

Impact Case Study

Supply Chain Resilience



Introduction



Supply chain management – how a business oversees the network of resources, activities, suppliers and partners that bring its products to market – has become increasingly challenging. The impact of the Covid-19 pandemic on the global trade, including lockdown restrictions, reduced workforces and drastic reduction in shipping capacity, left numerous sectors, from health to retail, in short supply.

Since then, the Russo-Ukraine war has further affected supply chains, disrupting trade in many commodities, including metals, oil, gas and wheat, all of which are components in elements of supply.

Both demand and supply are significantly affected, and supply chain management styles, including the shift from warehouse stockpiling to just-in-time inventory models, have contributed to these challenges.

Background



Even before the pandemic, changing technology and the complexities of global trade relations, along with the effects of climate change on some resources, had made global supply chains vulnerable.

In 2023, supply chain management faces a 'new normal'. With it, new approaches are required to help 'shock-proof' the system and make it more adaptive and resilient.

The Project



Professor Vinh Thai, of RMIT's School of Accounting, Information Systems and Supply Chain, is internationally recognised for his research in logistics and supply chain management.

In 2021, Professor Thai was invited to be a Visiting Scholar for Asia Society Australia's Trade Alliance project. Asia Society Australia is part of an international non-profit, non-political organisation which focusses on the interplay of business and policy in the Asia region. It hosts briefings with heads of state from around the world on business, diplomacy and culture.

The scholarship, a partnership between Asia Society Australia and Global Victoria, was created to "provide professional insights and new understandings of the operation of supply chains across South-East Asia".

During the two-year project, Professor Thai led webinars on the issue of supply chain resilience and wrote key articles on the topic, in which he focussed on the steps needed in strategy and policy to address global supply chain vulnerabilities.

He has advocated for solutions that use digital tools to map whole supply chains and relevant risk scenarios, including the likelihood of various risks, their potential impact and their priorities for treatment.

"For businesses to develop prediction, response and recovery capabilities in their sector, they need to map their supply chains," says Professor Thai. "They must have total visibility of their suppliers and suppliers' suppliers, as well as their locations, their customers and customers' customers and their locations."

"They also need to know the other logistics players involved, and how product and information flows are exchanged between these players. Digitisation can be a great catalyst for the necessary changes, and greatly facilitate a business's capacity to plan."

"Whatever the risk minimisation strategies, every business should have an up-to-date business continuity management plan," Professor Vinh Thai.

Once a supply chain is fully mapped, businesses will be in a position to assess which components are most critical and whether other options can be applied, such as alternative sources of components, and whether some elements can be shifted from overseas to domestic settings. Risk treatment strategies can then be developed, which may include strategic partnerships to diversify procurement, inventory build-up, or collaboration with others in the same industry to share risks and benefits.

Overview of the impact



Professor Thai's work during the scholarship has been widely discussed, including numerous interviews, news articles and further events.



Videos

- Asia Society, "The State of Supply Chains in Australia":
 - <https://asiasociety.org/video/state-supply-chains-australia>
 - <https://www.youtube.com/watch?v=rU7GyROI-ms>

Events

- The Australian Food and Grocery Council Symposium (August 2022)
- CILT (Chartered Institute of Logistics and Transport) Next Generation Panel Discussion hosted by Academy Global (August 2022)
- A webinar on the Impact of COVID-19 on Maritime Supply Chain and Post-Pandemic Mitigation Strategies hosted by the Australian Maritime Logistics Research Network (AMLRN), in collaboration with RMIT Enabling Capability Platforms (December 2021)
- Keynote presentation on the impact of COVID-19 on the maritime industry at the 2020 International Conference on Asian Shipping and Logistics (ICASL) (December 2020)

Radio interviews

- 6PR News Talk (November 2021)
- 702 ABC (November 2021)
- 2CC Canberra (November 2021)
- 2GB – Life & Technology (November 2021)

Media coverage

English

- Ragtrader, "Supply chain expert reveals solutions to cost-of-living" by Christopher Kelly <https://www.ragtrader.com.au/news/supply-chain-expert-reveals-solutions-to-cost-of-living>
- The Australian Retail, "Five Minutes with Vinh Thai" (pp30-33) <https://www.calameo.com/read/0003734959b626a63b95b?trackersource=library>
- The Advertiser, "Why supply chain issues will continue in 2022" by Tarric Brooker <https://www.news.com.au/finance/business/manufacturing/why-supply-chain-issues-will-continue-in-2022/news-story/cb193b50cc056294aad6d6bb8271d6a9>
- ABC, "What is the great shipping container shortage and could it ruin your Christmas?" by Nick Baker and Ian Coombe <https://www.abc.net.au/news/2021-10-29/what-is-the-great-shipping-container-shortage-covid-christmas/100550198>
- The World Education News, "The global supply chain crisis that stole Christmas" by Angela Chau <https://www.findworldedu.com/2021/the-global-supply-chain-crisis-that-stole-christmas.html>

Vietnamese

- BNews, "Tài định hình chuỗi cung ứng toàn cầu trong bối cảnh mới - Bài cuối: Xây dựng chuỗi cung ứng bền vững trong tương lai" by Diệu Linh <https://baotintuc.vn/kinh-te/tai-dinh-hinh-chuoi-cung-ung-toan-cau-trong-boi-can-h-moi-bai-cuoi-xay-dung-chuoi-cung-ung-ben-vung-trong-tuong-lai-20220515115530451.htm>
- VCCI, "Dự án xây dựng nền tảng hỗ trợ chuỗi cung ứng hậu COVID-19", <https://vcci-hcm.org.vn/du-an-xay-dung-nen-tang-ho-tro-chuoi-cung-ung-hau-covid-19/>

Project Outcomes



Professor Thai hosted online seminars for the Asia Society Australia and Global Victoria.

- Disrupted Supply Chains (December 2021) <https://asiasociety.org/video/disrupted-supply-chains>
- Trade Alliance | Resilient Supply Chains (March 2022) <https://asiasociety.org/australia/events/trade-alliance-resilient-supply-chains>
- Supply Chains and the International Trade Order: Policy Tools for Uncertain Times (May 2022) <https://asiasociety.org/australia/events/supply-chains-and-international-trade-order-policy-tools-uncertain-times>

Professor Thai was also invited as a speaker at the Organisation for Economic Co-operation and Development (OECD)'s Supply Chain Resilience in Southeast Asia meeting held in Paris (Jun 2022): <https://www.eria.org/database-and-programmes/erias-lead-advisor-on-southeast-asia-dr-lili-yan-ing-covid-19-pandemic-exposed-flaws-within-the-global-supply-chain/>

Professor Thai also wrote two key articles as a result of the Trade Alliance project:

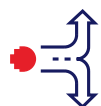
- Asia Society, "Supporting Trade in a New Era of Supply Chain Turbulence" (July 2022) <https://asiasociety.org/australia/supporting-trade-new-era-supply-chain-turbulence>
- Asia Society, "From COVID to Containers: Managing the New Supply Chain Disruptions" (July 2022) <https://asiasociety.org/australia/covid-containers-managing->

Funding Support and/or Institutional Support



The Trade Alliance project on Supply Chain Resilience was funded and supported by Asia Society Australia and Global Victoria.

Next Steps



The impact of Professor Thai's work covers both domestic and international markets, and he continues his work in this space, continually translating his research for industry and growing his research impact. As well as receiving significant attention from the OECD, Professor Thai has been invited to assist governments to develop strategies for supply chain resilience and related issues.

For example, in May 2023, he was invited by King Abdullah Petroleum Studies and Research Center (KAPSARC) – an advisory think tank specialising in energy economics, climate, and sustainability that seeks to advance Saudi Arabia's energy sector and inform global policies through evidence-based advice and applied research – to make a presentation at a workshop entitled "Enabling KSA's ambition to become a global transport and logistics hub".

