<sup>b</sup> and Heli Wang<sup>c</sup>

**ABSTRACT**  
Building on stakeholder theory, the paper argues that geographical differences in stakeholders' reactions to corporate philanthropy lead to differences in the relationship between corporate philanthropy and corporate financial performance across regions. When comparing the United States and China and different regions within China, it is found that the differences in stakeholder perceptions (as reflected by social identity) and information availability (as indicated by advertising intensity) across regions significantly moderate the corporate philanthropy–corporate financial performance relationship. The findings show that the value of corporate philanthropy varies by region and that stakeholder perception and information availability are two important mechanisms through which corporate philanthropy influences corporate financial performance.

**KEYWORDS**  
corporate philanthropy; corporate financial performance; geographical influences; stakeholder perception; information availability

JEL D, M14  
History received 29 August 2018; in revised form 31 August 2019

#### INTRODUCTION

Studies adopting a geographical approach to corporate philanthropy (CP) focus on the geographical determinants of philanthropy impacts. In general, this stream of the literature suggests that CP is geographically embedded and that this nature results in differential impacts of CP in different regions (Card, Hallock, & Moretti, 2010; Gaeremynck & Peche, 2015; Marshall, Darity, & Pate, & Pollard, 2018). However, research has paid little attention to how the geographically embedded nature of CP affects firm-level performance. As CP is a strategic choice made by firms that expect an economic return on their investment (McWilliams, Siegel, & Wright, 2006), examining geographical influences on the relationship between CP and corporate financial performance (CFP) is important.

By contrast, studies with unequivocal findings on the CP–CFP relationship are abundant in the strategic management literature. Early studies on the relationship generally revealed a positive relationship between the two concepts (e.g., Galaskiewicz, 1997; Orlitzky, Schmidt, & Rynes, 2003), while more recent studies have found conflicting

evidence (Choi & Jung, 2008; Wang, Choi, & Li, 2008). A comparison of the research contexts of extant studies on the CP–CFP relationship reveals that the controversy surrounding the relationship is partly due to the lack of a consideration of geographical influences (Marshall et al., 2018).

Economic geographers have long argued that the variance in firm performance can be explained by regional differences, especially when the drivers of firm performance are knowledge-based (Marshall, 1890; Marshall, 1961). Following this line of reasoning, we contend that incorporating the geographical dimension into theoretical models of the CP–CFP relationship is crucial.

Specifically, we identify two geographically bounded conditions through which CP affects CFP. As CP does



**Heli WANG**

Janice Bellace Professor of  
Strategic Management;  
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**Kenneth GOH**

Assistant Professor of Strategic Management; Academic Director, Business Families Institute; V3 Group Fellow in family Entrepreneurship

SMU-21-0015

#### FEDERATED HERMES – IMPROVING ESG THROUGH ACTIVE ENGAGEMENT WITH PORTFOLIO COMPANIES

*Science-based targets are a vital tool for companies to reduce Greenhouse Gas (GHG) emissions along a clearly defined path in line with the Paris Agreement goals. But the Ruby executives seemed reluctant to commit to them. How should I engage with the CEO to convey the seriousness of the situation? If nothing is done now, it is unlikely that Ruby will be carbon neutral by 2030. But if the CEO takes offence, it could potentially jeopardise our carefully cultivated relationships with Ruby's senior management and the sustainability champions.*

May 2021 – This was the dilemma that had kept Sarah Lee, Director of Engagement at Federated Hermes (FH), awake for the past few nights.<sup>1</sup>

FH, an investment management company that focused on creating sustainable wealth, adopted an active engagement approach with the companies in its portfolio by working alongside them to address risks, challenges and opportunities for running their businesses while meeting environmental, social and corporate governance (ESG) goals.

Ruby Goods was a consumer goods company in FH's portfolio. The company derived half its annual revenue from dairy products. Given that dairy farming was a major source of greenhouse gas (GHG) emissions and contributed to 1,700 million tonnes or 3.4 percent of the world's GHG emissions<sup>2</sup>, Lee saw FH's investment in Ruby as an opportunity to help the company reduce GHG emissions.

While Ruby had adopted several ESG initiatives in the past few years, Lee felt more could be done. As 90 percent of the GHG emissions were produced in the supply chain, Lee wanted to push for Ruby to commit to science-based targets<sup>3</sup> to further reduce GHG emissions. In her prior engagements with Ruby's senior management, Lee had sensed some resistance to the adoption of the more ambitious science-based targets. Some internal stakeholders and board directors had pushed back because of higher operating costs while others had demurred because of dampened sales caused by the COVID-19 pandemic. Lee also sensed that Ruby's board of directors had become more cautious about incorporating ESG goals in Ruby's strategy in light of the recent ousting of the CEO of Danone, Ruby's major competitor, for "not striking a balance between shareholder value creation and sustainability".<sup>4</sup>

Hence, while she saw an opportunity for Ruby to significantly reduce GHG emissions in its dairy

**Kenneth GOH**, Assistant Professor of Strategic Management and Director of Business Families Institute (BFI) at LKCSB, co-authored a Case Study and an accompanying Teaching Note on [Federated Hermes – Improving ESG through active engagement with portfolio companies](#). The case study follows a protagonist and her success in making organisational changes to drive Environmental, Social, and Governance (ESG) Goals and the difficult challenges she encounter in gaining external stakeholder trust towards reducing Greenhouse Gas Emissions (GHG).

**LIANG Hao**

Associate Professor of Finance; Lee Kong Chian Fellow

SMU-21-0027

#### ALIBABA CAINIAO'S SMART GREEN LOGISTICS STRATEGY: GOOD FOR THE EARTH, GOOD FOR THE BUSINESS

A day after the Singles' Day or the "11.11 Global Shopping Festival ('11.11')"<sup>1</sup> in 2020, the landmark online shopping festival in China, record-breaking online sales soon occupied major news headlines. Alibaba Group posted gross merchandise value (GMV) of US\$74 billion<sup>2</sup> during the 11-day campaign from November 1 to 11, 2020, outshining Black Friday (US\$9 billion) and Cyber Monday (US\$10.8 billion) sales in the United States.<sup>3</sup>

Originally intended as an informal celebration by bachelors in lieu of Valentine's Day in China, 11.11 had since turned into a global consumer festival orchestrated by Alibaba, which operated the largest retail commerce business in the world, in terms of GMV.

E-commerce, to some people, however, was a significant contributor of waste and carbon emission in consumption-driven economies like China. Piles of discarded waste, which emerged after consumers had unboxed parcels delivered in carton boxes, plastic courier bags and tapes, eventually went mostly to landfills and incinerators. Such scenarios, along with the increased carbon footprint from deliveries, were among the growing environmental concerns that confronted the express delivery industry.

In response to global calls for greater participation in sustainable development, Cainiao, Alibaba's logistics arm, implemented a slew of green logistics initiatives over the years. Since 2016, Cainiao had led the domestic industry in smart logistics through its technological innovations, for example, e-shipping labels, smart packaging, sorting, and routing of parcels, as well as smart warehouses and logistic robots. Additionally, Cainiao had also garnered major industry partners to embark on nation-wide green campaigns.

Green logistics was Cainiao's proposition for corporate social responsibility and the firm's promise to society to help the economic system decelerate the pace of destruction to the environment. Going green would be a win-win for both the environment and the business. What else could Cainiao do to promote going green, keeping in mind that there was an economic cost associated with all such initiatives?

**LIANG Hao**, Associate Professor of Finance at LKCSB, authored a Case Study and an accompanying Teaching Note on [Alibaba Cainiao's Smart green logistics strategy: Good for the earth, good for the business](#).

The Case Study shows how Cainiao, a logistics company implemented smart technologies in its daily operations to meet overwhelming demand while simultaneously make efforts to lower its ecological footprint through the use of smart technologies.



## UN SUSTAINABLE DEVELOPMENT GOAL 13: CLIMATE ACTION

**Simon J SCHILLEBEECKX****Gerard GEORGE**

Singapore Management University  
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4-2021

Digital sustainability and its implications for finance and climate change

Gerard GEORGE

Simon J.D. SCHILLEBEECKX

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**Simon SCHILLEBEECKX**, Assistant Professor and **Gerard GEORGE**, then Dean and now Visiting Professor of Strategic Management at LKCSB, authored a journal article at the *Macroeconomic Review* published by the Monetary Authority of Singapore (MAS) on [Digital sustainability and its implications for finance and climate change](#).

The paper argues that new digital technologies is the way forward in tackling Climate Change issues.

**Edson KIEU**, a PhD Graduate of Strategic Management at LKCSB, co-authored an article at the *Climate Journal*, published by Multidisciplinary Digital Publishing Institute (MDPI) on [Sociological perspectives on climate change and society: A review](#).

The study argues that an interdisciplinary approach and through embedding the understanding of sociology is the way forward in practice and research towards tackling Climate Change.



**Edson KIEU**  
Graduate of SMU LKCSB  
PhD in Business, Strategy & Organisation



## UN SUSTAINABLE DEVELOPMENT GOAL 15: LIFE ON LAND

**Onur BOYABATLI** and **ZHOU Yangfang Helen**, Associate Professors of Operations Management at LKCSB, co-authored a journal article at the Research Collection of LKCSB on [Integrated optimization of farmland cultivation and fertilizer application: Implications for farm management and food security](#).

The paper takes a stochastic approach in an attempt to mitigate the dilemma, trade-offs and policy interventions farmers face for their crop profit margin and yield.



**Onur BOYABATLI**



**Helen ZHUO**



## UN SUSTAINABLE DEVELOPMENT GOAL 16: PEACE, JUSTICE AND STRONG INSTITUTIONS

**David GOMULYA**, Associate Professor of Strategic Management at LKCSB, co-authored a journal article at the *Strategic Management Journal* on [Political ideology of the board and CEO dismissal following financial misconduct](#).

The study looks into how different boards may react/take action against misconduct by CEOs based on their political ideology and concludes that there are two factors to moderate this.



**David GOMULYA**  
Associate Professor of Strategic Management



**Heli WANG**

Janice Bellace Professor of Strategic Management;  
Dean, Post-Graduate Research Programmes

**Clara PORTELA**

## FROM THE EDITOR

## WHY WE NEED A THEORY OF STAKEHOLDER GOVERNANCE—AND WHY THIS IS A HARD PROBLEM

"There is nothing more powerful than an idea whose time has come."

—Victor Hugo, *Les Misérables*

Corporate governance is an important topic for both scholars and practicing managers. To date, most work on this subject has focused on how to resolve potential conflicts of interest between a firm's senior managers and its shareholders in how firms create and distribute economic value. This work, based in agency theory (Alchian & Demsetz, 1972; Jensen & Meckling, 1976), has led to the design of a variety of corporate governance mechanisms that have been widely implemented by many firms around the world (Aguilera & Jackson, 2003; Williamson, 1998). Those mechanisms include incentive programs for senior managers—such as CEO compensation in the form of stock and stock options based on firm performance—that act as management "bonding" devices (Jensen & Murphy, 1990), and a variety of disciplinary mechanisms—such as the inclusion of "outside" members of directors and legally mandated reporting requirements—that increase the ability of shareholders to "monitor" the performance of a firm (Fama & Jensen, 1983).

Work on using governance to resolve possible conflicts between senior managers and shareholders has largely developed separately from governance questions focused on the broader relationships between a firm and its multiple stakeholders (Donaldson & Preston, 1995; Freeman, 1984). This is ironic since some of the earliest work on agency theory conceptualized a firm as "a nexus for a set of contracting relationships among individuals" (Jensen & Meckling, 1976: 316). Those individuals, including "individuals" as legal entities, can be viewed as a firm's stakeholders. However, instead of examining how governance could enable a firm to work with all of its stakeholders in creating and distributing economic value, agency theorists have mostly focused on governing the relationship between managers and only a single stakeholder: shareholders.

As time has passed, it has come to be that of governance more directly the governance of relations between a firm and its multiple stakeholders and not just with its shareholders. This will necessitate broadening

the conceptualization of the value created by a firm beyond simply shareholder returns (Barney, 2018; McLean, 2020), a requirement accentuated by the recent COVID-19 public health crisis (Carney, 2020). However, on the face of it, the analysis of stakeholder governance seems likely to be a more difficult problem than the governance of manager-shareholder relations. Theories of stakeholder governance focus on how economic value is created by and distributed between two groups—shareholders and senior managers—that are relatively homogeneous with respect to their (sometimes) conflicting interests regarding how they would like to use a firm managed (Jensen & Meckling, 1976). Governance mechanisms designed to reconcile those potential conflicts are relatively straightforward to formulate, although not always easy to implement (Baysinger & Butler, 1985; Thayer, Crafts, & George, 2014).

Stakeholder governance, however, must deal with much broader relationships between a firm and its multiple stakeholder groups (Preston, 1984) and the associated creation and distribution of value across them. Conventional corporate finance suggests that, with perfect factor markets, a firm that maximizes the wealth of its shareholders as its sole residual claimant will correspondingly maximize the economic value of the firm (Jensen, 2001). However, this is not the case in a world of incomplete contracting and strategic factor markets: maximizing shareholder wealth does not necessarily address the difficulties of economic interests of shareholders, employees, suppliers, and other stakeholders, and thus does not necessarily maximize the value of the firm (Barney, 1986, 2018; Klein, Mahoney, McLean, & Phelan, 2012; Zingales, 2000).

Moreover, while stakeholder governance has primarily focused on economic returns, stakeholders can have interests that go well beyond narrow economic concerns (Campbell, Coll, & Kysyk, 2012; Carney, 2020; McLean, 2020). Employees, for example, are likely to be concerned about appropriating some of the economic profits their labor capitalizes (Miles, 1983; Morris, Alvarez, Barney, & Molloy, 2017) but may also have interests in personal health (Miles, 2011), work life quality (Lambert, 2000), internal and external pay

SMU-20-0045

## THE UNITED NATIONS' OIL-FOR-FOOD PROGRAMME IN IRAQ: GOOD INTENTIONS THAT WENT AWRY?

It was the beginning of autumn in New York City and the trees across the East River were beginning to turn bright orange. From his office on the 35th floor of the United Nations (UN) Secretariat building, Rahul Kumar, head of Internal Oversight at the UN, had a clear view of Brooklyn. However, Kumar had no time to enjoy the scenery as his thoughts were on the phone call he had just received from the Deputy Secretary General of the UN, Jasilavna Ryzhenko.

In early 2000, Kumar had been appointed Head of the Office of Internal Oversight Services (OIOS) at the UN. OIOS had been established only five years ago. Its function was to provide audit, investigation, evaluation, and inspection. It was an initiative led by the UN and other Members of the Geneva Group<sup>1</sup> that felt strongly about curbing wastage and corruption within the UN. The aim was to make the UN programmes more effective and efficient.

The Head of OIOS was graded at the Under Secretary General level, which gave OIOS considerable independence and clout. Though administratively accountable to the Secretary General, reports from the Head of OIOS were tabled directly to the General Assembly (GA). It was also stipulated that the Head would serve a five-year non-renewable contract with the UN. This was to ensure that the Head would retain his/her independence in decision-making and objectivity in performing his/her tasks.

Four months into the job, Kumar was looking into the UN Oil-for-Food Programme in Iraq. The Programme was designed to ease the hardship that the Iraqi population was enduring because of UN imposed sanctions following the first Gulf War. This Programme was meant to allow Iraq to sell oil and use the funds for the purchase of medicines and food under UN supervision.

Together with his officers, Kumar had done a risk analysis of all the major programmes managed by the UN, to assess the impact and probability of programme mismanagement. The Oil-for-Food Programme's high impact as well as high probability of programme failure deemed it to be an area of high risk. To Kumar, this meant the Programme needed greater oversight. However, Ryzhenko had just called him to say that he should not look into the Programme as it was outside his mandate. Kumar wondered what he should do.

Taking Up Work at OIOS

**WANG Heli**, Janice Bellace Professor of Strategic Management and Dean of Post-Graduate Research Programmes at LKCSB, co-authored a journal article at the *Academy of Management Review* on [Why we need a theory of stakeholder governance - and why this is a hard problem](#). The paper argues that the longstanding approach towards Corporate Governance has matured, and that a more fair approach is needed more than ever, though its acceptance, application and potential may be difficult to fully achieve.

**Clara PORTELA**, researcher at LKCSB-administered Centre for Management Practice, co-authored a Case Study with an accompanying Teaching Note on [The United Nations' Oil-For-Food Programme in Iraq: Good intentions that went awry?](#).

The Case Study documents a protagonist and the potential risks associated for the international organisation he is serving. The case study aims to teach students how and when it is appropriate to make a business case for change.

LKCSB follows ethical standards set by SMU when it comes to research. Integrity is part of SMU's Circle Values, and academic integrity is something that SMU emphasizes. Every year, members of LKCSB's faculty are reminded that SMU expects nothing but the highest standards of academic integrity. The value for academic integrity permeates throughout all research-oriented seminars and 'summer camps', where faculty members present their work and get feedback from others.

LKCSB supports the University's policies on the conflict of interests in relation to research, ensuring that research carried out by LKCSB is conducted with integrity and free from any actual or apparent institutional conflict of interest.

All faculty members undertaking studies that involve humans will have to submit their proposal and have them approved by a university-level Institutional Review Board. To do so, they also have to undergo and successfully complete the Collaborative Institutional Training Initiative (CITI) programme, which certifies faculty and students in general research and ethics for working with human subjects.

LKCSB ensures that every core faculty member is aware of regulations and best practices related to copyright, intellectual property right, and Singapore's Personal Data Protection Act. Faculty members similarly have to make declaration about their ties with external organisations every year.

*Photo: MSc In Management Students at Zenxin Organic Farm in Malaysia in 2019, which led to the case study and accompanying teaching note by Senior Lecturer of Marketing, Patricia Lui under UN SDG 9, Industry, Innovation and Infrastructure – see page 17.*



## Principle 5 | Partnership

*We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.*

### **Promoting greater environmental responsibility through Industry partnerships**

A number of industry partnerships have been formed to promote greater environmental responsibility in the past few years:

#### **i. DBS-SMU Sustainability Initiative**

In 2019, SMU and DBS – a major retail banking group in Singapore and Asia – established a partnership focused on sustainability<sup>9</sup>. DBS plans to commit more than S\$1 million to support initiative, as LKCSB launched its first sustainability major for certain degree programme students from 2019. The DBS-SMU sustainability Initiative supports and provides grants towards sustainability in the following key areas: 1) Fellowships 2) Annual Scholarships 3) Business Study Mission and 4) Talent Development.

TreeDots<sup>10</sup> and UglyGood<sup>11</sup> are two social enterprises that were founded by LKCSB alumni supported by the DBS-SMU Sustainability Initiative. Both were incubated by SMU's Institute of Innovation and Entrepreneurship (IIE), and were also 2019 recipients of the 2019 HSBC Sustainability & Innovation Grant<sup>12</sup>. TreeDots collects edible but ordinarily discarded produce items and distributes them to needy outlets, while UglyGood chemically converts certain produce wastes into valuable compounds.

#### **ii. HSBC-SMU Sustainability & Innovation Grant; HSBC-SMU Change Leaders Programme**

The HSBC-SMU Sustainability & Innovation Grant<sup>13</sup> 1) helps Small and Medium Enterprises (SMEs) who intend to transform their business model to be sustainable, and 2) supports start-ups which focus on sustainability with up to S\$30,000 in seed money. These start-ups will then be incubated in SMU IIE Business Innovations Generator (BIG) — a four-month programme to accelerate their business with mentors in relevant expertise, and networking opportunities with potential investors and clients. Successful 2020 outcomes include: a) Freedom Cup<sup>14</sup>, a reusable solution to women's menstrual products that was featured on the United Nations' Sustainable Development Goals blog<sup>15</sup>; b) TurtleTree Labs<sup>16</sup>, a bio-technology company that creates milk free from artificial hormones — have raised S\$3.2million in capital<sup>17</sup> and won the grand prize of Temasek Liveability Challenge<sup>18</sup> of S\$1 million, and c) Magorium<sup>19</sup>, a technology company that turns plastic waste into long-lasting construction materials. On top of the HSBC-SMU Sustainability & Innovation Grant, Magorium also won first place worth S\$20,000 at Ideas Inc 2020<sup>20</sup> hosted by Nanyang Technology University and the HSBC Swing for the Game Changers Competition 2021<sup>21</sup>. Last but not least, 3) Social Enterprises with the HSBC Change Leaders Programme through SMU's Lien Centre for Innovation<sup>22</sup>.

9 Read the full media release on DBS' website [here](#).

10 Read on how TreeDots are 'turning food waste into opportunity' [here](#).

11 Watch UglyGood featured on the DBS Foundation Social Enterprise Grant Programme [here](#).

12 See the full list of 2019 and 2020 HSBC-SMU Sustainability Grant recipients by IIE [here](#).

13 Read the full media release by Hong Kong Shanghai Banking Corporation (HSBC) [here](#).

14 Visit Freedom Cup's website [here](#).

15 Read the feature on Freedom Cup on the UN SDG blog [here](#).

16 Visit TurtleTree Labs' website [here](#).

17 Read on TurtleTree Labs' innovation by IIE [here](#).

18 See the winners of The Liveability Challenge 2020 [here](#).

19 View Magorium's start-up profile [here](#).

20 View full list of winners and images of the competition [here](#).

21 Read the news release on Magorium, and along with another SMU graduate victory [here](#).

22 Visit Lien Centre for Social Innovation for the HSBC-SMU Change Leaders programme [here](#).



### iii. LKCSB initiates and supports collaboration with industry on environmental responsibility

LKCSB-administered Sim Kee Boon Institute for Financial Economics (SKBI) now jointly administers Singapore Green Finance Centre<sup>23</sup> (SGFC) with Imperial College, U.K. As Singapore's first sustainable finance initiative, SGFC is a transformative opportunity to rethink traditional financial markets, instruments and policies, and develop next-generation talent for sustainable and climate change finance. The Centre's founding partners are Bank of China, BNP Paribas, Fullerton Fund Management, Goldman Sachs, HSBC, Schroders, Sumitomo Mitsui Banking Corporation (SMBC), Standard Chartered Bank, and UBS, each donating S\$750,000 to match a S\$7.3 million commitment from the Monetary Authority of Singapore (Singapore's 'central bank' equivalent) to total over S\$14 million<sup>24</sup>. The SGFC was presented at the World Expo Dubai 2020<sup>25</sup>. SKBI and SGFC hosted a session at the Global Research Alliance for Sustainable Finance & Investment Annual Conference<sup>26</sup>, moderated by Associate Professor of Finance at LKCSB, Liang Hao. Dave Fernandez<sup>27</sup>, Professor of Finance and Director of SKBI and SGFC was also on the second Panel at the CNA Leadership Summit 2021: *Green Recovery*<sup>28</sup>. SKBI is also the knowledge partner to Climate Governance Singapore<sup>29</sup>. LKCSB students have contributed to the Asia Pacific Association of Communication Directors (APACD) Sustainable Communications Programme, of which SMU is the association's partner for the second consecutive year. The programme allows students to bring forth viable business ideas/solutions to social enterprises who aim to solve environmental issues<sup>30</sup>.

### iv. LKCSB supports start-ups focused on the Environment and Social Equity

LKCSB supports new ventures focused on environmental responsibility. Examples of such successful start-ups incubated by SMU's Institute of Innovation and Entrepreneurship (IIE) include Alterpacks<sup>31</sup>, a company that manufactures biodegradable take-away food packaging from fungal/plant materials (who also won a mentorship with Closed Loop Partners at the Temasek Liveability Challenge 2020), Fluidityx Asia<sup>32</sup>, a water technology company that aims to reduce wastage and is researching the use of Internet of Things (IoT) in doing so. In addition, Magorium, TreeDot, Turtle Tree Labs and UglyGood mentioned earlier are similar examples.

23 Visit the Singapore Green Finance Centre (SGFC) Website [here](#).

24 Read the media release on the SGFC by the Monetary Authority of Singapore [here](#).

25 Singapore Green Finance Centre, 2020. [Singapore Business Series: Reimagining Business in the Green Economy](#).

26 SMU Centre for Management Practice, 2021. [Measuring ESG](#).

27 See Dave Fernandez's Faculty Profile [here](#).

28 Channel News Asia, 2021. [LIVE] [CNA Leadership Summit 2021: Green Recovery](#).

29 [Climate Governance Singapore \(CGS\) Launch and Panel Discussion: Understanding the Climate Challenge](#).

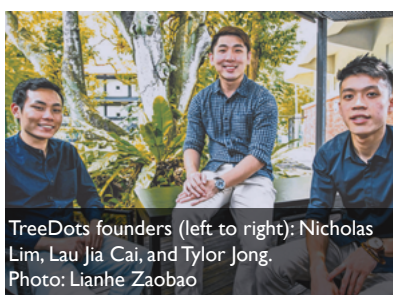
30 Read the media release on 'SMU students contribute to next generation changemakers through APACD's Sustainable Communications Programme for the 2nd year running' [here](#).

31 Visit Alterpacks' website [here](#).

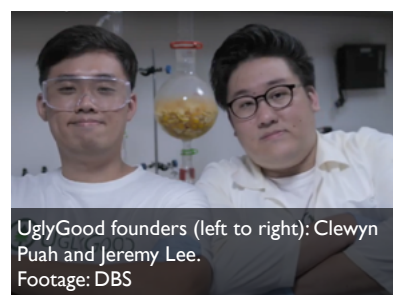
32 Visit Fluidityx Asia's website [here](#).



SMU Vice Provost (Research) Professor Steven Miller and DBS Singapore Country Head Shee Tse Koon.  
Photo: DBS.



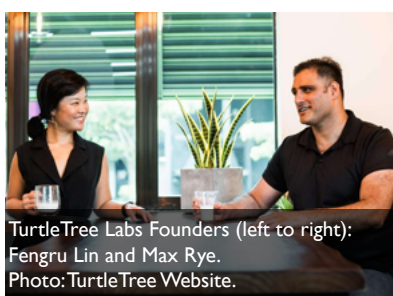
TreeDots founders (left to right): Nicholas Lim, Lau Jia Cai, and Tylor Jong.  
Photo: Lianhe Zaobao



UglyGood founders (left to right): Clewyn Puah and Jeremy Lee.  
Footage: DBS



Freedom Cup founders (left to right): Rebecca, Vanessa, and Joanne Paranjothy.  
Photo: UN SDG Blog.



TurtleTree Labs Founders (left to right): Fengru Lin and Max Rye.  
Photo: TurtleTree Website.



Magorium winning first place: (Left to Right) Oh Chu Xian, NTUitive Chairman Mr Inderjit Singh, Mr Adriel Ng  
Photo: NTUitive Website.

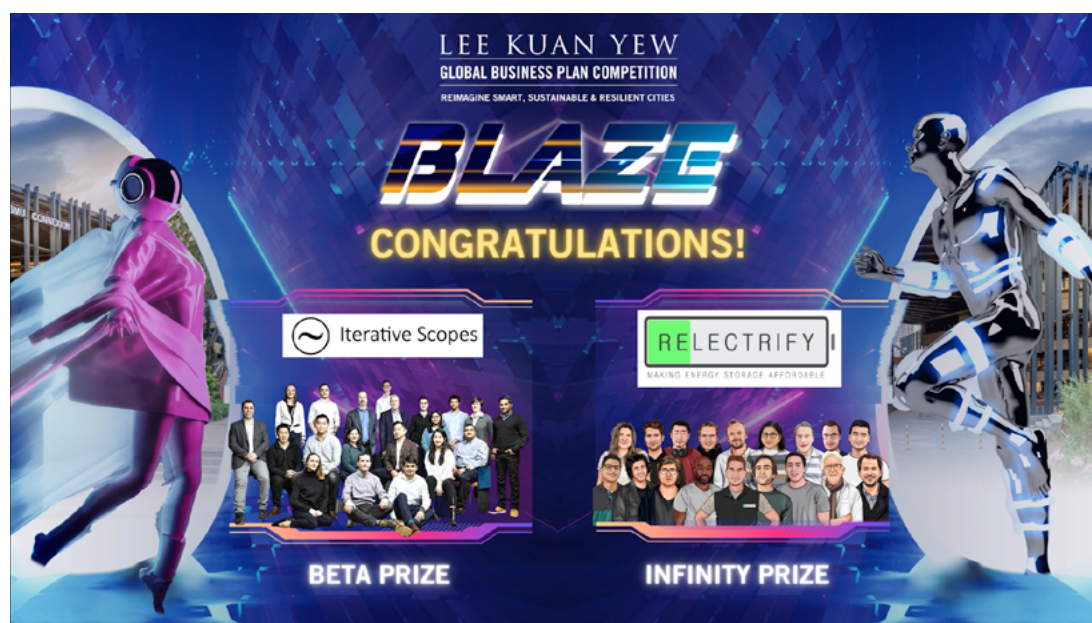
#### v. Lee Kuan Yew Global Business Plan Competition themed around Sustainability

LKCSB continues to support the bi-annual Lee Kuan Yew Global Business Plan Competition (LKYGBPC) through its Institute of Innovation and Entrepreneurship (IIE), which encourages the development and diffusion of environmentally friendly technologies. The latest 10<sup>th</sup> competition 2021 was themed 'Reimagine Smart, Sustainable and Resilient Cities'<sup>33</sup> that centres around sustainable urban innovations such as blockchain, virtual & augmented reality, data analytics & artificial intelligence, internet of things (IoT), 5G, robotics, etc. The Competition directly suggested a number of focus areas that are clearly related to environmental challenges.

In 2021 alone, the LKYGBPC, with its competitive cash prizes, attracted over 2,500 global participants with more than 850 submissions from over 650 Universities across 60 countries. A total of 13 categories of prizes were available to be won, with a number of them directly related to environmental sustainability:

- DBS Foundation Social Impact Prize
- Kajima Smart Construction Deployment Prize
- Sino-Singapore Nanjing Eco Hi-tech Island Investment Prize
- Public Utilities (PUB) Water Technology Innovation Prize

33 See the 10<sup>th</sup> LKYGBPC theme [here](#).



The landing page of the LKYGBPC as of June 2021.

Image: SMU LKYGBPC Website



Ang Wan Loong (left), Darren Cheng (centre) and Adriel Ng (right) – Co-founders of Fluidlytix Asia.  
Photo: SMU IIE



Alterpacks, co-founded Karen Cheah and Herbin Chia aims to create biodegradable take-away boxes from fungal and/or plant materials.  
Photo: Karen Cheah and Herbin Chia

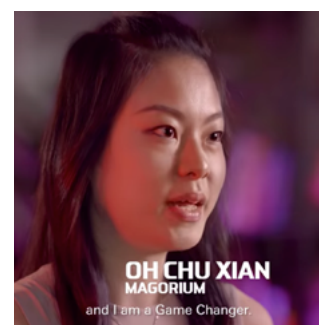


Photo: Magorium's Oh Chu Xian featured in HSBC's Game Changer Competition 2021.  
Footage: HSBC.



## Principle 6 | Dialogue

*We will facilitate and support dialog and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.*

LKCSB started a **Visionary Series**, inviting global industry leaders of visionary organisations to come share their thoughts. Many of these leaders spoke about environmental sustainability. For instance, Mr. Feike Sijbesma, CEO of Royal Dutch State Mines (DSM) on 10 October 2019 spoke on the benefits of sustainable practices as a long-term driver for financial performance for businesses.

One notable outcome of our Visionary Seminar Series is a partnership with DSM that has since continued to boost our courses on sustainability and our sustainability major. DSM will ride on the success of SMU-X, an award-winning experiential learning pedagogy where LKCSB students tackle real-world challenges facing businesses and sponsor SMU-X Overseas Courses that will bring students to DSM facilities for a two-week immersion at one of DSM's operations in Asia. DSM will also sponsor a Nutrition Improvement Challenge for three years from AY 2020-2021 for students to tackle business challenges under the UN SDGs.



*Mr Feike Sijbesma, CEO of DSM sharing his thoughts on sustainability in October 2019. Photo: SMU.*

LKCSB initiates and supports collaborative efforts with industry to promote environmental responsibility.

In 2019, Lee Kong Chian Professor of Operations, Shantanu Bhattacharya<sup>34</sup>, whose research interest include resilient, sustainable supply chains, (e.g. closed-loop supply chains) and the circular economy, shared his expertise on Channel News Asia – a television and multimedia channel broadcast throughout Asia and Australia – along with industry practitioners on *Going Beyond 'Green': How can we be truly sustainable?*<sup>35</sup>

They agreed that to be sustainable is to align with the United Nations' Sustainable Development Goals (SDGs) and that to be truly so, companies must look into how to best manage their supply chains that contributes positively to the 'triple bottom line' (People, Profit, Planet). Professor Shantanu also co-hosted the SMU LKCSB "Ideas Shaping Tomorrow" series on Sustainability & the Triple-Bottom Line in the F&B

<sup>34</sup> See Shantanu Bhattacharya's faculty profile [here](#).

<sup>35</sup> Watch *"Going Beyond 'Green': How can we be truly sustainable?"* by CNA Perspectives (2019)

Sector<sup>36</sup> with David Chen — LKCSB alumnus, Co-Founder, and COO of Golden Sunland<sup>37</sup>, a company that supplies rice through responsible farming which is supported by Government agencies such as Enterprise Singapore and Singapore's Health Promotion Board.

As mentioned in *Principle 5 | Partnerships*, LKCSB is proud to have Professor of Finance, David Fernandez, Director of SKBI and SGFC to speak on a panel on Sustainability, Green Finance, and how these can be put in practice. Says Prof. Fernandez in the Panel for the **CNA Leadership Summit 2021**, “Because of the urgency of this problem...We can't wait for academics to write those carefully researched, rigorous papers, get them published in the academic journals – that's going to take too long. With all due respect...We are going to pivot to the private sector capital...because that is where we can move quickly and make the biggest difference”.

36 See ‘Sustainability & the Triple-Bottom Line in the F&B Sector’ event page [here](#).

37 Visit Golden Sunland's website [here](#).



Professor of Operations, Shantanu Bhattacharya sharing his thoughts on Sustainable Supply Chains on Channel News Asia (CNA) in 2019. Footage: CNA.



A webinar poster by the SMU Office of Alumni Relations featuring LKCSB Professor Shantanu Bhattacharya and David Chen, Co-Founder and COO of Golden Sunland on Sustainable supply chains.

Photo: SMU Office of Alumni Relations.



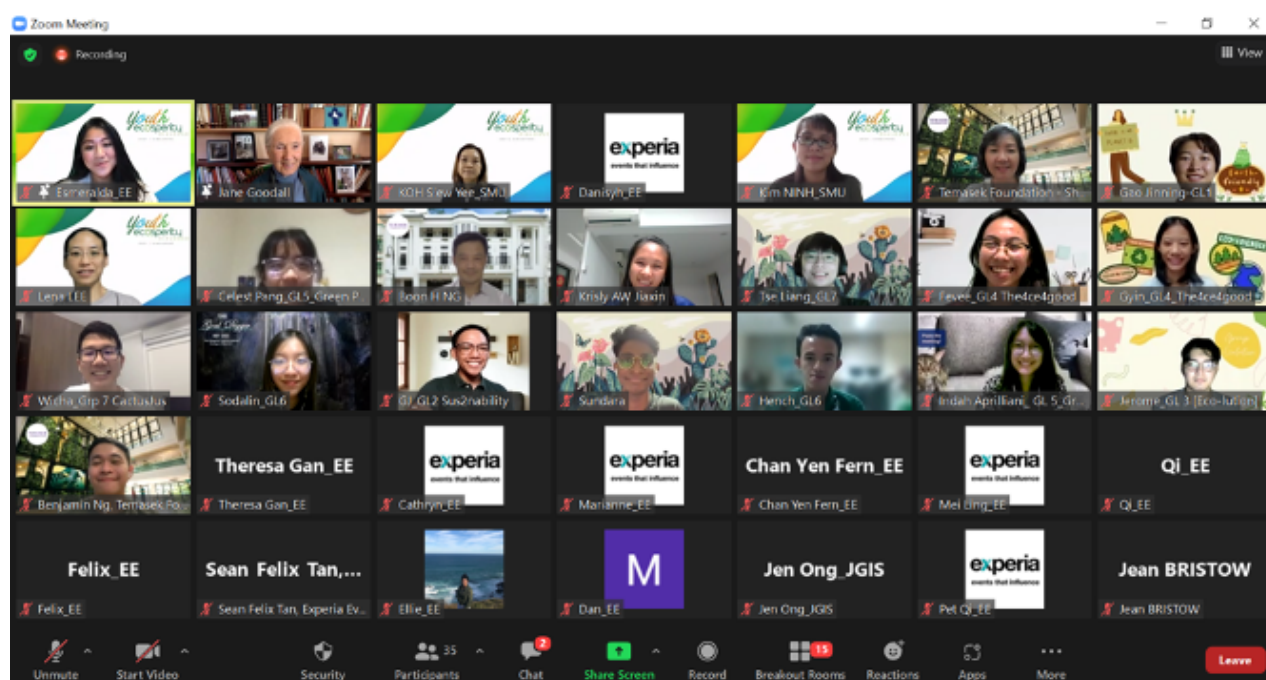
Professor of Finance, Dave Fernandez, (seated first from left), Director of SKBI and SGFC at LKCSB in a Panel on Financial Sustainability on CNA on April 2021. Footage: CNA.



**The Youth Ecosperity Dialogue (YED)**, organised by LKCSB and Ecosperity – the sustainability arm of Temasek Foundation, which is a part of Singapore's Sovereign Wealth Fund – is a platform that connects youths interested in bringing about environmental change of tomorrow with like-minded global thought leaders and international corporations who will share best practices on sustainable development. The event was conducted virtually and youths took part in various discussions and activities focused on sustainability.



*The Youth Ecosperity 2021 Poster that is organised by LKCSB.*



*Jane Goodall (second from left on first row), UN Messenger of Peace, joins in the conversation with LKCSB students at YED 2021.*

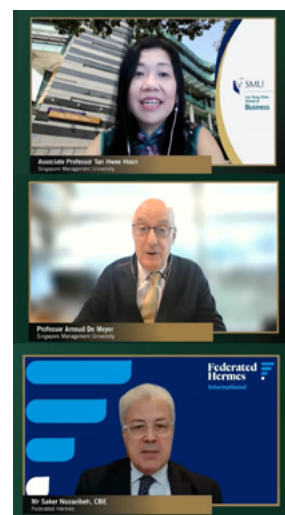
**The SMU Business Families Institute (BFI)**, arranged with Chief Executive Officer (CEO) of Federated Hermes, Mr Saker Nusseibeh to speak on *The Role Business Families Can Play* with how family businesses can achieve Environmental, Social, and Corporate Governance (ESG) Goals with Associate and Assistant Professors of Organisational Behaviour and Human Resources (OBHR), Tan Hwee Hoon and Kenneth Goh (BFI Director). The collaboration between BFI and Federated Hermes also came in the form of a Case Study and accompanying Teaching Note by Assistant Prof. Goh: [Federated Hermes – Improving ESG through active engagement with portfolio companies](#) as featured in page 21.



In her opening address, Associate Prof. Tan noted “We believe that when times are tough, family businesses’ commitment to values, long-term thinking and sensible leverage are even more crucial for society. This critical value to society not only applies to investments, but to every aspect of business... We need to grow a community that believes in building a sustainable world, hence our involvement with all of you today.”<sup>38</sup>

The dialogues featured in this section shows SMU LKCSB’s firm belief and commitment to societal impact and driving the conversation with industry partners towards a more sustainable future in various aspects.

Right Image: (From Top to bottom) Associate Professor of OBHR, Tan Hwee Hoon, Professor Emeritus Arnoud De Meyer, and Mr Saker Nueeibeh in the BFI Virtual Conference on Building a Sustainable Business World 2021.



## Media Appearance of LKCSB Faculty

LKCSB faculty members regularly contribute to public debates in the form of invited appearances at public broadcast programmes and quotations from reporters writing about noteworthy events in Singapore and across the world. These appearances consistently totalled around 200 per year, typically involving 30 to 40 different faculty members each year.

## The Future Ahead

LKCSB will continue its efforts towards UNPRME SIP. As Institutes of Higher Learning are gearing towards a more mindful and sustainable thought of capitalism, LKCSB is committed to stay relevant by: staying true to our mission to nurture keen minds who will lead society, keeping our courses offered up to date, and embed best practices in theory and practice – through the lenses of Ethics, Social Responsibility, Sustainability and Governance in all if not most of our courses. Over the past decade, LKCSB has ramped up its efforts to be in touch with the world of practice, by pioneering our award-winning SMU-X programme where students can experience real business challenges beyond the classroom and present their recommendations to the dilemmas entrepreneurs and corporations around the region face. Our connection with the world of practice involves having dialogues with thought leaders from the industry, being part of a panel with public intellectuals in the media, and making our voice and research heard as mentioned in our report. With the new LKCSB-administered Sim Kee Boon Institute for Financial Economics (SKBI) that jointly administers Singapore Green Finance Centre (SGFC) with Imperial College, U.K – Singapore’s first sustainable finance initiative, we believe that we are poised to create actionable impact in Singapore and the region.



SMU's newly built SMU Connexion that connects the School of Law (left), Connexion building where our Institute of Innovation and Entrepreneurship (IIE) now resides (centre) and the School of Accountancy (right).

38 For the full re-cap, see [Building A Sustainable World – The Role Business Families Can Play](#).



SINGAPORE MANAGEMENT  
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