# **3RD VIETNAM Symposium in Supply Chain Management**

# VSSCM-2024

### 21 - 22 October 2024 Hanoi, Vietnam











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# Welcoming Note

We are very pleased to welcome you to the third edition of the Vietnam Symposium in Supply Chain Management (VSSCM-2024, 21-22 October 2024), which is jointly organized by the Association of Vietnamese Scientists and Experts (AVSE Global) and the Thuongmai University.

The Symposium aims at providing academics, doctoral students, and practitioners with a forum for presenting their research findings and discussing current and challenging issues in supply chain management field. The Symposium is also an ideal occasion for Vietnamese scholars to exchange research experiences and develop research projects with their international colleagues.

This year, we have the great privilege to welcome two outstanding Guest Keynote Speakers, Alexandre Dolgui from IMT Atlantique (France) and Stefan Minner from TUM School of Management (Germany), together with Professor Duc Khuong Nguyen from EMLV Business School (France), Assoc Prof. Hoang Nguyen from Thuongmai University (Vietnam) and Professor Thi Le Hoa Vo from University of Rennes (france) as the advisors. They are among the world's leading supply chain management experts. We are grateful to them for their presence and kind support.

Finally, we would like to thank **Assoc Prof. Hoang Nguyen** (*Rector of the Thuongmai University*) and **Assoc Prof. Huu Duc Bui** (*Chairman of the Thuongmai University*), for their outstanding support in making this event a great success. Also, our special thanks go to the members of our organizing committee and supporters for their great contributions to the preparations of this scientific event.

We wish you all an intellectually stimulating and productive conference as well as a chance to meet new colleagues and establish collaborations. We hope that you will have the occasion to exchange ideas and enjoy the virtual environment of the conference!

On behalf of the Organizing and Scientific Committees The Conference Co-Chairs **Zhe Yuan, Pierre Fenies, Dat Tien Le and Ninh Nguyen** 

# **Conference Scope**

The Third Vietnam Symposium in Supply Chain Management (VSSCM-2024) aims at providing academics, doctoral students, and practitioners with a forum for presenting their research findings and discussing current and challenging issues in supply chain management field. The Symposium is also an ideal occasion for Vietnamese scholars to exchange research experiences and develop research projects with their international colleagues.

The symposium organizers welcome submissions of theoretical and empirical research papers in all areas of sustainable and circular supply chain, logistics and production management for presentation. The main topics of the conference include, but not limited to:

Blockchain And IoT In Supply Chain Challenges Of Climate Change Climate Change Adaptation And Resilience Collaborations For Sustainable Supply Chains Digital Transformation Of Supply Chains Lean And Agility Logistics Systems Design And Management Reverse Logistics And Circular Economy Supply Chain Efficiency And Effectiveness Sustainable Management Practices Sustainable Production & Operations Management Operations Management On Innovation Transition Management For SustainableDevelopment Transition Towards Circular Economy

# **Keynote Speakers**



**Stefan Minner** Professor of Logistics and Supply Chain Management, TUM School of Management, Germany

Stefan Minner is a Full Professor for Logistics and Supply Chain Management at the School of Management, Technical University of Munich (TUM) and a core-member of the Munich Data Science Institute (MDSI). His research interests using methods of operations research, artificial intelligence and machine learning are in global supply chain design, transportation optimization and inventory management. His work was published in many peer reviewed journals, including Management Science, Manufacturing & Service Operations Management, Operations Research, Production and Operations Management, Transportation Science, Transportation Research Part B, and European Journal of Operational Research. He serves on several editorial boards of logistics and operations research journals. Currently, Stefan Minner is the Editor-in-Chief of the International Journal of Production Economics. Stefan Minner is a fellow of the International Society for Inventory Research (ISIR) and is currently vice-chairman of the scientific advisory board of the German Logistics Association (BVL), and a member of the Research Committee of the European Logistics Association (ELA).



Alexandre Dolgui Professor of Industrial and Systems Engineering Fellow of IISE, IMT Atlantique,

France

Dr. Alexandre Dolgui is an IISE Fellow, Distinguished Professor and the Head of Automation, Production and Computer Sciences Department at the IMT Atlantique, campus in Nantes, France. His research and teaching activities focus on decision aid in manufacturing line design, production planning, scheduling and supply chain optimisation, especially his recent work is dedicated to resilience issues in supply chains. He is the co-author of 5 books, the co-editor of 32 books or conference proceedings, the author of over 320 refereed papers in international journals. He is the Editor-in-Chief of the International Journal of Production Research, an Area Editor of Computers & Industrial Engineering. He is an Active Fellow of the European Academy for Industrial Management, Member of the Board of the International Foundation for Production Research, former Chair (Vice-Chair now) of IFAC TC 5.2 Manufacturing Modelling for Management and Control, Member of IFIP WG 5.7 Advances in Production Management Systems, IEEE System Council Analytics and Risk Technical Committee, he has been Scientific Chair of many leading scientific conferences and received several international distinctions. He is one of Highly Cited Researchers in the field of Engineering awarded by Clarivate in 2021, 2022, 2023.

Research interests: manufacturing line design, production planning and supply chain optimization; 5 authored books, 25 edited books or conference proceedings, over 300 refereed journal papers, 32 editorials and 34 book chapters as well as over 400 papers in conference proceedings.

# Policy Roundtable



Zhe Yuan Associate Professor in Supply Chain & Logistics, EMLV Business School Paris, France

Zhe Yuan is an associate professor at EMLV. She earned her Ph.D. in Industrial Sciences and Technologies from CentraleSupélec, Université Paris-Saclay. She serves as a project coordinator for the European Union's ERASMUS+ programs, specifically focusing on the creation of pedagogical material for the 21st Century (TASK21) in the areas of EdTech and AI. Her research interests include operations management, smart warehouse management, interface research between artificial intelligence and management science, energy and environmental efficiency, and Data Envelopment Analysis.

She has published articles in influential journals such as European Journal Of Operational Research, International Journal Of Operations & Production Management, International Journal of Production Economics, Journal of the Operational Research Society, International Journal of Production Research, IEEE Transactions on Engineering Management, Transportation Research Part D, and Energy Economics.



#### **Pierre Fenies** Professor of Management Sciences, Paris Panthéon-Assas University, France

Pierre Fenies is the Director of the Logistics and Supply Chain Management Department at Panthéon-Assas University in Paris, France. With over six years of experience at the institution, he currently serves as the Director of the UFR - Maison des Sciences de Gestion, a position he has held since May 2021. He is also a professor and the Director of the master's program in Performance and Logistics Management (MPL) and the GPLA specialization, roles he has held since January 2018



Chi Dzung Tran Secretary General, Vietnam Logistics Association (VLA), Vietnam

Chi Dzung Tran is an accomplished Electrical Engineer who expanded his expertise into logistics and supply chain management. With over a decade of experience in power system testing and commissioning, he transitioned into managing industrial automation sales and system integration. Since 2007, he has focused on logistics and supply chain management (SCM) studies and training. Chi Dzung Tran is the Co-founder and Chairman of the Academic Advisory Board at Vietnam Logistics and Aviation School Co., Ltd (VILAS), where he oversees the design and delivery of training programs validated by FIATA and accredited by IATA. His consultancy services have been sought by various Ministry Agencies, the World Bank, and the Asian Development Bank, where he has served as a national and senior consultant.

# Committees

#### **CONFERENCE CO-CHAIRS**



Zhe Yuan EMLV Business School, France



Pierre Fenies University of Paris Pantheon Assas, France



Dat Tien Le Thuongmai University, Vietnam



Ninh Nguyen RMIT University, Australia & Thuongmai University, Vietnam

#### **SCIENTIFIC COMMITTEE**

Zhe Yuan, EMLV Business School, France
Surajit Bag, EMLV Business School, France
Zied BABAI, Kedge Business School, France
Abdelghani BEKRAR, Univ. Polytechnique Hauts-de-France, France
Pierre Fenies, University of Paris Pantheon Assas, France
Ahmad JAFARIAN, Linköping University, Norrköping, Sweden
Hoang Viet NGUYEN, Thuongmai University, Vietnam
Van Su HA, Thuongmai University, Vietnam
Ninh NGUYEN, RMIT University, Australia & Thuongmai University, Vietnam
Binh DO, Thuongmai University, Vietnam
Phuong Tra TRAN, IPAG Business School, France
Thi Le Hoa VO, University of Rennes, France

#### **ORGANIZING COMMITTEE**

Zhe Yuan, EMLV Business School, France Surajit Bag, EMLV Business School, France Huu Duc Bui, Thuongmai University, Vietnam Hoang Nguyen, Thuongmai University, Vietnam Hoang Viet Nguyen, Thuongmai University, Vietnam Van Su Ha, Thuongmai University, Vietnam Duc Nhuan Nguyen, Thuongmai University, Vietnam Binh Do, Thuongmai University, Vietnam Thanh Hung Nguyen, Thuongmai University, Vietnam Nguyen Giap Cu, Thuongmai University, Vietnam Huy Vu Le, Foreign Trade University, Vietnam Minh Ngoc, AVSE Global, France Quynh Pham, AVSE Global, France Thi Minh Nhan Nguyen, Thuongmai University, Vietnam Thu Trang Phan, Thuongmai University, Vietnam Thanh Binh Vu, Thuongmai University, Vietnam Thuan Vu, Thuongmai University, Vietnam Ngoc Canh Hoang, Thuongmai University, Vietnam

# Associated Journals



In consultation with the conference organizers and the Editor-in-Chief of the <u>Journal of Business &</u> <u>Industrial Marketing</u> (CiteScore: 6.6), <u>Supply Chain Forum: An International Journal</u> (CiteScore: 5.8) <u>The</u> <u>International Journal of Logistics Management</u> (IF: 7.5), and <u>Journal of Trade Science</u>, authors of best conference papers will be invited to submit their papers to a regular issue of the Journal.

# Program Overview

### Monday, 21 October 2024

08:00 – 08:45 Welcome and Opening Ceremony

F buildingVan Su Ha, Vice Rector of the Thuongmai University, VietnamTra Tran, Associate Professor, Audencia Business School, FranceZhe Yuan, Associate Professor, EMLV Business School, France

#### 08:45 – 09:30 Plenary Keynote



9:30 – 10:00	Break
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Meeting Room No. 1 - 2 F building

Meeting Room No. 1 - 2

	10:00 – 11:30 Parallel Session (A1)	
10:00 – 11:30	A1.1: Climate Change Adaptation and Resilience	Meeting Room No. 1 F building
	Chair: Zhe YUAN, EMLV Business School, France	
10:00 – 11:30	A1.2: Logistics Systems Design and Management	Meeting Room No. 2 F building
	Chair: Libo Ren, Paris-Panthéon-Assas University, France	
10:00 – 11:30	A1.3: Collaborations for Sustainable Supply Chains (1)	Meeting Room No. 3 F building
	<b>Chair: Stefan Minner,</b> TUM School of Management, Germany	

### 13:00 – 13:45 Plenary Keynote 2

13:00 - 13:45Optimal planning under uncertain lead times:<br/>cases of assembly and disassembly systemsMeeting Room No. 1 - 2<br/>F building



Alexandre Dolgui, Professor of Industrial and Systems Engineering Fellow of IISE, IMT Atlantique, France

### 14:00 – 15:30 Parallel Sessions (B1)

14:00 – 15:30	B1.1: Supply chain efficiency and effectiveness	Meeting Room No. 1 F building
	<b>Chair: Lise Nakache,</b> Paris-Panthéon-Assas University, France	
14:00 – 15:30	B1.2: Blockchain and IoT in Supply Chain	Meeting Room No. 2 F building
	Chair: Alexandre Dolgui, IMT Atlantique, France	
14:00 – 15:30	B1.3: Sustainable SCM practices	Meeting Room No. 3 F building
	Chair: Pierre Fenies, Paris-Panthéon-Assas University, France	
15:30 – 16:00	Break	F building
	16:00 – 17:00 Parallel Sessions (B2)	

16:00 – 17:00	B2.1: Global value chain and Circular Economy	Meeting Room No. 1 F building
	<b>Chair: Luc Thi Thu Huong,</b> Thuongmai University, Vietnam	

16:00 – 17:00	B2.2: Collaborations for Sustainable Supply Chains (2)	Meeting Room No. 2 F building
	Chair: Le Tien Dat, Thuongmai University, Vietnam	
16:00 – 17:00	B2.3: Digital Transformation of Supply Chains	Meeting Room No. 3 F building
	Chair: Libo Ren, Paris-Panthéon-Assas University, France	

### 18:00 – 20:00 Gala dinner

Participants will take a coach prepared by the Thuongmai University to the Ben Gourmet Hanoi. 2 best paper awards will be presented during the Gala dinner Ben Gourmet, 98 Hoàng Quốc Việt Street, Câu Giâý District, Hà Nội.



### Tuesday, 22 October 2024

### 09:00 – 10:30 Policy Rountable

09:00 – 10:30 The use of digital twins for logistics management in extreme weather events H1 Building Auditorium



Zhe Yuan, Associate Professor, EMLV Business School, France



Pierre Fenies, Professor, Director of the Maison des sciences de gestion, University Pantheon Assas, France



Stefan Minner, Professor of Logistics and Supply Chain Management, TUM School of Management, Germany

Alexandre Dolgui, Professor of Industrial and Systems Engineering Fellow of IISE, IMT Atlantique, France



Chi Dzung Tran, Secretary General, Vietnam Logistics Association (VLA), *Vietnam* 

END OF CONFERENCE

# Program in Detail

### Monday, 21 October 2024

08:00 – 08:45 Welcome and Opening Ceremony

F buildingVan Su Ha, Vice Rector of the Thuongmai University, VietnamTra Tran, Associate Professor, Audencia Business School, FranceZhe Yuan, Associate Professor, EMLV Business School, France

08:45 – 09:30 Plenary Keynote

 

 08:45 – 09:30
 The Economics of Digital, Resilient, and Sustainable Supply Chain Management
 Meeting Room No. 1 - 2 F building

 Image: Stefan Minner, Professor of Logistics and Supply Chain Management, TUM School of Management, Germany
 Supply Chain Management, Management

9:30 – 10:00 Break

Meeting Room No. 1 - 2 F building

Meeting Room No. 1 - 2

	10:00 – 11:30 Parallel Session (A1)	
10:00 – 11:30	A1.1: Climate Change Adaptation and Resilience	Meeting Room No. 1 F building
	Chair: Zhe YUAN, EMLV Business School, France	Discussant
	Discrete and smooth scalar-on-density compositional regression for assessing the impact of climate change on rice yield in Vietnam <b>Thi Huong Trinh</b> ( <i>Thuongmai University, Vietnam</i> )	Khanh Pham (Vietnam Academy of Science & Technology, Vietnam)
	Real-time Greenhouse Climate Control : Integrating Nonlinear Model Predictive Control with Deep Learning Khanh Pham (Vietnam Academy of Science & Technology, Vietnam).	<b>Thao Phan</b> Thuongmai University, Vietnam

Thi Huong Trinh (Thuongmai University, Vietnam), Giang Le (Vietnam Academy of Science & Technology, Vietnam), Loan Do (Vietnam Academy of Science & Technology, Vietnam)	
Assessment of the relationship between economic growth, trade openness and carbon (co2) emissions reduction in vietnam Thao Phan (Thuongmai University, Vietnam), Thao Tran (Thuongmai University, Vietnam, Trang Tran (Vietnam Institute of Economics, Vietnam Academy of Social Sciences, Vietnam)	<b>Thi Huong Trinh</b> Thuongmai University, Vietnam

10:00 – 11:30	A1.2: Logistics Systems Design and Management	Meeting Room No. 2 F building
	Chair: Libo Ren, Paris-Panthéon-Assas University, France	Discussant
	Applying the fuzzy -topsis method to select a supplier: case of vietnam's textile and garment industry <b>Trang Nguyen Thi Van</b> (Thuongmai University, Vietnam), Thi Thu Thuy Nguyen (Thuongmai University, Vietnam), Tam Do Thi Thanh (Thuongmai University, Vietnam)	<b>Yash Daultani</b> (Indian Institute of Management Lucknow, India)
	Enhancing Supply Chain Resilience : A Study of Additive Manufacturing & Risk Mitigation Capabilities through Grey Theory and Digraph Matrix Analysis Gaurvendra Singh (Indian Institute of Technology Kanpur, India), Shubhendu Singh (Indian Institute of Technology Kanpur, India), Subhas Chandra Misra (Indian Institute of Technology Kanpur, India), <b>Yash Daultani</b> (Indian Institute of Management Lucknow, India)	<b>Ha Hong Tran</b> (Foreign Trade University, Vietnam)
	A Comprehensive Review of Green Logistics Research: A Bibliometric Analysis Ha Hong Tran (Foreign Trade University, Vietnam), Huy Vu Le (Development and Policies Research Center, Vietnam)	<b>Trang Nguyen Thi Van</b> (Thuongmai University, Vietnam)

10:00 – 11:30	A1.3: Collaborations for Sustainable Supply Chains (1)	Meeting Room No. 3 F building
	<b>Chair: Stefan Minner,</b> TUM School of Management, Germany	Discussant
	Analyzing Strategic Resources in the Plaine de Versailles Food Supply Chain : A Field Diagnostic Study Stessy coutelle (Paris-Panthéon-Assas University, France), <b>Rami alkhudary</b> (Paris-Panthéon-Assas University, France), Pierre fenies (Paris-Panthéon-Assas University, France)	<b>Enshuai Yu</b> (Boston College, United State)
	Optimizing sales mode selection and marketing effort for a B2C marketplace under green product investment uncertainty Dinh Anh PHAN (The University of Danang, Vietnam), <b>Thi Le Hoa VO</b> (University of Rennes, France)	<b>Rami alkhudary</b> (Paris-Panthéon-Assas University, France)
	Regulatory Costs and Vertical Integration: Evidence from Supply Chain Disclosure Regulations Enshuai Yu, (Boston College, United State)	<b>Thi Le Hoa VO</b> (University of Rennes, France)
	Online presentation	
11:30 – 13:00	Lunch	H2 building

### 13:00 – 13:45 Plenary Keynote 2

 13:00 – 13:45
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Optimal planning under uncertain lead times: cases of assembly and disassembly systems Meeting Room No. 1 - 2 F building

Alexandre Dolgui, Professor of Industrial and Systems Engineering Fellow of IISE, IMT Atlantique, France

### 14:00 – 15:30 Parallel Sessions (B1)

14:00 – 15:30	B1.1: Supply chain efficiency and effectiveness	Meeting Room No. 1 F building
	<b>Chair: Lise Nakache,</b> Paris-Panthéon-Assas University, France	Discussant
	Modeling supply chain viability with intelligent agents and combination of resilience strategies Phu Nguyen (Berlin School of Economics and Law, Germany), Dmitry Ivanov (Berlin School of Economics and Law, Germany)	<b>Truong Chi</b> (Thuongmai University, Vietnam)
	The profit optimization model relies on selecting production output and pricing using deep learning and reinforcement learning techniques <b>Truong Chi</b> (Thuongmai University, Vietnam), Hoang Do Thanh Tung (Vietnam Academy of Science and Technology, Vietnam), Ly Van Kien (Vietnam Academy of Science and Technology, Vietnam), Pham Van Khanh (Vietnam Academy of Science and Technology, Vietnam),	<b>Ha Viet Le</b> (Thuongmai University, Vietnam)
	T I I I I I I I COM (	
	a Bibliometric study Ha Viet Le (Thuongmai University, Vietnam)	(Berlin School of Economics and Law, Germany)

14:00 – 15:30	B1.2: Blockchain and IoT in Supply Chain	Meeting Room No. 2 F building
	Chair: Alexandre Dolgui, IMT Atlantique, France	Discussant
	Digital Twin for supply chain and operations management : literature review and research potential Lise Nakache (Paris-Panthéon-Assas University, France), Libo Ren (Paris-Panthéon-Assas University, France)	<b>Omid Fatahi Valilai</b> (Constructor University Bremen, Germany)
	Enhancing Transparency through Blockchain and Internet of Things Technology in Supply Chain Than Lee Lee (Xiamen University Malaysia, Malysia), Zhao Xiangkun (Xiamen University Malaysia, Malysia)	<b>Lise Nakache</b> (Paris-Panthéon-Assas University, France)
	Online presentation	
	An Integration of Blockchain Technology in Supplier Selection Process Hakshith Gowda Ravikumar (Constructor University Bremen, Germany), Omid Fatahi Valilai (Constructor University Bremen, Germany)	<b>Than Lee Lee</b> (Xiamen University Malaysia, Malysia)
	Online presentation	

14:00 – 15:30	B1.3: Sustainable SCM practices	Meeting Room No. 3 F building
	<b>Chair: Pierre Fenies,</b> Paris-Panthéon-Assas University, France	Discussant
	Research on Green Consumption Behavior of Tourists in Vietnam Thi Quynh Huong Nguyen (Thuongmai University, Vietnam), Viet Thai Nguyen (Thuongmai University, Vietnam), Thi Quynh Trang Bui (Thuongmai University, Vietnam)	Mohammad Yaser Mofatteh (Constructor University Bremen, Germany)
	The Analysis of Livelihood Portfolios in Peru: Empirical Insights Using Clustering Compositional Data Method <b>Mai Nguyen</b> (Thuongmai University, Vietnam), Thi Huong Trinh (Thuongmai University, Vietnam)	<b>Viet Thai Nguyen</b> (Thuongmai University, Vietnam)
	Exploring the Viability of Electric Vehicle Adoption for Prospective Companies in Outbound Logistics ; A Blockchain based Lifecycle Sustainability Assessment Approach Mohammad Yaser Mofatteh (Constructor University Bremen, Germany),	<b>Mai Nguyen</b> (Thuongmai University, Vietnam)

Christopher Fabian Mattaba (Constructor University
Bremen, Germany),
Ma. Keni Lucero Villaruz (Constructor University
Bremen, Germany),
Pandurang Kishanrao Kawale (Constructor University
Bremen, Germany),
Omid Fatahi Valilai (Constructor University Bremen,
Germany)
Online presentation

15:30 – 16:00 Break

6<sup>™</sup> Floor, F building

### 16:00 – 17:00 Parallel Sessions (B2)

16:00 – 17:00	B2.1: Global value chain and Circular Economy	Meeting Room No. 1 F building
	<b>Chair: Luc Thi Thu Huong,</b> Thuongmai University, Vietnam	Discussant
	Customer Evaluation of Reverse Logistics on E- commerce Platforms in Vietnam Huong Tran (Thuongmai University, Vietnam), Nguyen Ha (Thuongmai University, Vietnam), Lam Vu (Thuongmai University, Vietnam), Lo Kim (Thuongmai University, Vietnam), Vu Ngoc Diep (Thuongmai University, Vietnam)	<b>Thanh Nguyen Thi</b> (Thuongmai University, Vietnam)
	Factors affecting the participation in the global value chain of supporting industry enterprises in Vietnam Thanh Nguyen Thi (Thuongmai University, Vietnam), Hoa Cao (Thuongmai University, Vietnam), Luyen Pham (Thuongmai University, Vietnam), Linh Ngo (Thuongmai University, Vietnam), Linh Nguyen (Thuongmai University, Vietnam), Anh Loan (Thuongmai University, Vietnam)	<b>Nguyen Ha</b> (Thuongmai University, Vietnam)

16:00 – 17:00	B2.2: Collaborations for Sustainable Supply Chains (2)	Meeting Room No. 2 F building
	Chair: Le Tien Dat, Thuongmai University, Vietnam	Discussant
	Impacts of trust on opportunism in buyer-supplier relationships : The moderating role of psychological safety Thoa Pham (FPT University Hanoi, Vietnam), Tuan Nguyen (Vietnam National University Hanoi, Vietnam),	Zanele Matsane (University of Johannesburg, South Africa)

	<b>Anh Nguyen</b> (Vietnam National University Hanoi, Vietnam) <b>,</b> Thao Tran (Thuongmai University, Vietnam)	
	Revisiting scm: bridging the gap between existing models and construction realities for enhanced project performance Zanele Matsane (University of Johannesburg, South Africa)	<b>Anh Nguyen</b> (Vietnam National University Hanoi, Vietnam)
(	Online presentation	

16:00 – 17:00	B2.3: Digital Transformation of Supply Chains	Meeting Room No. 3 F building
	Chair: Libo Ren, Paris-Panthéon-Assas University, France	Discussant
	Determinants of the decision to use digital banking services of gen Z <b>Phuong Dang</b> (Thuongmai University, Vietnam), Vu Diep (Thuongmai University, Vietnam)	<b>Evans DARKO</b> (University of Rennes, France)
	Optimizing New Product Introductions: A Data-Driven DRO Model Leveraging Historical and Pre-Sale Demand Dynamics <b>Zhe YUAN</b> (EMLV Business School, France)	<b>Phuong Dang</b> (Thuongmai University, Vietnam)
	Technical and Economic Efficiency Measurement of African Commercial Banks: Using Data Envelopment Analysis (DEA) Approach Evans DARKO (University of Rennes, France), Nadia Saghi-Zedek (University of Rennes, France), Gervais Thenet (University of Rennes, France)	<b>Zhe YUAN</b> (EMLV Business School, France)
	Online presentation	

### 18:00 – 20:00 Gala dinner

Participants will take a coach prepared by the Thuongmai University to the Ben Gourmet Hanoi 2 best paper awards will be presented during the Gala dinner Ben Gourmet, 98 Hoàng Quốc Việt Street, Câu Giâý District, Hà Nội.



### Tuesday, 22 October 2024

### 09:00 – 10:30 Policy Rountable





Chi Dzung Tran, Secretary General, Vietnam Logistics Association (VLA), *Vietnam* 

END OF CONFERENCE

# Best Paper Awards

VSSCM2024 presents 2 Best Paper Awards.

The recipient of the awards:

- Addresses a significant organizational phenomenon
- Shows appropriate consideration of relevant theoretical and empirical literature
- Offers reasonable interpretations of the research results, draws appropriate inferences about the theoretical and applied implications of the results, and suggests promising directions for future research
- Yields information that is both practically and theoretically relevant and important
- Presented logically, succinctly, and clearly

Award Committee Charges:

• The Scientific Committee has the responsibility of selecting the final candidates for the Awards.

Presentation of Awards:

• The 2 Awards are presented during the Gala Dinner on Oct 21th 2024.

# List of Abstracts

#### Monday, 21 October 2024

#### A1.1: Climate Change Adaptation and Resilience

Discrete and smooth scalar-on-density compositional regression for assessing the impact of climate change on rice yield in Vietnam Thi Huong Triph

Thi Huong Trinh

#### Abstract

Within the econometrics literature, assessing the impact of climate change on agricultural yield has been approached with a linear functional regression model, wherein crop yield, a scalar response, is regressed against the temperature distribution, a functional parameter alongside with other covariates. However, this treatment overlooks the specificity of the temperature density curve. In the realm of compositional data analysis, it is argued that such covariates should undergo appropriate log-ratio transformations before inclusion in the model. We compare a discrete version with temperature histograms treated as compositional vectors and a smooth scalar-on-density regression with temperature density treated as an object of the so-called Bayes space. In the latter approach, when density covariate data is initially available as histograms, a preprocessing smoothing step is performed involving CB-splines smoothing. We investigate the respective advantage of the smooth and discrete approaches by modelling the impact of maximum and minimum daily temperatures on rice yield in Vietnam. Moreover, we advocate for the modelling of climate change scenarios through the introduction of perturbations of the initial density, determined by a change direction curve computed from the IPPC scenarios. The resulting impact on rice yield is then quantified by calculating a simple inner product between the parameter of the density covariate and the change direction curve. Our findings reveal that the smooth approach and the discrete counterpart yield coherent results, but the smooth seems to outperform the discrete one by an enhanced ability to accurately gauge the phenomenon scale.

### Real-time Greenhouse Climate Control: Integrating Nonlinear Model Predictive Control with Deep Learning

Khanh Pham, Thi Huong Trinh, Giang Le, Loan Do

#### Abstract

In modern greenhouse management, maintaining optimal environmental conditions is crucial for maximizing crop yield and quality. This study focuses on the implementation of control strategies based on Nonlinear Model Predictive Control (NMPC) and Deep Neural Networks (DNN) to regulate key environmental variables in greenhouses. The main state variables considered are air temperature, CO2 concentration, absolute humidity, crop biomass, crop temperature, soil moisture, nutrient concentration in irrigation water, and wind speed inside the greenhouse. The control variables include solar radiation, heating, cooling, irrigation, ventilation, fertilization, and humidification. The NMPC method is used to optimize these control variables by minimizing a cost function that penalizes deviations of the state variables from their reference trajectories. This involves solving a nonlinear optimization problem at each time step over a finite prediction horizon. The training data generated from the NMPC optimization

process is then used to train a DNN, with the goal of estimating the optimal control actions computed by the NMPC. The DNN model is trained using supervised learning, minimizing the mean squared error between the predicted and actual control actions. Once trained, the DNN can make real-time control decisions with significantly reduced computational requirements compared to NMPC. Simulation results are presented to compare the performance of the NMPC and DNN controllers against reference trajectories. The effectiveness of the DNN in approximating the NMPC control strategy is evaluated based on tracking accuracy and computational efficiency. The study demonstrates that the DNN-based controller can achieve performance comparable to NMPC, offering a promising solution for real-time greenhouse climate control. This approach leverages the predictive capabilities of DNNs while maintaining the robust control performance of NMPC, thereby providing a practical and efficient method for advanced greenhouse management.

Assessment of the relationship between economic growth, trade openness and carbon (co2) emissions reduction in vietnam

Thao Phan, Thao Tran, Trang Tran

#### Abstract

Trade openness is one of the criteria to evaluate the level of integration of an economy, it has a strong influence on that country's GDP growth rate. However, recently, the serious level of environmental pollution has prompted countries to make commitments to reduce CO2 emissions. Increasing CO2 emissions reduces the growth rate and is affected by trade openness. The following article uses the VAR model to evaluate the linear relationship between trade openness, economic growth, and CO2 emissions. This paper will conduct an empirical study in Vietnam to test the short-term and long-term causal correlation among trade openness, CO2 emission from 1990 to 2020. Research results show that the increase in trade openness and economic growth is positively related to the increase in CO2 emissions. Based on the research results, the article also provides policy suggestions to reduce CO2 emissions while still ensuring sustainable economic development and increasing trade openness.

#### A1.2: Logistics Systems Design and Management

Applying the fuzzy –topsis method to select a supplier: case of vietnam's textile and garment industry Trang Nguyen Thi Van, Thi Thu Thuy Nguyen, Tam Do Thi Thanh

#### Abstract

Using advantage of technology such as machine learning applications in particular fuzzy rules has greatly assisted in evaluation and selection of suppliers. However, how to determine the criteria for enterprise as well as the priorities in short list of suppliers remains a challenging issue for both enterprise and researchers. The Fuzzy-TOPSIS method evaluates and ranks suppliers based on multiple criteria under uncertain conditions. In this paper, we use the Fuzzy-TOPSIS method with the survey dataset taken from Vietnam's Textile and Garment industry as a case study to produce a result in a ranking list of suppliers in order to support the supplier's selection. The application of the Fuzzy-TOPSIS method can be seen as a foundation knowledge to help garment and textile enterprises in particular and Vietnamese enterprises in general can select suitable candidates based on their own set of criteria. This contributes to improve their business efficiency as well as building business development strategies.

Enhancing Supply Chain Resilience: A Study of Additive Manufacturing & Risk Mitigation Capabilities through Grey Theory and Digraph Matrix Analysis

Gaurvendra Singh, Shubhendu Singh, Subhas Chandra Misra, Yash Daultani

#### Abstract

Modern supply chain networks are sophisticated systems reliant on a global network of linked suppliers and manufacturers. Thus, disturbance in one section of the network may swiftly propagate through to other portions, generating a domino effect of delays and supply shortages. This susceptibility of contemporary supply networks to disruptions underscores the necessity for businesses to incorporate resilience into their supply chain strategy. This study, therefore, examines the supply chain risk (SCR) addressal capabilities of additive manufacturing technology (AMT) using a combination of grey theory and digraph matrix approach. The dual methodology approach used in this study allows the analysis of vague and imprecise data in a system and models the interdependencies between several factors. Sixteen supply chain risks and nineteen supply chain risk mitigation strategies (SCRMS) are identified in the study, which have been examined with a focus on AMT. Our results reveal that operational versatility, supplier consolidation, agile production capability, and virtual inventory management are the highest-ranked risk mitigation capabilities of AMT. This study will contribute to understanding the risk mitigation competencies of AMT that will aid supply chain managers in making educated choices on integrating AMT into their operations, establishing comprehensive risk management strategies, and ensuring the resilience of their supply chains against disruptions.

#### A Comprehensive Review of Green Logistics Research: A Bibliometric Analysis Ha Hong Tran, Huy Vu Le

#### Abstract

To analyze the research progress and development drivers of Green Logistics worldwide, this study will utilize Google Scholar's citation database to filter relevant literature from 1995 to 2022, focusing on publications ranked at Q3 or higher, along with other statistical criteria. A total of 300 representative publications have been collected. Based on this dataset, the research team will apply a bibliometric approach to examine the characteristics of the literature and the current hotspots in Green Logistics. The study aims to provide researchers with a comprehensive overview while also identifying gaps in previous studies to help them determine suitable research directions in the future. Additionally, the temporal evolution of the concept, arguments, and research methodologies related to Green Logistics will be highlighted in this analysis.

#### A1.3: Collaborations for Sustainable Supply Chains (1)

Analyzing Strategic Resources in the Plaine de Versailles Food Supply Chain: A Field Diagnostic Study Stessy COUTELLE, Rami ALKHUDARY, Pierre Fenies

#### Abstract

This article centers on the Plaine de Versailles food supply chain, illustrating the evolving agri-food industry driven by shifting consumer preferences. Grounded in the resource-based view (RBV) theory, this study delves into essential strategic resources underpinning supply chain competitiveness. Through an in-depth case study, it unveils a fragmented supply chain marked by diverse logistical approaches among local producers. The study identifies three pivotal logistical processes, emphasizing the significance of logistical expertise. Wholesalers hold a pivotal role but encounter operational constraints, while emerging distribution platforms aim to enhance interactions. The Plaine de Versailles food supply chain mirrors the complexities of the agri-food sector. Effective collaboration, resource optimization, and adaptability are essential to meet consumer demands and ensure transparency. This research paves the way for future investigations and showcases the potential of advanced systems in addressing supply chain challenges amidst evolving consumer behavior and environmental considerations.

Optimizing sales mode selection and marketing effort for a B2C marketplace under green product investment uncertainty

Dinh Anh PHAN, Thi Le Hoa VO

#### Abstract

Uncertainty about the effect of Green Product Investment (GPI) may dissuade manufacturers from making such investments with the aim of enhancing the green performance of their products. This study examines an e-commerce (EC) supply chain involving a manufacturer who determines the product's greenness level and a Business to Customer (B2C) marketplace which can operate in either an agency or a reselling mode and engages in green marketing to promote sales of green products. An analytical model is formulated to drive the optimal values of product greenness, green marketing effort, product quantity, and individual profits of the manufacturer and the B2C marketplace. Our analysis elucidates the circumstances under which the B2C marketplace will elect to implement (or not) green marketing. Furthermore, a comparison is made between the two sales modes in order to determine the optimal approach for implementing green marketing. The results demonstrate that the interaction between GPI uncertainty and the referral fee affects the optimal sales mode selection of the manufacturer and the B2C marketplace. Overall, our research contributes to a deeper understanding of the complex interplay between GPI uncertainty, green marketing, and sales mode selection in an EC supply chain.

Regulatory Costs and Vertical Integration: Evidence from Supply Chain Disclosure Regulations Enshuai Yu

#### Abstract

I study whether and how supply chain disclosure regulations shape corporate vertical boundaries. I employ a 2010 California corporate disclosure mandate designed to eradicate human trafficking and slavery in supply chains. This mandate elevates costs to firms that rely on supply chain parties, specifically reputational and litigation risk, other stakeholder pressure, and information acquisition and monitoring costs. As a result, to better control their supply chains, affected firms vertically integrate, primarily via acquiring supply chain parties. The effect is concentrated among firms facing greater stakeholder pressure (e.g., plaintiffs, consumers, NGOs, and shareholder activists), higher sourcing risk, and asset specificity. Also, following the regulation, affected firms increase overall vertical integration and reduce outsourcing to suppliers. Collectively, my findings suggest that supply chain disclosure regulations incentivize firms to become more vertically integrated.

#### B1.1: Supply chain efficiency and effectiveness

Modeling supply chain viability with intelligent agents and combination of resilience strategies Phu Nguyen, Dmitry Ivanov

#### Abstract

Resilience is an important capability of modern supply chain management. Inspired by the resilience principles of immune systems, we propose a multi-agent simulation approach to investigate how different supply chain strategies can be combined to foster long-term resilience. We first model a simplified supply chain of an electronic manufacturer, including suppliers, a manufacturer, and customers. In practice, when responding to a disruption, an organization deploys a combination of various strategies at different stages of the disruption. Accordingly, we develop three policies representing innate strategies, active adaptive strategies, and passive adaptive strategies within one intelligent agent. These policies reflect the decisions made by different management roles within a manufacturer to remedy the consequences of the ripple effect. Finally, we conduct experiments to evaluate the effectiveness of combined strategies when a supply chain copes with a series of disruptions. This study makes two contributions. First, it proposes an approach to model a viable supply chain by incorporating recurrent human-like decision-making processes. Second, it examines how to reconcile various resilience strategies simultaneously to achieve the desired level of resilience. Future research can scale up our model and extend this approach to other industries.

## The profit optimization model relies on selecting production output and pricing using deep learning and reinforcement learning techniques

Truong Chi, Hoang Do Thanh Tung, Ly Van Kien, Pham Van Khanh

#### Abstract

The rapid development of markets and the increasing diversity of consumer preferences have driven businesses to offer products with varying quality levels while optimizing their supply chains to balance production costs with market demand. This study introduces a model that integrates deep learning and reinforcement learning to optimize production and pricing decisions. The model employs deep neural networks to predict product demand with high accuracy, followed by the application of reinforcement learning to make optimal real-time decisions regarding production and pricing. The results demonstrate that this model not only helps businesses optimize profits but also enhances their competitiveness in the highly volatile market environment. Trends in ai application to enhance scm performance: a Bibliometric study Ha Viet Le

#### Abstract

In the era of the 4th Industrial Revolution, the application of AI in supply chain enterprises is considered a revolution in the informatization of supply chain management. This study aims to investigate the types of documents, volume, research trends, contributions by geographical region, co-authorship relationships, prominent authors, research groups, influential documents, and publication channels in the literature on the application of AI to enhance supply chain management performance. The authors adapted the PRISMA guidelines to assess the suitability of documents indexed on Scopus from 2004 to 2024. The paper employs a bibliometric approach combined with content analysis to conduct descriptive statistics and scientific mapping to highlight relevant entities and their patterns in the knowledge base. The research results confirm the increasing trend of documents over the past two decades, with Articles dominating (202 documents, 46.01%) out of a total of 434 documents. Despite research contributions from many countries around the world, concentrated efforts from authors in 15 countries generated 88.25% of the total documents. Another important finding is that the network of research collaboration between countries is divided into 3 main collaborative clusters: the North America - Europe cluster, including countries such as the United States, the United Kingdom, and Canada - which are developed countries with significant investment in new technology research - has consistent research collaboration every year; the East Asia cluster, with countries like China and South Korea, has published many publications in recent years, reflecting the reality of leveraging the strengths of new AI technology in the supply chain activities of these countries; other clusters with smaller collaborations belong to India, Indonesia, and Thailand, demonstrating the dynamism and development potential in these regions. Other aspects analyzed in this study include authors, research groups, cited documents, and content trends in research on AI applications to enhance SCM performance.

#### B1.2: Logistics Systems Design and Management

Digital Twin for supply chain and operations management: literature review and research potential Lise Nakache, Libo Ren

#### Abstract

The rising of online shopping and the emergence of social commerce in recent years as well as the urban population growth makes activities related to the efficient transportation and distribution of goods in urban logistics increasingly complex. Digital twins (DT) are emerging as new technologies to support decision-making processes in various fields of industry. The advancement of Digital twin and related technologies in the realm of smart cities and mobility allow extending its applicability to urban logistics management. In this paper, we are interested in the application of digital twin for urban logistics management in extreme situations. Extreme situations in urban logistics management occur when a certain transport infrastructure is disturbed or damaged by extreme weather events as flood caused by the heavy rainfalls for example. Our study aims to design a digital twin for urban logistics management under extreme situations using of a robust optimization model for operation planning and a simulation model for the dynamic operational environment simulating.

#### Enhancing Transparency through Blockchain and Internet of Things Technology in Supply Chain Than Lee Lee, Zhao Xiangkun

#### Abstract

This paper provides a new research perspective for the urgent need of business process management for cutting-edge technologies represented by blockchain and Internet of Things technology in the era of Industry 4.0. We systematically study the transformative potential of blockchain and Internet of Things (IoT) technology in the integration of business process management (BPM), with a view to providing new solutions for the development of modern business process management based on Industry 4.0 in practice and the extension of existing theories. These challenges require companies to ensure that their business processes are not only efficient but also transparent. However, traditional BPM tools often rely on centralized data management and processing architectures, which limits the timeliness and reliability of information sharing, making it difficult for enterprises to achieve true end-to-end transparency. We found that the rise of blockchain technology and the IoT has brought a new perspective and approach to modern business process management. In this paper, bibliometric analysis was used to search the relevant literature from Scopus database, and PRISMA process was used to screen the literature. 560 literatures were obtained and imported into VOSviewer for data visualization processing. The results show a strong connection between key nodes such as blockchain, IoT, BPM, enterprise resource management (ERM) and transparency. Blockchain is central to enhancing traceability and security within BPM and is directly linked to transparency, which underscores its role in improving regulatory compliance and operational visibility. IoT connects to BPM, highlighting its impact on enhanced real-time monitoring and operational efficiency. ERM interacts with blockchain and IoT, demonstrating its importance in leveraging these technologies for ERM and decision making. The connected network demonstrates a robust framework in which the integration of blockchain and IoT with BPM can not only solve traditional BPM determination, but also enhance the transparency and efficiency of BPM systems across various industries, thereby reshaping the business process management landscape towards a more transparent and efficient paradigm.

#### An Integration of Blockchain Technology in Supplier Selection Process Hakshith Gowda Ravikumar, Omid Fatahi Valilai

#### Abstract

Supplier and vendor selection is considered as a significant challenge for supply chain long-term performance. The careful selection and assessment of suppliers is a critical first step in ensuring the company's stability. Selecting and evaluating suppliers is a multi-faceted and difficult task. Supplier selection and assessment are often based on data. This information, particularly in non-economic, societal, and ecological dimensions, is not easily accessible, certifiable, or audited. Considering the potential behind the blockchain technology, this paper has proposed a methodology for integration of blockchain technology in the supplier selection process. Conducting a comprehensive literature review, the paper has Considered the existing traditional or existing supplier selection process. Using blockchain technology features especially smart contracts, a new theoretical methodology is proposed. The methodology applies blockchain to tackle the existing problems in supplier selection process like the errors in data collection, authenticity of the data collected, means of collecting data, data storage and access. The proposed methodology includes the selection of criteria and analyzing the supplier performance based on the criteria. The Blockchain enabled platform ensures the integration of data from supplier which benefits from decentralized planning system. The smart contract insures the establishment of supply contracts. The paper has illustrated the practical aspects of implementation of methodology.

#### B1.3: Sustainable SCM practices

#### Research on green consumption behavior of tourists in vietnam Thi Quynh Huong Nguyen, Viet Thai Nguyen, Thi Quynh Trang Bui

#### Abstract

The research explores the green consumption behavior of tourists in Vietnam, examining key factors and relationships using the Value-Attitude-Behavior (VAB) theoretical framework. The study incorporates both qualitative and quantitative methods, surveying 526 tourists across major cities such as Hanoi, Da Nang, and Ho Chi Minh City. Structural Equation Modeling (SEM), conducted through SMARTPLS 4 software, was used to assess the model's validity and reliability. Findings suggest that Environmental Awareness, along with mediating factors like attitudes toward green advertising, environmental concerns, and the socio-ecological benefits, positively influences tourists' green consumption behavior. This research further extends previous studies by highlighting a direct, positive link between Environmental Awareness and green consumer behavior. Additionally, statistically significant variations were found when analyzing the data through a Multi-Group Analysis (MGA) based on nationality and education levels. These results offer valuable insights for tourism stakeholders, supporting the development of strategies aimed at promoting sustainable green practices and contributing to Vietnam's sustainable tourism growth.

The analysis of livelihood portfolios in peru: empirical insights using clustering compositional data method Mai Nguyen, Thi Huong Trinh

#### Abstract

Livelihoods of households in Peru are of interest due to their difficulties and the risks they suffer in the last few years. This paper focuses on characterizing the portfolios in six regions of Peru, using a sample of 1008 households. We first analyze household welfare by the household wealth index and income sources. The cluster analysis method is applied to group households into four clusters. To be more specific, Ffactors impacting livelihood portfolios are different in each cluster, based on their main source of income. Moreover, this study will also point out that Vicuña management contributes minimally to household incomes. Through out this paper, we shall support for the idea that Ppolicy makers aiming to improve the welfare of households in Peru should consider the main sources of household income.

### Exploring the Viability of Electric Vehicle Adoption for Prospective Companies in Outbound Logistics; A Blockchain based Lifecycle Sustainability Assessment Approach

Mohammad Yaser Mofatteh, Christopher Fabian Mattaba, Ma. Keni Lucero Villaruz, Pandurang Kishanrao Kawale, Omid Fatahi Valilai

#### Abstract

Vehicle manufacturers are encouraged to be more transparent in disclosing data related to the Product Carbon Footprint (PCF) methodology of their vehicles, enabling more accurate emissions comparisons. Zero-emission transport is recognized as an environmentally friendly solution to reduce CO2 emissions and air pollutants during vehicle operations, with Hydrogen Fuel Cell Vehicles (HFCVs) considered one of the most promising options compared to traditional Internal Combustion Engine Vehicles (ICEVs) using gasoline and Plug-in Hybrid Electric Vehicles (PHEVs). Hydrogen Production results indicate that the environmental impact of vehicle emissions is significantly influenced by the fuel cycle, and the cleaner the production of hydrogen, the lower the overall environmental impact. HFCVs using green hydrogen show substantial emissions reductions, making them more competitive. The objective of this research on electric truck integration for outbound logistics include identifying and assessing the significant factors for companies implementing electric trucks in their freight operations and evaluating the costeffectiveness of electric trucks compared to traditional diesel or gasoline-powered trucks via Blockchain technology. This includes examining the initial investment costs, operational costs, and potential cost savings associated with electric truck adoption over the long term. This research employs a multifaceted approach to examine the feasibility of integrating electric trucks into existing last-mile delivery infrastructures, considering the practical challenges, regulatory aspects, and technological advancements in the electric vehicle industry. The study will employ a mixed-method approach, combining quantitative surveys and qualitative interviews with industry stakeholders, to provide a comprehensive and comparative analysis that informs not only corporate decision-makers but also policy developers and technology providers seeking to promote sustainable transportation solutions.

#### B2.1: Global value chain and Circular Economy

#### Customer evaluation of reverse logistics on e-commerce platforms in vietnam Huong Tran, Nguyen Ha, Lam Vu, Lo Kim, Vu Ngoc Diep

#### Abstract

The e-commerce sector is experiencing significant growth in Vietnam. However, customers face many difficulties in returning products, which greatly affects the customer experience. Retailers as well as e-commerce platforms face many operational challenges and conflicts between parties. Therefore, research on customer evaluation of reverse logistics activities in e-commerce plays an important role. The study analyzed the survey of 309 responses, using comparative, statistical and descriptive methods. The results of this research are expected to bring positive contributions to online retailers in understanding the needs and desires of customers, thereby creating a throughout return policy, committed to bringing customer satisfaction and a sustainable online shopping experience.

Factors affecting the participation in the global value chain of supporting industry enterprises in Vietnam Thanh Nguyen Thi, Hoa Cao, Luyen Pham, Linh Ngo, Linh Nguyen, Anh Loan

#### Abstract

The research aims to explore and analyze factors affecting the ability of supporting industry enterprises in Vietnam to participate in the global value chain. Based on the distribution of direct survey questionnaires to 120 businesses participating in the supporting industry exhibition VIMEXPO 2023, however, only 88 valid questionnaires were used and the Binary Logistic regression model on SPSS 26 was applied. The results show that product quality and R&D capacity and ensuring accurate delivery times have a positive impact on the ability to participate in the global value chain, in which product quality is the most influential factor. In addition, factors related to the level of government support have a positive correlation with the ability of enterprises to participate in GVCs but are not statistically significant. Based on the research results, the authors propose some suggestions for Vietnamese supporting industry enterprises to accelerate the process of participating in the global value chain.

#### B2.2: Collaborations for Sustainable Supply Chains (2)

Impacts of trust on opportunism in buyer-supplier relationships: The moderating role of psychological safety

Thoa Pham, Tuan Nguyen, Anh Nguyen, Thao Tran

#### Abstract

This study investigates the impacts of affective trust and cognitive trust on weak-form and strong-form opportunism and their impacts across different levels of psychological safety among purchasing agents within Vietnam's firms' supply chain. Using a cross-sectional dataset collected from 220 purchasing agents in Vietnamese firms, we employed partial least squares structural equation modelling (PLS-SEM) to test the proposed hypotheses. The results indicate that affective trust exhibits a statistically significant positive effect solely on strong-form opportunism. Its impact on weak-form opportunism is not statistically significant. Surprisingly, cognitive trust demonstrates a statistically significant positive effect on both weak-form and strong-form opportunism. Notably, under conditions of high level of psychological safety, the previously non-significant effect of affective trust on weak-form opportunism turns significantly negative, warranting further investigation.

Revisiting scm: bridging the gap between existing models and construction realities for enhanced project performance Zanele Matsane

#### Abstract

This study explores the intricacies of supply chain management (SCM) in the construction industry, emphasising the difficulties and differences in implementing SCM principles that were originally developed for the manufacturing sector. This study examines the historical roots of SCM, its development over time, and its use in the field of construction project management. The research endeavours to develop a comprehensive framework for applying SCM in construction by utilising a diverse variety of literature and empirical data. This framework intends to bridge the gap between existing knowledge of construction SCM (CSCM), and the specific issues encountered in construction projects. The study offers a comprehensive analysis of CSCM, taking a new approach to examine SCM in order to address persistent challenges associated with the unique project-based setting and industry fragmentation. The study analyses fundamental components of supply chain networks and their associated operations using a mixed-methods methodology, incorporating data from 117 questionnaires and insights from 71 interviews. This examination results in the development of a comprehensive framework that encourages collaborative effort, therefore improving project performance. This research adds to the ongoing discussion on the future of supply chain management (SCM) in the construction sector by focusing on a retrospective analysis to propel the industry ahead.

#### B2.3: Digital Transformation of Supply Chains

#### Determinants of the decision to use digital banking services of gen z Phuong Dang, Vu Diep

Abstract

Factors, decisions to use digital the article studies the factors influencing the decision to use digital banking services of Generation Z. Research data is mainly obtained through surveys of Generation Z customers of commercial banks. Vietnam. Research results show that factors that positively influence the decision to use digital banking services include expected effectiveness, expected effort, social impact, favourable conditions, and safety/security: confidentiality and Convenience. The level of influence differs between non-users and active customers, with the factor "Expected performance" having the most negligible impact on the non-user group and "Safety/security" having the most negligible impact on the non-user group. Using banking services, generation Z

Optimizing New Product Introductions: A Data-Driven DRO Model Leveraging Historical and Pre-Sale Demand Dynamics

Zhe YUAN

#### Abstract

Technical and Economic Efficiency Measurement of African Commercial Banks: Using Data Envelopment Analysis (DEA) Approach

Evans DARKO, Nadia Saghi-Zedek, Gervais Thenet

#### Abstract

The paper aims to analyze the Technical Efficiency of 70 Commercial banks from 19 African countries from 2009-2020. Using the Data Envelopment Analysis (DEA) method of the two main approaches, Variable Return to Scale (VRS) and Constant Return to Scale (CRS) technique on a Panel Data. We find that African banks have a higher efficacy assessment with the VRS than the CRS technique, thus, with high a Pure Technical Efficiency (PTE) score than Technical Efficiency (TE). Our findings show that the majority of the banks are operating at very low levels of efficiency (not technically efficient), and inability to optimize the conversion of bank assets and liabilities into loan production for customers. Furthermore, the banks are operating inefficiently in scale, economic, and allocative manner due to mismatches in scale of production. Considering these findings, the implications of these inefficiencies extend to the overall economic development and financial stability of the region.

# List of Participants

First Name	LAST NAME	Affiliation	Country
НА	Nguyen Viet	Thuongmai University	Vietnam
PHUONG	Dang Thi Lan	Thuongmai University	Vietnam
DIEP	Vu Ngoc	Thuongmai University	Vietnam
ANH	Nguyen Ngoc	Thuongmai University	Vietnam
LINH	Ngo	Thuongmai University	Vietnam
LUYEN	Pham	Thuongmai University	Vietnam
LINH	Nguyen	Thuongmai University	Vietnam
LOAN	Anh	Thuongmai University	Vietnam
CAO	Ноа	Thuongmai University	Vietnam
THANH	Nguyen	Thuongmai University	Vietnam
СНІ	Truong Thi	Thuongmai University	Vietnam
THAO	Viet Tran	Thuongmai University	Vietnam
THUONG	Trinh Thi	Thuongmai University	Vietnam
TRANG	Bui Thi Quynh	Thuongmai University	Vietnam
THAI	Nguyen Viet	Thuongmai University	Vietnam
HUONG	Nguyen Thi Quynh	Thuongmai University	Vietnam
MAI	Nguyen	Thuongmai University	Vietnam
THAO	Phan Huong	Thuongmai University	Vietnam
THAO	Tran Viet	Thuongmai University	Vietnam
TRANG	Tran	Thuongmai University	Vietnam
НА	Le	Thuongmai University	Vietnam
THUY	Nguyen Thi Thu	Thuongmai University	Vietnam
ALEXANDRE	Dolgui	IMT Atlantique	France
STEFAN	Minner	TUM School of Management	Germany
PASCAL	Zammit	University of Paris Pantheon Assas	France

BOLANDIFAR	Ehsan	HBBC Business School-Peking University, China	China
FATAHI VALILAI	Omid	Constructor University Bremen	Germany
MOFATTEH	Mohammad Yaser	Constructor University Bremen	Germany
DAULTANI	Yash	Indian Institute of Management (IIM) Lucknow	India
MATSANE	Zanele	University of Johannesburg	South Africa
НА	Hong Tran	Foreign Trade University	Vietnam
HUY	Vu Le	Development and Policies Research Center	Vietnam
НОА	Le Thi Vo	University of Rennes	France
TRA	Phuong Tran	Audencia Business School	France
PHAN	Anh Dinh	University of Da Nang	Vietnam
ZHE	Yuan	EMLV Business School	France
PHU	Nguyen	Berlin School of Economics and Law, Germany	Germany
PIERRES	Fenies	University of Paris Pantheon Assas	France
NAKACHE	Lise	University of Paris Pantheon Assas	France
ALKHUDARY	Rami	University of Paris Pantheon Assas	France
REN	Libo	University of Paris Pantheon Assas	France
ENSHUAI	Yu	Boston College	United State
EVANS	Darko	University of Rennes	France
THAN	Lee Lee	Xiamen University Malaysia	Malysia
NINH	Nguyen	RMIT University	Australia

# Organizers

The Association of Vietnamese Scientists and Experts (AVSE Global) was founded in May 2011 with the main purpose of connecting intellectual sources in a systematic way to identify ideas, strategies, and implementation in all fields of sciences and techniques in foreign countries and, at the same time, to make contributions to the development of Vietnam.

Thuongmai University is a state university established in 1960, governed by the Ministry of Education and Training.

Thuongmai University (abbreviated as TMU) is a public university under the national education system of the Socialist Republic of Vietnam. Thuongmai University is a high-quality, multi-major training university which operates under autonomy in close connection with responsibilities for information disclosure and guarantee of opportunities to access education for policy-favored and lowincome people.

# **Collaborating Partners**

EMLV (Ecole de Management Léonard De Vinci) – the Leonard de Vinci Business School Paris-La Defense – is a business school in Paris located at the Pôle universitaire Léonard-de-Vinci in La Defense, the main business district of Paris. It delivers a 5-year program and is accredited by the French government and recognized at the European level by ENQA. The Pôle Universitaire Léonard De Vinci campus also includes a school of engineering (ESILV) and an international school of multimedia (IIM)

Paris-Panthéon-Assas University (French: Université Paris-Panthéon-Assas, IPA: [ynivɛʁsite paʁi pɑiteɔ̃ asas]), commonly known as Panthéon-Assas or Paris 2 (French: Paris II [paʁi dø]), is a university in Paris, often described as the top law school of France.[1] It is considered the direct inheritor of the Faculty of Law of Paris[2] the second-oldest faculty of Law in the world, founded in the 12th century.

Center for Research in Economics and Management the Centre de Recherche en Economie et Management / Center for Research in Economics and Management (UMR 6211) is a Research Unit jointly supported by CNRS, Université of Rennes and University of Caen Normandie. CREM is a multisite laboratory as its members are scholars from these universities and researchers from CNRS.











# Guideline For Session Chairs

Thank you for generously agreeing to chair a session in the VSSCM2024. In this role you have the great opportunity to bring out the best from the speakers and their interaction with the audience. This is a very important contribution to the overall experience of every attendee.

Please take an opportunity to familiarise yourself with our Guidance for Session Chairs and get in touch with us (vsscm2024@sciencesconf.org) should you have any questions or require assistance.

#### GENERAL RESPONSIBILITIES OF A SESSION CHAIR

Each session will be facilitated by a host and chaired by one of our Session Chairs. The host will support the session from a technical point of view; therefore, the chair will not be required to control any of the technical aspects of the event. The role of the chair is to welcome/speak to the attendees, facilitate the interaction between the audience and the presenters, keep the program to time and conclude the session.

If you have any issues whilst you are chairing, please don't panic and keep contact with the hosts. Below is the list of hosts:

Host	Session	Email	Phone Number
Minh Ngoc Vu	A1.1, B1.2, B2.2	ngocvm@tmu.edu.vn	036 868 888 4
Minh Tuan Le	A1.2, B1.1, B2.1	leminhtuan0506@gmail.com	094 808 999 8
Quang Huy Vu	A1.3, B1.3, B2.3	huyvq@tmu.edu.vn	098 989 6867

#### **BEFORE A SESSION:**

- 1. Make sure you have the following: a laptop or desktop with a microphone and webcam, a recent version of Chrome or Firefox and Zoom app and a strong internet connection.
- 2. Check the conference program to re-confirm the day, time, and the session you have been allocated.
- 3. Read in advance the abstract(s), available on the program, for the presentations you will be chairing. This will help you prepare to lead questions and discussion in a fruitful direction.

#### DURING THE SESSION:

4. Briefly introduce the audience to the topic of the session, the titles of papers and the presenters. For online sessions, we recommend that you turn on your video to engage the attendees during the session introduction. This can be done by selecting video connection when joining a Zoom meeting.

- 5. Keep the session to time. Each presentation is generally allowed 20 minutes. Each Q&A discussion is allowed up to 10 minutes. If it looks like someone will run over, we recommend that you briefly step in to give them a 2-minute warning.
- 6. Monitor the chat/questions coming in and facilitate the interaction between the audience and the presenters.

Sometimes the audience may need to clarify their question. If there are not many questions, feel free ask some of your own. Where appropriate give feedback to individual presenters in the spirit of encouraging improvement in presentation.

- 7. Wrap up the session by summarizing the key insights across the papers of your session.
- 8. At the end of the session, invite all participants to take a photo.

# Guideline For Participants

### Session Participation Instruction

Conference date:	08:00 – 17:00 (Vietnam time, GMT+7), Monday, October 21, 2024
Platform:	Onsite at the Thuongmai University and Online via Zoom Webinar

Please follow the timetable below to access various sessions of VSSCM2024. **Note** that **passcode** to attend the online sessions was sent to you privately via email. If you cannot find your passcode, please **contact** Huy Le (huymaeco@gmail.com).

Date	Time	Session	1			2
	08:00 - 08:45		Welcome and Opening Ceremony			
	08:45 - 09:30		The Economics of Digital, Resilient, and Sustainable Supply Chain Management Stefan Minner, Professor of Logistics and Supply Chain Management, TUM School of Management, Germany			
Monday 10:00 - A 23/10/2023 11:30			A1.1: Climate Change Adaptation and Resilience A1.2: Logistics Systems Design and Management A1.3: Collaboration Sustainable Sup Chains (1)		A1.3: Collaborations for Sustainable Supply Chains (1)	
	13:00 - 13:45		Optimal planning under uncertain lead times: cases of assembly and disassembly systems Alexandre Dolgui, Professor of Industrial and Systems Engineering Fellow of IISE, IMT Atlantique, France			
	14:00 - 15:30	B1	B1.1: Supply chain efficiency and effectiveness	B1.2: Blockcl in Suppl	hain and IoT y Chain	B1.3: Sustainable SCM practices

### MONDAY, OCTOBER 21, 2024

Date	Time	Session	1			2
	16:00 - 17:00	B2	B2.1: Global value chain and Circular Economy	B2.2: Collab Sustainab Chair	porations for le Supply ns (2)	B2.3: Digital Transformation of Supply Chains

#### Note for presenters:

1. Make sure you have the following: a laptop or desktop with a microphone and webcam, a recent version of Chrome or Firefox and Zoom app and a strong internet connection.

2. Please send your presentation slides to us (vsscm2024@sciencesconf.org) before the presentation day as a backup plan. Please name your file as <Day>\_<Session number>\_<Name of Presenter>, e.g., Tue\_A2.1\_Dat Luong

3. Keep the presentation to time. Each presentation is generally allowed 20 minutes. Each Q&A discussion is allowed up to 10 minutes.

4. If you have any technical issues whilst you are presenting, please don't panic. We have a copy of your presentation as a backup, so we can load it up for you in the event of any technical difficulties.



# VSSCM2024 Product management



https://vsscm2024.sciencesconf.org/