Unlocking the Possibilities of a Multi-Stakeholder Approach

APRU Case Study: The Transformation of Work in the 21st Century in Asia Pacific Project
1. Preface

As a network of leading universities linking the Americas, Asia, and Australasia, the Association of Pacific Rim Universities (APRU) is the Voice of Knowledge and Innovation for the Asia-Pacific region.

A neutral platform for collaboration, one of APRU’s strengths is its ability to bring together thought leaders, researchers, and policymakers from across the region to exchange ideas and collaborate on effective solutions to the challenges of the 21st century. This access to multi-disciplinary expertise across stakeholders and borders is a key advantage that enables successful outcomes to be delivered.

This Document

This document showcases the strengths and possibilities of a multi-stakeholder project approach using the Transformation of Work in Asia-Pacific in the 21st Century as a case study. The case study is not only an example of timely academic research and knowledge transfer, but of the power and impact of bringing together academics, experts, industry, and government from across regions, industries, and disciplines.

Through this case study, APRU hopes to further create opportunities for public-private-academia collaboration to implement, support, and inform science-based policy developments for the benefit of societies across the Asia-Pacific.

“New technologies and demographic shifts are changing the way we work, and through the Google.org Work Initiative, we’re backing groups around the world to understand and anticipate those changes. We’re pleased to support APRU in researching how work is changing across the diverse and growing Asia-Pacific region.”

Jacquelline Fuller, President, Google.org.
2. The Transformation of Work in Asia-Pacific in the 21st Century Project

The pace of digital transformation will have a profound impact on the Asia-Pacific region, on economies, businesses, and jobs. With the disruptive effects inevitable, the Transformation of Work in Asia-Pacific in the 21st Century project aims to stimulate informed discussions in society.

The Project Consists of:

- A report composed by ten academics representing APRU member universities and partnering institutions across the Asia-Pacific region.

- A series of dissemination events which accompanied the report publication. These events further boosted the project as an avenue and platform to expand knowledge, exchange ideas, and contribute solutions to the transformational effects of digitalization on societies.

Academic studies on the challenges of digital transformation typically focus on developed countries in the Western world. The project plays a key role in filling the research gap, particularly as the recommendations in the report are unique to the context of the Asia-Pacific, offering guidance to policymakers and relevant stakeholders.

APRU’s Role in the Project

The challenges facing societies today are no longer confined to national contexts. Creating collaborative research networks to link knowledge and insights from across nations and disciplines is more essential than ever. APRU is well-positioned to fill this role, as it brings together more than 50 major research universities in Asia and the Pacific Rim.

Leveraging the Network Effect

With multiple stakeholders involved, the impact of the Transformation of Work in the 21st Century project was greatly increased as a result of the diverse contributions, knowledge, and resources available. The multi-stakeholder approach facilitated by APRU enabled the project to leverage the influence and network of involved partners from three core groups – government and policy, industry, and academia.
3. The Project at a Glance

The Transformation of Work in Asia-Pacific in the 21st Century paints a picture of how digitization will transform the future of work in the Asia-Pacific and highlights the associated economic and social risks. It informs discussions among researchers, policymakers, and civil society on the direction and solutions to solving key challenges related to digital transformation. It also gives policy recommendations to minimize the negative impacts of digitization and capitalize on the opportunities.

**WHO?**
A joint project by APRU and Google.

**WHO?**
Authored by 10 academics from APRU member universities and partnering institutions.

**TIMELINE**
- **LATE 2017**: Project initiated
- **MAR 2019**: Report launch
- **FEB 2018**: First meeting
- **MAR-DEC 2019**: Dissemination series

**WHAT**
- **1** report
- **7** chapters
- **10** academics across 10 disciplines
- **5** dissemination events

**WHY?**
By 2030
- **85%** of today’s jobs will have disappeared.
- **65%** of today’s elementary school students will work in jobs that do not currently exist.

**Filling the Research Gap**
Asia-Pacific Region
- **60%** of the world’s population
- **50%** of global economic growth
WHERE?

Hosted by APRU member, The Hong Kong University of Science and Technology (HKUST).

Economies Represented

- Australia
- Hong Kong SAR
- Japan
- Philippines
- Singapore
- South Korea

5 dissemination events across the region

THE STRENGTHS OF A MULTI-STAKEHOLDER APPROACH

The collaborative multi-stakeholder approach maximized the project’s impact in a number of ways:

- It increased the flow of knowledge between parties – academic experts learn and benefit from engaging with colleagues across nations, facilities, and disciplines.
- Multi-stakeholder projects increase understanding and knowledge across various stakeholder groups – government and policymakers, industry, and academia – and help guide future research.
- Multi-stakeholder approaches, particularly with the contribution of industry, help to focus on key research impacts and output. This ensures research is closely tied to the needs of society.

Project Leadership

The project identified an experienced Project Lead in Professor Kar Yan Tam, Dean of The Hong Kong University of Science and Technology Business School. This leadership role was essential to manage and coordinate multi-disciplinary experts and deliver the project’s key outputs for success.

“Unlocking the Possibilities of a Multi-Stakeholder Approach

In our ongoing effort to promote thought leadership, the Project opened up a new round of dialogue to facilitate policymakers and researchers to exchange ideas and collaborate on solutions to address challenges to our future workforce.

Kar Yan Tam,
Dean of Business School, The Hong Kong University Science and Technology (HKUST)."
Unlocking the Possibilities of a Multi-Stakeholder Approach

The report is composed of seven chapters tackling cultural impact, the social benefits and challenges of digitization in diverse regional contexts, and policy recommendations.

It considers the risks and uncertainties proposed by digitization in the Asia-Pacific and explores the opportunities automation and AI could provide. The report gives recommendations to empower policymakers to address uncertainty deriving from workforce challenges.

Report Overview

**Chapter 1: Coming of Age of Digital Automation: Backgrounds and Prospects**

*Myung Jae Moon*, Yonsei University Professor of Public Administration  
*Jungwoo Lee*, Yonsei University Professor of Systems and Technologies

The chapter explains the concept of digital automation through a careful examination of its characteristics and trends.

**Chapter 2: Technological Change and its Consequences: A Brief History for the Future**

*Stephen Frenkel*, UNSW Sydney Professor of Organization and Employment Relations  
*Sunghoon Kim*, UNSW Sydney Business School Associate Professor of Organization and Employment Relations

The chapter provides a historical survey of disruptive technological change and the potential impacts and consequences of emerging technologies.

**Chapter 3: The Social Benefits of Automation and Facilitating Policies for Realizing Them – The Case of Japan in Aging Society**

*Hideaki Shiroyama*, The University of Tokyo Professor, Graduate School of Public Policy

Using Japan as an example, the chapter uses a series of scenarios to examine the associated social benefits and risks of automation.

**Chapter 4: Cultural Impact of Automation - Quality of Work and Life Redefined**

*Namgyoo K. Park*, Seoul National University Professor, Graduate School of Business

The chapter examines the relationship between automation and organizational structure by focusing on the role of a manager in the future.

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1 - The full report including policy implications and recommendations can be read via: “Transformation of Work in Asia-Pacific in the 21st Century.”  
Chapter 5: Automation and the Future of Work in Developing Countries

Jikyeong Kang, Asian Institute of Management, President and Dean
Jamil Paolo S. Francisco, Asian Institute of Management Associate Professor

The chapter focuses on the Philippines to provide a detailed perspective on automation from the perspective of a developing country.

Chapter 6: Preparing the Future Workforce - Reskilling, Retraining, and Redeploying, and the Transformation of the Education System

Faizal Bin Yahya, National Singapore University Senior Research Fellow, Lee Kuan Yew School of Public Policy

Faizal Bin Yahya, National Singapore University Senior Research Fellow, Lee Kuan Yew School of Public Policy

Chapter 7: Digital Transformation in the 21st Century: Implications and Policy

Kar Yan Tam, Dean of Business School, The Hong Kong University Science and Technology (HKUST)

This final chapter proposes a series of policy recommendations for coping with the social and economic challenges arising from the adoption of digital automation in the Asia Pacific.

“This project has helped stimulate public discourse on the topic, putting positive pressure on government, academe, and business to take the Fourth Industrial Revolution seriously.”

Jikyeong Kang, President and Dean of the Asian Institute of Management (AIM).
5. Dissemination Events: Amplifying the Report Impact

Impact is not simply achieved by publishing a timely report with insight from key experts. It was essential to ensure adequate and effective dissemination of the report content amongst relevant parties, including policymakers and civil society.

A strategic dissemination plan was built in the Transformation of Work in Asia-Pacific in the 21st Century project. This ensured visibility of the results and recommendations, secured promotion of the project across varied channels by engaged partners, and heightened the profile of APRU, member universities, and contributing academics and experts.

Event Discussion Highlights

**Hong Kong**

**Media Event**
March 11, 2019 | HKUST

The Hong Kong dissemination event marked the official media launch of the Transformation of Work in the 21st Century report. Participants discussed the need to cultivate an innovative workforce through STEM education and invest in technology and entrepreneurship infrastructure to provide agility in the market.

Post-event, HKUST Business School published a Future of Work themed issue of its magazine, *Biz@HKUST*. The edition featured interviews, commentary, and opinion from business, government, and industry leaders. The magazine was an effective way of disseminating the report and its findings to influential policymakers in Hong Kong.

Each of the report’s chapters presents a single perspective and complements the other chapters; together, they offer a richly holistic view even as they draw attention to specific issues and their resolutions.

Kar Yan Tam,
Dean of Business School, The Hong Kong University Science and Technology (HKUST).
Despite the positive contributions of automation, it will likely replace traditional jobs. Therefore Governments worldwide should closely monitor the impact of automation and prepare appropriate policy measures.

M. Jae Moon, Professor Public Administration, Yonsei University

The main challenges facing the workforce include obsolete education material, expiration of skills in the light of rapid technological changes, and heavy rates of youth unemployment in Indonesia. Education will have to be reimagined.

Jikeyong Kang, Asian Institute of Management.
Singapore

Institute of Policy Studies, National University of Singapore
July 11, 2019 | Singapore

The event focused on the advances Singapore has made in introducing digitalization in its economy and suggestions on future related initiatives, particularly in response to Singapore's aging demographic and tightening workforce situation.

Event discussions focused on the potential role a new Ministry of Ageing could play to help resolve the displacement of mature professionals due to automation. Industry representatives from PwC and the National Trades Union Congress initiated discussions on the motivations of millennial workers, climate change and new green jobs, and how workers in the growing gig economy can adapt to new technologies and gain skills to meet future demand.

"The sheer speed... of changes is taking every country by storm. The challenge is, how fast can we keep up?"

Patrick Tay,
Assistant Secretary-General of the National Trades Union Congress.

Indonesia

Organized by APRU with the Centre for Strategic and International Studies (CSIS). Co-organized with the Employment Policy Forum (FKK), Jakarta

The event double-functioned as FKK's year-end summit themed “2019 Indonesia Employment Policy Forum-Accelerating Indonesia’s Human Capital Transformation for Future of Work”. It examined different forces at play shaping the transformation of work, the challenges facing the Indonesian workforce, and the foundation for multiple stakeholders to increase effective upskilling and reskilling efforts in Indonesia.

There is a need to move from academic learning for the sake of credentials towards skills needed in the workplace.

Faizal Bin Yahya,
Senior Research Fellow, National University of Singapore.

Participants emphasized that it was important for the Indonesian Government to expand efforts to keep the education system updated and relevant to industry demands. Continuous training of the existing workforce to keep up with technological trends and remedy lack of talent in certain fields is also essential.
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6. Policy Influence and Impact

The Transformation of Work in the 21st Century report and dissemination events helped to increase awareness and frame the debate. By identifying key stakeholders with interest in the subject from across policy, academia, and industry, the project provided a platform for participants to better understand the challenges and opportunities, and the types of contributions they can make.

Since the launch of the report and the dissemination events, advocacy has achieved influence in a number of diverse ways at the local, national, and international level.

Championing Awareness of the Topic

Supporting information spread and encouraging knowledge transfer through new teaching and learning.

- Parts of the report are being used as supplemental reading and seminar content in the Philippines and South Korea, respectively.

A Growing Base of Support and Interest

The report led to outreach from government and industry, furthering their involvement with academic experts in the topic and placing a series of new activities in the pipeline.

- Industry players further engaged in discussions with AIM experts to ensure they can adequately prepare and respond to future of work challenges, including:
  - Philippines Department of Labor and Employment (DOLE)
  - Philippine Department of Trade and Industry
  - Information Technology and Business Process Association of the Philippines (IBPAP)
  - HSBC

Strengthening Alliances

The project led to an increased level of cooperation and collaboration capacity through alliances with important partners and organizations.

- Asian Development Bank (ADB) partnered with APRU to explore how new technologies can prepare senior workers for the future of work.
- The above collaboration led to the CEPAR-APRU working paper, Demographic and Technological Change: Two Megatrends Shaping the Labor Market in Asia. The paper informed to a great extent the ADB report, Tapping Technology to Maximize the Longevity Dividend in Asia, published May 2018.
- APRU initiated a new collaboration with Google and United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP) on AI For Social Good, launched December 2018.
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Influencing International Discussion

The report has helped to promote the issue on the political agenda, frame debates, increase awareness, and transform the perceptions of stakeholders from across the region, leading to formal and informal meetings and discussions.

- Insights from the report informed key details in chapter two of the State of the Region Report 2018–2019. The report was referenced at APEC Ministerial meetings and working groups at the Pacific Economic Cooperation Council (PECC) meeting in Port Moresby, Papua New Guinea, November 2018.
- Project findings and policy recommendations were presented at the Second Senior Officials’ Meeting (SOM2) held in May 2019 in Viña del Mar, Chile. This initiated discussions on how project findings can feed into future focus areas of APEC working groups.
- Delegates representing 15 APEC economies were briefed on the report at the APEC Closing the Digital Skills Gap Forum, held in Singapore in July 2019.
- Report findings were disseminated to delegates working on Project DARE, an APEC initiative seeking to facilitate the development of a data science and analytics (DSA)-enabled workforce.
- Canada’s Deputy Minister of Employment and Social Development, Graham Flack, a delegation from Brunei, and Vietnamese officials from Ho Chi Minh City and Ha Long Bay were briefed on chapter 6 during a visit to Singapore in September 2019.

Increasing Visibility of the issue

Drawing attention to the issue and increasing awareness through media engagement.

- In July 2019, Singapore media outlet, The Straits Times, covered the launch of the report and Singapore event. Coverage focused on the report findings, and discussions to create a division working closely with the combined Manpower and Education Ministries to meet the human capital needs of the information-communication sector.
- Singapore’s Channel Ness Asia (CNA) published an opinion piece by Helen Ko, Senior Lecturer at Singapore University of Social Sciences (SUSS), regarding recommendations from chapter 6 of the report.

“Governments should abolish relevant regulations to contribute to technology development. They must also prepare for increasing inequality and workforce casualization.”

Sunghoon Kim, UNSW, Sydney.
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7. Reach, Impact, and Collaboration

Project Partners

10 Academics
10 Disciplines
7 Chapters
7 Higher Education Institutions
7 Economies

Google Offices in Hong Kong, Indonesia, and South Korea provided project support.

Yonsei University, South Korea
Seoul National University, South Korea
UNSW, Australia
The University of Tokyo, Japan
AIM, Philippines
National University of Singapore, Singapore
The Hong Kong University of Science and Technology, Hong Kong SAR

Academic Disciplines

Public Administration
Systems and Technologies
Organization and Employment Relations
Human Resource Management
Science, Policy, Public Administrations
Business Administration
Economics
Management
Human Capital
Information Systems
Report Reach

- 2,812 Electronic downloads
- 307 Hardcopies distributed to stakeholders in 21 economies
- 188 Academics
- 18 Senior university leaders
- 50 Government representatives and policymakers
- 51 NGOs, media, and industry

Dissemination Events and Advocacy

- 5 Events
- 5 Economies
- 25 Event speakers
- 341 Total event participants
- 4,091 Event page impressions
- 3,989 Event news impressions
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8. Next Steps

APRU will continue to disseminate the report’s findings, move the discourse forward, and support policymakers and stakeholders in the region for further discussion and policy development.

Sharing Insights at Official Meetings

At the 2020 APEC Senior Official Meetings (SOM1) held in Putrajaya, Malaysia, project outputs informed discussions with government officials. This included how the project’s insights and recommendations can support and inform APEC host, Malaysia’s, projects addressing the future of work in the APEC region.

Support and Engagement

The project will support academics to build on the findings and insights developed in the Transformation of Work in Asia-Pacific in the 21st Century and apply them to new project areas. One example is HKUST’s Fintech Manpower Study, which looks into the core competencies required in this new industry, with first stage results released mid-2020.

New Collaborations and Partnerships

APRU will promote its hallmark multi-stakeholder approach in order to work on AI challenges with industry and multi-disciplinary teams of academic experts. Examples include:

Public-Private Dialogue on Science, Technology, and Innovation (PPSTI) Project

Between late-2019 and early-2020, PPSTI brought together stakeholders in science, technology, and innovation to strengthen the ecosystem in promoting R&D and commercialization in related sectors. APRU’s role of bringing together the right partners for future of work-focused projects was recognized by PPSTI. “For the academic partners in particular, the ability to access multi-disciplinary expertise (beyond just academic expertise) is a key advantage that enables successful outcomes to be delivered,” PPSTI noted in a case study report.

AI for Social Good

APRU is currently working with UN ESCAP and Google on developing research on AI for Social Good, with a focus on policy frameworks and governance. This multi-stakeholder research project enables scholars and experts to collaborate with policymakers and industry to generate evidence and cross-border connections to promote an enabling policy environment. With UN ESCAP as a partner, the project benefits from a close connection to policymakers to drive and guide policy development for disruptive technology for social good. The project will build on research within APRU member institutions to propose the implementation of a framework certification system for trustworthy AI.
9. Contributors and Acknowledgements

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