

## Report

Policy Research Center  
Research Project Accomplishment Report

**Date:** 2019/2/1

**Project Leader:** Professor Patarapong Intarakumnerd

**Research Project Title:** Analysis of Intermediary Organizations in East Asia's Innovation Systems

**Duration (yyyy/mm/dd):** 2018/4/1 ~ 2020/3/31 2-year

<b>Co-Investigator:</b>	Title	Name	Affiliation	(Remarks)
Co-Investigator 1	Researcher	Yaling Huang	Taiwan External Trade Development Council (TAITRA), Taiwan	

### **Project aims and goals:**

The research project aims to provide better understanding on roles and capabilities of innovation intermediaries (e.g. public research institutes, industrial associations, professional associations, community-based organizations) that facilitate collaborations among key actors in particular industrial sectors ranging from high-tech, mid-tech, and low-tech manufacturing and services. Intermediaries are particularly important in developing countries where knowledge creating capabilities and concerning actors are weak. However, the studies on intermediaries in developing countries or those comparing with successful intermediaries in more advanced countries are limited. Having better understanding of roles and enabling capabilities will lead to better government policy measures in promoting innovations in various industries. The study is very much in line with an important target of the SDG Goal 9 in 'supporting domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities'.

### **Accomplishment(s) of Project (400 words):**

In the first year of the project, we have already interviewed and gathering data on the roles and capabilities of the following well-known public and private/non-governmental intermediaries at national level and in selected industrial sectors in Thailand and Taiwan:

- National-level intermediaries: Taiwan's Industrial Technology Research Institute (ITRI), and Thailand's National Science and Technology Development Agency (NSTDA)
  - High-tech manufacturing sectors: three laboratories of ITRI, Taiwan Electrical and Electronic Manufacturers' Association (TEEMA), Thailand's National Electronics and Computer Centre (NECTEC), Thailand's Electrical; and Electronics Institute, Electrical, Electronic, Telecommunication and Allied Industry Club under Federal of Thai Industries
  - Mid-tech manufacturing sectors: Mechanical laboratory of ITRI, Taiwan Transportation Vehicle Manufacturers Association (TTVMA), Thailand Automotive Institute (TAI)
  - Resource-based manufacturing sectors: Thailand Food Institute (TFI), Food Science & Technology Association of Thailand (FoSTAT), Taiwan Quality Food Association (TQF)
  - Services: Taiwan's Institute for Information Industry, Taipei Computer Association (TCA), Information Service Industry Association of R. O. C. (CISA), Association of Thai ICT Industry (ATCI)
- Data from the interviews have been written into case studies. We conducted cross-case analysis and drew lessons learnt for management of intermediaries and policy implication. Academic articles and conference papers were written based on the results (see List of Accomplishment).

(Please include all items within one page.)

# List of Accomplishment

## List of Accomplishment

(including forthcoming )

(If the description exceeds five in each item, please add a line as necessary.)

### Article

Academic papers (including those published in general journals)

\*For collaboratively authored papers, please underline your name.

\*Please report "Peer-reviewed academic conference papers" as well.

Author	Title	Publisher	The number of referred article		Date of Publications	Pages (from)	Pages (to)	Referee Report (year=1)	International coauthorship (year=1)	DOI	Open Access (year=1)
			5 in total	5							
1	Intarakumnerd, P.	Thailand's Middle-Income Trap: Firms' Technological Upgrading and Innovation and Government Policies	Seoul Journal of Economics	vol. 32. No.1 (forthcoming)	2019	-	1	0	N/A		1
2	Lee, K., Wong, C., <u>Intarakumnerd, P.</u> and Limapornvanich, C.	'Is the Fourth Industrial Revolution a window of opportunity for upgrading or reinforcing the middle-income trap?	Journal of Economic Policy Reform	forthcoming	2019	-	1	1	10.1080/17487870.2019.1565411		0
3	<u>Intarakumnerd, P.</u> , and Liu, M.	Industrial Technology Upgrading and Innovation Policies: A Comparison of Taiwan and Thailand	K. Tsunekawa and Y. Todo (eds.), Emerging States at Crossroads, Emerging-Economy State and International Policy Studies, Springer: Tokyo	chapter 6	Jan-19	119	- 143	1	1	10.1007/978-981-13-2859-6	
4	<u>Intarakumnerd, P.</u> and Goto, A.	Role of Public Research Institutes in National Innovation Systems in Industrialized Countries: The Cases of Fraunhofer, NIST, CSIRO, AIST, and ITRI	Research Policy	No. 47	Sep-18	1309	- 1320	1	0	10.1016/j.respol.2018.04.011	
5	Huang, Y. and <u>Intarakumnerd, P.</u>	Alternative Technological Learning Paths of Taiwanese Firms	Asialics Conference 2018, Hangzhou, China, August 25-26.		2018/8/25	-	1	1			1

### Book

\*For collaboratively edited or authored books, please underline your name.

\*If you are an author of a chapter in a book, please report in "Article" category.

Author	Title	Publisher	Date of Publications	Total pages
1				
2				
3				
4				
5				

### Verbal report / Conference presentation

\*Here please report "Non-peer-reviewed academic conference papers".

\*When you or co-invited had a lecture/presentation as invitees, please specify "(invited lecture)" after Event Title.

Presenter	Title	Event Title	Venue	Date dd/mm/yyyy
1	Intarakumnerd, P.	Applying Innovation System Concept to Creative Tourism: A Case Study of Thai Floating Market	Asialics Conference 2018 (invited lecture)	Hangzhou, China 25/08/2018
2	Intarakumnerd, P.	Technology and Upgrading in ASEAN's Manufacturing Firms	4th Asian Innovation Forum 2018 (invited keynote lecture)	Taipei, Taiwan 07/11/2018
3	Intarakumnerd, P.	Lessons learnt from leading public research institutes to developing countries	Asian Society for Innovation and Policy (ASIP) Conference	Bangkok, Thailand 14/09/2018
4	Intarakumnerd, P.	Technological Learning and Innovation of ASEAN's Manufacturing Firms	INNOSCAPE 2018 (invited lecture)	Jakarta, Indonesia 25/10/2018
5	Intarakumnerd, P.	ASEAN 4.0: Can the Fourth Industrial Revolution be Realized in the ASEAN Region?	International Symposium on "New Horizons of East Asian Integration: How to Create Synergies between Economic and Socio-Cultural Aspects? (invited lecture)	Waseda University 11/07/2018