



Waipapa
Taumata Rau
**University
of Auckland**

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Supply Chain Workshop

16 – 17 April 2026

Welcome and Overview

Welcome to the Supply Chain Workshop 2026.

The Centre for Supply Chain Management at the University of Auckland is pleased to host this year's workshop. The event brings together researchers and industry partners to share current work, discuss ideas, and build stronger links between research and practice.

We hope you find the sessions interesting and that you have the chance to engage in useful discussions throughout the day.

Thank you for being part of the workshop.

Dr Sarah Marshall
Director, Centre for Supply Chain Management
The University of Auckland

Presentations

To help keep the programme running on time, presenters are asked to keep within their allocated slots. There are two presentation formats:

- **Full Research Presentations:** 25 minutes in total (15 minutes presentation, followed by 10 minutes for questions)
- **Work-in-Progress Sessions:** 25 minutes in total (10 minutes presentation, followed by 15 minutes for discussion)

Presenters can either:

- bring slides on a USB drive, or
- connect their own laptop using HDMI.

Please have your presentation ready before your session begins. If using a USB drive, copy your slides to the lecture room PC in advance. If using your own device, ensure it is ready to connect via HDMI and that you have any necessary adapters.

WiFi

Guest WiFi is available at the venue. Access details will be provided at registration.



Workshop Day 1		Decima Glenn, 260-310		
08:30 – 09:00	Registration			
09:00 – 09:15	Welcome		Dr Sarah Marshall	
09:15 – 10:15	Plenary: Andy Windsor, Health New Zealand <i>Culture, Capability and Capacity – How Health NZ are overcoming these challenges to build a World Class Commercial Function.</i>		Chair: Prof David Robb	
10:15 – 10:50	Morning Tea			
10:50 – 11:40	Contributed session 1 (<i>Full research presentations</i>)		Chair: Dr Binyamin Oz	
	Cécile L'Hermitte, University of Waikato, <i>Disaster strikes, Cook Strait ferry terminals shut down... What now?</i>			
	Xiaowei Dong, University of Auckland, <i>Unboxing product returns: What drives return policy leniency in the fashion industry?</i>			
11:40 – 12:20	Panel Discussion: Current Challenges in Global Supply Chains Moderator: Prof David Robb. Panellists: Dr Maryam Mirzaei (AUT), Dr Carel Bezuidenhout (IPU New Zealand), Simon Crook (UniServices)			
12:20 – 13:20	Lunch			
13:20 – 15:00	Contributed session 2a	260-310	Contributed session 2b	
	<i>(Work-in-progress discussion)</i>		<i>(Work-in-progress discussion)</i>	
	Chair: Dr Lisa Hillas		Chair: Dr Anson Li	
	Hannah Liu, University of Auckland, <i>First-Party Advantage? An Empirical Analysis of Supplier Performance on a Leading E-Commerce Platform</i>		My-Huong Le, University of Otago, <i>A Delphi-Based Investigation of Collaborative Practices and Performance Metrics towards Circular and Resilient Supply Chains</i>	
	Xiang Huang, Auckland University of Technology, <i>An Evaluation System for Supply Chain Resilience with Mapping to Industrial Metaverse Solutions</i>		Wayne Ren, Victoria University of Wellington, <i>The Impact of Industry 4.0 on Employee Well-being</i>	
	Lahiru Gunasekara, Lincoln University, <i>Optimising Fraud Prevention and Detection in Returnless Refund Systems</i>		Taichi Arioka, Auckland University of Technology, <i>From practice-as-entity to practice-as-bundle: rethinking cross-functional organisational initiatives</i>	
	Mona Koushan, University of Canterbury, <i>Advancing Equitable Oral Health Access for Young Adults in New Zealand: Capacity Management Policies</i>		Taihang Wang, Auckland University of Technology, <i>Navigating Institutional Pressures and Voids: SMEs Institutional Work in GenAI-enabled Procurement across Diffusion Stages</i>	
15:00 – 15:20	Afternoon Tea			
15:20 – 16:35	Contributed sessions 3 (<i>Full research presentations</i>)		Chair: Param Iyer	
	Xinyi (Cecilia) Zhao, University of Auckland, <i>Local Production Architectures and Global Supply Chain Resilience: A Network Motif Perspective</i>			
	Yang Sun, Dongbei University of Finance and Economics, <i>Overcoming Cultural Barriers: Blockchain and Government Strategies for Sustainable Textile Waste Recycling</i>			
	Carel Bezuidenhout, IPU New Zealand, <i>Exploring: Barriers and Enablers to Collective Advocacy in the Warehousing Sector: A Study of New Zealand and Victoria (Australia)</i>			
16:35 – 16:40	Closing			
After 5s		Decima Glenn, 260-310		
17:00 – 18:30	Speaker: Richard Marshall, Air New Zealand <i>What does the future of work look like for supply chain professionals?</i> After 5s Sponsor: More Optimal		Chair: Dr Sarah Marshall	



Abstracts: Thursday 16th April 2026

Plenary – 9:15am-10:15am

Culture, Capability and Capacity – How Health NZ are overcoming these challenges to build a World Class Commercial Function

9:15am-10:15am
260-310

Andy Windsor

National Director | Procurement, Supply Chain & Health Technology Management Health New Zealand | Te Whatu Ora

In this interactive session, you'll hear from Andy Windsor, National Director of Procurement, Supply Chain and Health Technology Management at Health New Zealand on how they are overcoming the challenges of culture, capability and capacity to build a World Class Commercial function. Drawing on real world experience, the session explores what it takes to deliver large scale change in a complex national public health environment. The session will share some practical insights on how organisation culture adds value, and how a strategic approach to procurement is delivering incremental benefits to Aotearoa. Topics for discussion include the importance of building a performance culture and how leveraging our economies of skill and scale to enable regional and local delivery is critical in enabling the delivery of better health outcomes for New Zealanders.

Session 1 – 10:50am-11:40am

Disaster strikes, Cook Strait ferry terminals shut down... What now?

10:50am-11:15am
260-310

Cécile L'Hermitte, Nathan Brutsch, Cécile L'Hermitte, Richard Mowll, Liam Wotherspoon

University of Waikato

The Cook Strait ferry terminals in Wellington and Picton are critical infrastructure in Aotearoa New Zealand. The ferries, which perform some 6,300 sailings and carry about 5.5 million tonnes of freight each year, are an extension of State Highway 1. In the wake of major Hikurangi Subduction Zone earthquake and tsunami, the Cook Strait ferry terminals could be out of service for up to three months. This would severely disrupt domestic freight transport operations and the flow of goods between the North and the South Islands. Using a qualitative, scenario-based research design informed by interviews with 30 stakeholders, we investigated the operational complexity created by a prolonged ferry terminal outage and used a diagnostic tool (Current Reality Tree) to map the interconnected events and cascading effects affecting post-disaster freight performance. Our findings highlight the vulnerability of Aotearoa New Zealand's freight system and show that the continuity of post-disaster transport operations is strongly influenced by government policy.

Unboxing product returns: What drives return policy leniency in the fashion industry?

11:15am-11:40am
260-310

Xiaowei Dong, João Quariguasi Frota Neto, Antony Potter

University of Auckland

Purpose Return policy leniency is a strategic approach to managing product returns, as it affects the quantities of products sold and returned, as well as profitability. Despite its importance, little is known about the drivers of return policy leniency. This paper addresses this gap by identifying the factors that explain variation in sellers' return policy leniency in the fashion industry. **Methodology** Using a novel dataset of online return policies from 208 US-based fashion brands, we develop a multidimensional construct, the Return Leniency Index, to capture key attributes of return policy leniency. We analyse its antecedents using regression analysis with suitable proxy variables capturing six hypotheses informed by theory and real-life observations. **Findings** The results suggest that return policy leniency is reduced by supply chain leanness. On the other hand, counterfeiting concerns, online channel importance, and asset intangibility are positively associated with return policy leniency. **Originality** This study proposes a framework for understanding the antecedents of return policy leniency and introduces a measure incorporating time, monetary, effort, and scope dimensions. Evidence from the US fashion industry shows statistically significant relationships between return policy leniency and its drivers, offering insights for future research and for managers and policymakers shaping return practices.

Session 2a – 1:20pm-3:00pm (Room 260-310)

First-Party Advantage? An Empirical Analysis of Supplier Performance on a Leading E-Commerce Platform

1:20pm-1:45pm
260-310

Hannah Liu

University of Auckland

Many e-commerce platforms operate hybrid marketplace models in which the platform sells products directly while also hosting independent third-party sellers. This structure creates potential differences in operational performance due to variations in inventory control and fulfilment processes. This study examines whether these structural differences lead to disparities in delivery performance. Using transaction-level data from JD.com, we compare delivery outcomes between first-party (1P) and third-party (3P) suppliers within a shared logistics network. Delivery time is decomposed into three operational stages: processing, shipping, and last-mile delivery. The empirical results show that while the frequency of delivery delays is similar across supplier types, delays associated with 3P orders tend to be more severe. Further analysis indicates that these differences are primarily driven by inefficiencies in the shipping stage rather than processing or last-mile operations. These findings provide new empirical evidence on logistics performance differences within hybrid e-commerce platforms.

An Evaluation System for Supply Chain Resilience with Mapping to Industrial Metaverse Solutions

1:45pm-2:10pm
260-310

Xiang Huang, Benjamin Dehe

Auckland University of Technology

Today's supply chains face numerous risks, such as pandemics, financial crises, and political instability, which can disrupt operations and harm performance. Consequently, enhancing supply chain resilience has become a key priority. The industrial metaverse, a shared virtual environment for supply chain collaboration, is increasingly recognized as a promising solution to enhance resilience. It integrates technologies like extended reality, digital twins, artificial intelligence, and blockchain, with different solutions targeting specific resilience capabilities. Prior research on the industrial metaverse in the context of supply chain resilience primarily focuses on its initial potential and adoption barriers. However, limited attention has been given to exploring how different industrial metaverse solutions support supply chain actors in strengthening resilience capabilities with firms' priorities. Therefore, this study aims to develop an evaluation system for supply chain resilience, with the relative significance of each resilience capability, and to map these capabilities to relevant industrial metaverse solutions. It employs the Bayesian Best-Worst Method to construct a prioritization framework for resilience capabilities, and then applies document analysis to link to corresponding industrial metaverse solutions. This study advances theoretical understanding of the industrial metaverse's role in supply chain resilience and provides practical guidance for deploying technology combinations to strengthen specific capabilities.

Optimising Fraud Prevention and Detection in Returnless Refund Systems

2:10pm-2:35pm
260-310

Lahiru Gunasekara

Lincoln University

The growth of returnless refund policies in e-commerce presents operational challenges for retailers seeking to balance customer satisfaction with fraud prevention. This study develops a mixed integer linear programming (MILP) model to optimise fraud detection strategies while maintaining service quality in returnless refund systems. The model addresses the determination of optimal inspection strategies, customer risk thresholds, and resource allocation to minimise total fraud-related costs while preserving customer loyalty. The formulation incorporates customer segmentation, product categorisation, and risk factor analysis to provide a quantitative framework for systematic fraud prevention. Preliminary computational experiments suggest the proposed approach can meaningfully reduce fraud losses while sustaining acceptable customer satisfaction levels. Ongoing work focuses on validating the model using industry datasets and testing its adaptability to changing fraud patterns and customer behaviours. This research contributes to the literature on revenue assurance in digital commerce and aims to provide practical guidance for retailers implementing returnless refund policies.

Advancing Equitable Oral Health Access for Young Adults in New Zealand: Capacity Management Policies

2:35pm-3:00pm
260-310

Mona Koushan, Lincoln C. Wood, Jeff Foote, and Janine Cochrane

University of Canterbury

Oral health is an integral component of overall wellbeing, yet it remains under-prioritised in public health policy, particularly for young adults who transition out of publicly funded dental care. In New Zealand and other OECD countries, individuals aged 18 and over often face significant barriers to accessing dental services due to affordability, availability, and systemic inequities. This research proposes to explore and evaluate capacity management policies that could enhance the availability and affordability of dental services for this underserved group. By mapping determinants of access-related inequalities and assessing existing policy frameworks, the study aims to provide evidence-based recommendations to support universal oral health coverage and reduce disparities. Using a Policy Delphi approach, the study will engage a diverse panel of stakeholders-including healthcare practitioners, policymakers, youth advocates, and Māori and Pacific health leaders-to identify, evaluate, and refine policy options related to workforce planning, resource allocation, and service delivery. Findings will inform strategic interventions and resource allocation to optimise dental care capacity and equity for young adults post-transition from publicly funded services.

Session 2b – 1:20pm-3:00pm (Room 260-317)

A Delphi-Based Investigation of Collaborative Practices and Performance Metrics towards Circular and Resilient Supply Chains

1:20pm-1:45pm
260-317

My-Huong Le, Lincoln C. Wood, Linh N.K. Duong

University of Otago

Amid increasing calls for sustainability and resilience, supply chains face pressure to adopt circular economy principles while building resilience to disruptions. Integrating these goals is challenging due to fragmented knowledge, stakeholder misalignment, and lack of validated performance frameworks. This study used a three-round Delphi process with 50 global experts from academia, industry, and government to identify practices, barriers, enablers, and metrics for circular and resilient supply chains (CRSCs). We identified 29 collaborative practices and 20 performance metrics. Analyses revealed three stakeholder perspectives, reflecting different levels of CRSC maturity. Practices emphasizing process changes, strategic alignment, and knowledge sharing were viewed as most effective, rather than technological solutions alone. Major barriers included high investment costs and weak strategic coordination, while leadership commitment, partnerships, and clear regulations were key enablers. Critical performance indicators identified were innovation capability, traceability, and stakeholder engagement. Framing insights within the Supply Chain Practice View framework, this research offers practical guidance for practitioners, researchers, and policymakers seeking to implement CRSC strategies. The findings highlight the importance of collaborative governance and adaptive capabilities in transforming supply chains into sustainable, regenerative, and resilient systems.

The Impact of Industry 4.0 on Employee Well-being

1:45pm-2:10pm
260-317

Wayne Ren, Arun Elias, Geoff Plimmer

Victoria University of Wellington

Although Industry 4.0 has sparked a wave of technological transformation marked by enhanced automation, connectivity, and intelligence, it has been widely criticised for its overemphasis on the technological aspects while neglecting humans and broader organisational dimensions in its implementation. Furthermore, literature on Industry 4.0 is inconclusive on its impacts on employee well-being by drawing oversimplified conclusions on whether it is beneficial or detrimental to employee well-being. This may suggest that broader organisational and personal factors are often overlooked in the link. By drawing on the Job Demands-Resources (JD-R) model, this study examines a wide array of organisational and personal factors during Industry 4.0 implementation to better understand the relationship. The initial phase of data collection has been concluded in November 2025, with multiple case studies across five New Zealand manufacturing firms using semi-structured interviews and non-participant observations. To ensure trustworthiness, focus groups will be held in another New Zealand manufacturing firm in March 2026 as a means of data triangulation. While data analysis might not be able to conclude in April, I aim to share some preliminary results during the workshop.

From practice-as-entity to practice-as-bundle: rethinking cross-functional organisational initiatives

2:10pm-2:35pm
260-317

Taichi Arioka, Benjamin Dehe, Maryam Mirzaei

Auckland University of Technology

The existing body of literature has largely treated practices associated with cross-functional organisational initiatives as a singular and coherent entity (e.g., Feldman & Orlikowski, 2011; Orlikowski, 2000), including studies of digital innovation and transformation (e.g., Frank et al., 2019; Leonardi, 2011). While some studies have illustrated alternative perspectives by highlighting tensions, partial coordination, or paradoxes across practices (e.g., Jarzabkowski et al., 2013; Kellogg et al., 2006), these insights have not been systematically consolidated into an ontological account of practice. This study draws on practice theory to empirically examine the implicit ontological scope of practice assumed in research on cross-functional organisational initiatives. Empirical data were collected through semi-structured interviews with 27 participants from agri-food companies in New Zealand and Japan, focusing on the generating and sustaining mechanisms underlying organisational practices for the circular economy enabled by digital technologies (digital CE). The analysis is informed by a critical realist philosophical stance (Danermark et al., 2019; Fletcher, 2017) and conducted through reflexive thematic analysis (Braun & Clarke, 2006, 2019, 2021). As a work-in-progress, the study suggests that practices in complex initiatives such as digital CE are better understood analytically not as a singular entity (practice-as-entity), but as a bundle of distinct practices enacted across different functional domains (practice-as-bundle). This perspective highlights analytical and ontological limitations in treating practice as a single unit of analysis in studies of supply chains and cross-functional collaboration.

Navigating Institutional Pressures and Voids: SMEs Institutional Work in GenAI-enabled Procurement across Diffusion Stages

2:35pm-3:00pm
260-317

Taihang Wang, Maryam Mirzaei, Anne Staal, Kasuni Weerasinghe

Auckland University of Technology

The rapid diffusion of generative artificial intelligence (GenAI) is reshaping procurement practices, yet its integration in small and medium-sized enterprises (SMEs) unfolds within environments characterised by institutional pressures and regulatory voids. Under these conditions, SMEs face a legitimacy paradox in which non-adoption risks marginalisation, while adoption without regulatory safeguards exposes them to legal and operational risks, a tension insufficiently explained by existing adoption models. Therefore, this research investigates the mechanisms through which SMEs enact institutional work to navigate the structural tensions of pressures and voids during GenAI adoption in procurement, and how these responses accumulate into institutional changes in SME procurement. The study is grounded in institutional theory, complemented by diffusion of innovation theory to account for stage-based variation in organisational responses. This study follows an abductive research design. First, the research will conduct a systematic literature review together with a theory-driven integrative review to synthesise existing knowledge and develop an initial conceptual framework. Second, the study will use purposive sampling to recruit procurement decision-makers from SMEs. The research will collect data through in-depth interviews and secondary materials to capture institutional conditions and contextual variation. The research contributes theoretically by integrating institutional and diffusion perspectives to explicate the micro-macro co-evolutionary dynamics of technology integration. Practically, it provides structured insights for managers and policymakers navigating GenAI adoption under conditions of regulatory ambiguity and institutional complexity.

Session 3 – 3:20pm-4:35pm

Local Production Architectures and Global Supply Chain Resilience: A Network Motif Perspective

3:20pm-3:45pm
260-310

Xinyi(Cecilia) Zhao, Chanelle Duley, Prasanna Gai

University of Auckland

This paper examines how local production architectures embedded within firm-level networks affect the resilience of global supply chains. We construct cross-national and cross-industrial supply chain networks for July 2024 and July 2025, a period of unusually high geo-political uncertainty, using firm-level supplier–customer relationship data. Local production structures are characterized by network motifs – recurrent multi-firm connectivity patterns – and subjected to different disruption scenarios. We find that global supply chains are dominated by two motifs: “hub–spoke” and vertically organized “outsourcing chain” structures. While “hub–spoke” structures are prevalent, they are highly vulnerable to targeted disruptions affecting central firms. “Outsourcing chains” are more robust and play a central role in sustaining network reliability. A motif-based reliability framework reveals increasing fragility of cross-national supply chains under targeted shocks, highlighting the importance of local production organization for supply chain resilience.

Overcoming Cultural Barriers: Blockchain and Government Strategies for Sustainable Textile Waste Recycling

3:45pm-4:10pm
260-310

Yang Sun, Na Luo, Xiaoxiao Liang, Herbert Sima, Thuy-Tien Nguyen

Dongbei University of Finance and Economics

As the fashion industry grapples with mounting environmental pressures, recycling has emerged as a crucial strategy to curb the growing impact of textile waste. However, consumer reluctance to recycle or purchase recycled products often hinders the sustainability of the textile waste supply chain. This hesitation stems from factors such as cultural taboos, cognitive biases, and a lack of transparency in recycling processes. Blockchain technology offers a promising solution by enabling end-to-end traceability, thereby addressing symbolic stigmas and building consumer trust. This study examines how blockchain technology and government subsidies can enhance the efficiency and sustainability of textile waste recycling. Key findings include: 1) Blockchain technology significantly improves the operational efficiency of textile recycling systems. However, the application cost of this technology introduces uncertainties regarding its ability to effectively promote the sustainable transformation of the industry; 2) Government subsidy strategies vary in impact depending on the recipient. In most cases, purchase subsidies for recycled textiles are more effective than those directed solely at recycling operations, as they stimulate consumer demand and support market growth; and 3) Encouraging adoption by leading brands can amplify blockchain's benefits. When major brands integrate this technology, it not only reduces the overall need for government subsidies but also accelerates industry-wide adoption, creating shared value for businesses, policymakers, and the environment. These findings provide actionable insights for improving transparency and participation in textile recycling, supporting the industry's shift toward long-term environmental and economic sustainability.

Exploring: Barriers and Enablers to Collective Advocacy in the Warehousing Sector: A Study of New Zealand and Victoria (Australia)

4:10pm-4:35pm
260-310

Carel Bezuidenhout, Muhammad Akmal Khan, Carel Nicolaas Bezuidenhout

IPU New Zealand

This study critically examines the persistent fragmentation and lack of unified advocacy within the warehousing sectors of New Zealand and Victoria, Australia. Grounded in Collective Action Theory and guided by a Communication, Collaboration, and Commitment (3Cs) model, the research employs comparative qualitative case studies and hybrid deductive-inductive thematic analysis of semi-structured interviews with senior industry stakeholders. The results demonstrate that entrenched secrecy, competition, and governance gaps maintain barriers to effective collective action. However, when leaders engage in transparent communication and targeted collaboration, trust builds and sector-wide commitment becomes feasible. The study offers actionable recommendations, highlighting the value of neutral advocacy bodies and inclusive forums to empower long-term industry renewal. These insights provide a clear framework for overcoming institutional isolation and advancing strategic, collective leadership in warehousing and beyond.

After 5s – 5:00pm-6:30pm

What does the future of work look like for supply chain professionals?

5:00pm - 6:00pm
260-310

Richard Marshall

General Manager Supply Chain, Air New Zealand

We are entering a period of significant change with AI, digitisation and automation driving both excitement and fear within our ranks. Excitement in that many of our pain points and challenges, our tedious and administrative tasks, will disappear, and fear in that many are worried about their skills and job security along with wanting to better to understand, “what’s in it for me” (WIFM). The presentation will predict how this will play out, and moreover how we should prepare our teams and ourselves for the future.

About the speaker

Rich Marshall joined Air New Zealand in March 2023, as the General Manager Supply Chain overseeing the Supply Chain & Procurement teams in Auckland, Christchurch, Nelson, and Supply Chain and Ground Support Equipment operations across the Group.

Rich spent 25 years in the Royal New Zealand Air Force (RNZAF), predominantly on No 40 and 42 Squadrons as a Navigator. Rich was a project manager for both the C-130 Hercules Avionics upgrade and the acquisition of the Boeing 757s. After a diplomatic posting to Washington DC, USA, Richard was appointed the Base Commander at RNZAF Base Auckland.

Prior to joining Air New Zealand, Rich was the General Manager of Supply Chain at Douglas Pharmaceuticals and prior to this, was the Head of Supply Chain and Procurement at SKYCITY.

Richard holds a BCom (Management) from Massey University, a Certificate in Sustainability Strategy from Cambridge University and a Certificate in Digital Supply Chain from Massachusetts Institute of Technology (MIT) and attended the University of Auckland’s Strategic Supply Chain Programme, and NZPICS’ CPIM course. In 2025, Richard was awarded the Safeguard Safety Leader of the Year Award.

Richard is married to Melissa who is a lawyer and IR/ER Specialist and has two adult children, Hugh who is a lawyer in Sydney and Rosa who is on the DHL Supply Chain Graduate programme. In his spare time, he enjoys traveling, hiking, biking and swimming. He also mentors several up-and-coming Supply Chain practitioners.

Thank you to the sponsors of this After 5s event:



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