



I P S E R A
ONLINE CONFERENCE 2021

ABSTRACTS

Addressing the challenges in sustainability performance measurement in the food supply chain: The case of the organic Italian wine

Authors

Dr. Verónica León-Bravo - Politecnico di Milano

Prof. Federico Caniato - Politecnico di Milano

Abstract

This study aims at investigating the challenges that companies in different supply chain stages face when implementing sustainability performance measurement (SPM). A set of eight cases in the Italian organic wine supply chain are studied for identifying and analysing the challenges of SPM application in three supply chain stages: winery cellars, distributors and retailers. Finding in this study evidence that the organic wine supply chain in Italy is active in implementing SPM though companies face several challenges (lack of relevance, costly measurement processes and the pressures from external and internal supply chain actors); and, need to manage several trade-offs.

Track

Competitive Papers

Topic Areas

Sustainability

A framework for implementing gamification in Purchasing and Supply Management education.

Authors

Dr. Stephen Kelly - Edge Hill University

Dr. Peter Vangorp - Edge Hill University

Mr. Dennis Meyer - TU Dortmund University

Mr. Vincent Delke - University of Twente

Abstract

This paper uses the findings from a literature review and series of expert interviews to develop a richer and Purchasing and Supply Management (PSM) context-specific perspective of the different key techniques, tools and principles that can be used to develop gamified learning to enhance the skills required by PSM professionals in dealing with current and future challenges, such as the transformation to Industry 4.0. It also provides further details of the different stages of implementing gamified learning, which can enhance the success of any such provision.

Track

Competitive Papers

Topic Areas

Purchasing Competence

A Kraljic and Competitive Rivalry Perspective on Hospital Procurement During a Pandemic (Covid-19): A Dutch Case Study

Authors

Ms. Barbara Tip - University of Twente

Dr. Frederik Vos - University of Twente

Ms. Esmee Peters - Public Procurement Research Centre, Enschede

Mr. Vincent Delke - University of Twente

Abstract

The application of purchasing portfolio models in hospitals as well as the impact of a pandemic shock on product classifications remains largely unknown. This research aims to assess hospital purchasers' procurement strategies during the Covid-19 pandemic and how the purchasing portfolio categorizations hold up in this situation. This is a qualitative study of hospital purchasing in the Netherlands with thirteen

informants, supported by secondary data from official government publications. An important finding is that purchasers and governments fulfill the role of being important gatekeepers in channeling factor market rivalry, thereby reducing potential harmful competition between and within hospitals.

Track

Competitive Papers

Topic Areas

Public Procurement

Analysing drivers and hinders for green purchasing transportation policy: A systematic review

Authors

Prof. Richard Calvi - USMB

Prof. GISELE MENDY BILEK - UPPA

Dr. Youcef MECHOUAR - UPPA

Prof. Daniel Erhel - USMB

Abstract

The coordination of Logistics actors (shippers i.e buyers, Logistics Service Providers and Carriers) could be at the service of reducing GHG emissions. This article relies on a systematic review to identify the main research topics and contribution for green purchasing of sustainable road transportation in a collaborative approach. This systematic review contributes in analysing drivers, barriers, practices for CO₂ emissions reductions. Further, by comparing buyers and sellers' views on environmental sustainability behaviour's, contrasting patterns will emerge based on the actor's different roles in the supply chain providing further depth trough conceptualising how their different conditions influence green logistics purchasing practices.

Track

Working Papers

Topic Areas

Sustainability

A resource dependency perspective on supplier resource mobilization

Authors

Mr. Lars Goossen - University of Twente

Dr. Frederik Vos - University of Twente

Mrs. Bitá Mirzaei - University of Twente

Prof. Holger Schiele - University of Twente

Abstract

This paper analyses supplier's willingness / acceptance of being dependent upon a particular customer. Based on a survey, it was found that competition uncertainty and awarding preferred customer status have a positive effect on dependence, i.e. acceptance of dependence seems to be a relative phenomenon, not an absolute one.

Track

Competitive Papers

Topic Areas

Buyer-Supplier Relationships

A soft skills experiment in an academic course

Authors

Mr. Klaas Stek - University of Twente

Abstract

The turbulence caused by digitisation and focus on sustainability issues changed PSM personnel requirements. Machines are taking over processes and humans' contribution in the new era. Machines may act like humans but can only support humans in their 'creativity' and 'strategic thinking' but cannot replace humans' soft skills in this role. Learning objectives in PSM courses in higher education are evaluated for not covering soft skills. This study presents an educational soft skills experiment that provides evidence that soft skills learning can successfully involve existing courses.

Track

Competitive Papers

Topic Areas

Purchasing Competence

Assistance for the implementation of AI in procurement - An analysis of maturity models

Authors

Mr. Dennis Meyer - TU Dortmund University

Mr. Matthias Brüggelolte - TU Dortmund University

Mr. Tan Gürpınar - TU Dortmund University

Prof. Michael Henke - TU Dortmund University

Abstract

The implementation of Artificial Intelligence (AI) in business processes shows great potential, this is particularly the case for procurement processes. In practice, however,

there are only few use cases for the implementation of AI in procurement. To address this gap, in this paper maturity models are identified by a systematic literature review and analysed concerning procurement processes and the management dimensions human, technology, organization, and information. As a result, no maturity model addresses all dimensions. Hence, it is discussed whether a maturity model is the most promising methodological support at this stage, or whether a procedure model is more appropriate.

Track

Working Papers

Topic Areas

Technology and Digitalization

Attracting suppliers in project-based relationships

Authors

Mr. Gregor Möllers - University of Twente

Dr. Niels Pulles - University of Twente

Prof. Louise Knight - University of Twente

Abstract

A preferred customer status helps to obtain better resource allocation from suppliers. In project-based buyer-supplier relationships, this can be difficult because there are discontinuities in the relationship and varying project complexity, which influence supplier expectations. It is crucial that these specific expectations are addressed if a project-based customer seeks to become a preferred customer. Therefore, in this study we present quadrant based on project relation continuity and project complexity, that addresses specific important topics around suppliers' expectations per quartile. If these expectations are met or exceeded by the customer, it is likely that it will receive a preferred customer status.

Track

Competitive Papers

Topic Areas

Projects, Buyer-Supplier Relationships, Public Procurement

Big Data Analytics and Machine Learning pathway to Supply Chain Sustainability: The Role of Organizational Agility and Environmental Dynamism

Authors

Prof. Mihalis Giannakis - Audencia Business School

Ms. Linjing Huang - University of Warwick

Abstract

We explore the effect of Big Data Analytics (BDA) and Machine Learning (ML) tools on supply chain sustainability (SCS). We develop a conceptual model that hypothesizes the mediating effect of organizational agility (OA) and the moderating effect of environmental dynamism (ED) on the link between BDA, ML, and SCS. We draw data from a large survey amongst 280 supply chain professionals. We find that BDA/ML have a more prominent effect on the environmental and economic dimensions of SCS, whereas ED moderates the mediating role of OA on SCS. We draw conclusions on how organizations can effectively integrate these technologies.

Track

Working Papers

Topic Areas

Technology and Digitalization

Blockchain as a tool for improving social issues in the fashion supply chain

Authors

Ms. Ana Terra - COPPEAD Graduate School of Business

Dr. Leonardo Marques - COPPEAD Graduate School of Business

Abstract

This document aims to bring a guideline of how blockchain can be used to ensure traceability in the fashion supply chain, resulting in a tool that can be used to monitor social issues through it. By addressing the theory behind the concepts used in this new technology, it is possible to ground the main idealization of the project. The study's scope will also disclose a Brazilian initiative that has already started this theory into practice. To sum up, it will show how traceability can work in the real management world.

Track

Working Papers

Topic Areas

Sustainability, Technology and Digitalization, Networks, Projects, Transparency, Traceability, Visibility

Brand Power Use and Innovative Sources Of Supplier Power in the Fashion Industry in Response to COVID-19

Authors

Dr. Hakan Karaosman - University College Dublin

Prof. Donna Marshall - University College Dublin

Prof. Veronica Villena - The Pennsylvania State University

Abstract

This research investigates the cashmere fashion supply chain consisting of global brands and Italian suppliers over three tiers. We aim to explore the effect of COVID-19 on suppliers across different tiers of the supply chain (SC). We identify external and internal antecedents and their responses; at the brand and supplier levels; to COVID-19 and to brands' power use. We also identify innovative power use by suppliers adding to the power discourse with new power constructs and mechanisms.

Track

Working Papers

Topic Areas

Sustainability, Buyer-Supplier Relationships

Building supply chain resilience through ambidexterity in the context of COVID-19: A single case study from information processing perspective

Authors

Dr. Lujie Chen - Xi'an Jiaotong-Liverpool University

Mr. Fangxu Yan - Xi'an Jiaotong-Liverpool University

Prof. Fu Jia - University of York

Abstract

This paper attempts to develop a theory of supply chain resilience through ambidexterity during COVID-19 pandemic. We conducted a case analysis by choosing one of the biggest Chinese cross-border e-commerce enterprises as our sample. Through case analysis, we identified that a fit between information processing requirements of a firm and its information processing capability leads to greater ambidexterity, which in turn improves supply chain resilience (SCRE). Corporate social responsibility (CSR)-oriented culture also moderates the relationship between SCRE and ambidexterity. This study identified two types of ambidexterity,

exploration/exploitation ambidexterity and instrumentality/morality ambidexterity, as risk mitigation strategies to strengthen SCRE.

Track

Competitive Papers

Topic Areas

Sustainability

Challenges and benefits of transcontinental sourcing - a study with selected companies

Authors

Mr. Thomas Körber - University of Twente

Prof. Holger Schiele - University of Twente

Abstract

This study shows challenges, corresponding solutions, motives and trends regarding transcontinental sourcing as an extreme form of global sourcing. Therefore, 21 interviews with companies affected by transcontinental sourcing are conducted. To structure data gained from the interviews, we use Gioia's model. To sum up, high similarities to global sourcing are found regarding challenges and solutions. Some differences concerning motives and trends can be identified. For example, know-how and technology of transcontinental suppliers are essential motives for purchasing companies. Strong relationships and collaboration with suppliers are named. Despite of crises like Covid-19, companies believe, that transcontinental sourcing will remain important.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Networks, Transparency, Traceability, Visibility, Buyer-Supplier Relationships

Collaborators and supplementers : Profiling the social and health care delivery options of Finnish municipalities through cluster analysis

Authors

Prof. Katri Kauppi - Aalto University

Dr. Suvituulia Taponen - Aalto University

Abstract

Municipalities methods to deliver health and social services are under constant public debate. To better understand how different types of municipalities currently deliver these services, and what are the associated costs, we analyse data for all Finnish municipalities on the delivery of 10 social and healthcare services. We cluster the municipalities based on their service delivery choices, and then examine the differences in municipal background factors and the costs of service delivery between the clusters. The results provide a more detailed understanding of the factors that drive the use of different service delivery decisions, and their overall cost impacts.

Track

Competitive Papers

Topic Areas

Services, Healthcare, Public Procurement

Conceptualization and theorization of lean supply management

Authors

Mr. Fernando Naranjo - Western University

Dr. Larry Menor - Western University

Dr. Fraser Johnson - Western University

Abstract

We present a novel conceptualization and theorization of lean supply management (LSM) that captures contextually specific supply challenges that firms face in fulfilling their LSM performance objectives and their contingent association with specific lean practices. We illustrate the practical relevance of our contextual contingent LSM conceptualization using a Delphi survey of Canadian agri-food experts to examine what specific supply challenges and lean pillars are associated with pursued LSM performance objectives, and explore what lean supply management means from a practitioner's perspective. The theorization underlying this study's novel LSM conceptualization is rooted in insights emanating from tenets of the practice-based view.

Track

Competitive Papers

Topic Areas

Transparency, Traceability, Visibility, Buyer-Supplier Relationships, Other

Contextual considerations when specifying transport services to reduce CO2 emissions

Authors

Mr. Javad Ghanei - IVL Swedish Environmental Research Institute

Dr. Dan Andersson - Chalmers University of Technology

Dr. Linda Styhre - IVL Swedish Environmental Research Institute

Abstract

This paper focus on how contextual factors interact with shippers' level of service specification in their transport-purchases and how the latter interacts with logistical variables influencing CO₂ emissions. Preliminary results of a survey of 146 Swedish manufacturing and wholesale companies provide insight into interactions between some external contextual factors and the level of specification. However, no evidence found suggesting interaction with internal (organisational) factors. Results show that level of service specification influence logistic-related variables. Results provide companies an insight into effects of specifying transport services in their transport-purchases on CO₂ emissions.

Track

Working Papers

Topic Areas

Purchasing Competence, Sustainability, Buyer-Supplier Relationships

COVID-19 crisis and supply chains

Authors

Dr. Ioannis G. Theodorakis - INSEEC Grande École INSEEC U.

Dr. Marek Vins - Prague University of Economics and Business

Dr. Efthymia Kottika - Prague University of Economics and Business

Dr. Ayşegül Özsoy - Koç University

Dr. Miroslav Karliček - Prague University of Economics and Business

Mr. Konstantinos G. Kottikas - Athens University of Economics and Business

Abstract

The COVID-19 crisis impacted all aspects of life and business including how supply chains work across industries. Focusing on the automotive industry, this paper seeks

to conceptualize relevant human-, business-, and broader environmental-centric factors that affect the reaction of the supply chains amidst the dramatic disruption of their normal function due to the current health crisis. As a basic outcome of such a conceptualization, there appears transiliency a significant notion referring to the ability of an organization to both maintain its resiliency under extreme conditions and to transform elements of its business that help it move forward.

Track

Working Papers

Topic Areas

Purchasing Competence, Networks, Other

Critical review of use of qualitative ‘big data’ for PSM to anticipate shortages in a pandemic

Authors

Ms. Esmee Peters - Public Procurement Research Centre, Enschede

Prof. Louise Knight - University of Twente

Ms. Daphne Theodorakopoulos - University of Twente

Dr. Gwenn Englebienne - University of Twente

Dr. Shenghui Wang - University of Twente

Abstract

The rationale underpinning this exploratory study is to assess whether purchasing managers might be able to leverage publicly available big data to anticipate shortages. The analysis was conducted on two publicly available big data sources: one medical- and one governmental database. The most important findings include: 1) potential governmental warning signals categorized in the factor rivalry framework, 2) an analysis of evolution (e.g., frequency of occurrence) of critical materials and supply terms in medical data, and 3) a plot of the timeline of worldwide active measurements

with a direct influence on PPE shortage—to enhance shortage anticipation for purchasing managers.

Track

Competitive Papers

Topic Areas

Healthcare, Public Procurement

Deep tier Supply Chain Finance: an empirical investigation

Authors

Ms. Elisa Medina - Politecnico di Milano

Dr. Luca Mattia Gelsomino - Windesheim University of Applied Sciences

Prof. Federico Caniato - Politecnico di Milano

Mrs. Antonella Moretto - Politecnico di Milano

Abstract

Supply Chain Finance (SCF) has received attention from both academic research and managerial practice, but the research focus is limited to buyer-supplier dyads. This is no longer suitable in distributed and complex Supply Chains (SC), since major financial issues are often faced by second or third tiers suppliers, with negative consequences for the whole SC. Thus, this paper analyses cases of SCF solutions that go beyond the first SC tier, called “deep tier SCF”, to solve financial constraints of actors in need and contributing to the sustainability of the SC. Four models of deep tier SCF are identified and discussed.

Track

Working Papers

Topic Areas

Supply Chain Finance

Delivering socially useful products and services to the underserved: A resource dependence perspective

Authors

Ms. Feigao Huang - University of Tennessee

Dr. Wendy Tate - University of Tennessee

Abstract

Companies need to cope with various supply chain uncertainties to provide socially useful products and services to the poor people. Interviews with social enterprises and text analysis of inclusive business reports were conducted to understand this phenomenon. Drawing on resource dependence theory, this research identified five main sources of uncertainty in the supply chain and six major coping strategies that companies adopted in response to supply chain uncertainties to achieve social and economic viability. Besides, this study also found a high interdependence in the companies operating in low-income markets and that motivates companies to employ coping strategies to reduce uncertainty.

Track

Working Papers

Topic Areas

Sustainability

Design and Adoption of Agility in Purchasing and Supply Management: Conceptual findings based on case study data

Authors

Mrs. Vanessa Kraft - TU Dortmund University

Prof. Elmar Holschbach - South Westphalia University of Applied Sciences

Abstract

Agility is receiving increased attention by practitioners and researchers alike. Although the benefits of agility are widely recognized, research on agility in Purchasing and Supply Management (PSM) is still scarce. A review of the literature revealed large ambiguities in definitions and inaccuracies in the proposed frameworks. It remains unclear how agility can be successfully adopted in PSM organizations. This paper provides an overview of agile practices that are successfully applied in managerial practice based on the preliminary results of 11 case studies. Six categories of agile practices are presented, and their most important characteristics are highlighted.

Track

Working Papers

Topic Areas

Purchasing Competence, Other

Designing pre-commercial procurement: how procurement practices facilitate commercialization of innovative solutions

Authors

Mr. Yannick Beverloo - Rotterdam School of Management, Erasmus University

Dr. Kostas Selviaridis - Lancaster University Management School

Prof. Finn Wynstra - Rotterdam School of Management, Erasmus University

Abstract

This research identifies and quantifies factors influencing the commercialization of innovative solutions developed through pre-commercial procurement instruments, specifically the Dutch SBIR program. Through a GLM- and OLS-analysis on the basis of public data and semi-structured interviews, we find that commercial aspects of an innovative solution should be emphasized more in the early stages of the contracted R&D project so suppliers consider possible commercialization issues for their innovations early in development. This study contributes to the literature by

examining how R&D procurement processes can influence successful market entry of new products or services.

Track

Competitive Papers

Topic Areas

Public Procurement, Other

Developing Sustainable Purchasing and Supply Management Competences Using Critical Incidents

Authors

Dr. Heike Schulze - Manz University of Applied Sciences

Prof. Lydia Bals - Manz University of Applied Sciences

Prof. Jon Warwick - London South Bank University

Abstract

Many companies still struggle with fully implementing sustainable purchasing and supply management (SPSM) practices within their supply chains. While the importance of individual competences of buyers for change toward such practices has been emphasized, how to develop such SPMS-related competences remains under researched. This paper highlights the value and potential of the Critical Incident Technique (CIT) for developing competences in this field. It highlights how the critical incidents (CIs) were developed and how they were applied in training interventions within higher education, public procurement and private procurement settings, following an action research approach.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Sustainability

Diffusing sustainability in supply networks: from the top down or bottom up?

Authors

Prof. Thomas Johnsen - Audencia Business School

Dr. Toloue Miandar - University of Padova

Prof. Federico Caniato - Politecnico di Milano

Prof. Osama Meqdadi - Audencia Business School

Abstract

This paper investigates the diffusion of sustainability in supply networks and the role of the purchasing and supply management (PSM) function in this process. Based on an in-depth case study of a supply network in the coffee industry, we analyze how a focal company seeks to diffuse sustainability through a range of strategies, and the role of PSM in interaction with other internal functions. Emerging findings show that sustainability is diffused not only top-down from the focal company but also bottom-up from suppliers.

Track

Competitive Papers

Topic Areas

Sustainability, Networks

Digitization and its effects on the future of the PSM function in new product development – A Delphi study

Authors

Mr. Manuel Wehrle - Friedrich Alexander Universität

Dr. Hendrik Birkel - Friedrich Alexander Universität

Prof. Evi Hartmann - Friedrich Alexander Universität

Abstract

Bringing innovative products to markets is essential for companies, particularly in markets with intense competition. One of the driving forces behind new product development's (NPD) success is the integration of the functions involved. While intensive research has been conducted on purchasing and supply management (PSM) in the context of driving innovation, research on the future of the PSM function in NPD has been mostly neglected. The present study is concerned with this subject and examines to what extent ever more spreading digitization influences the future of the PSM function in NPD.

Track

Working Papers

Topic Areas

Technology and Digitalization, Other

Driving supplier commitment in strategic buyer-supplier relationships: how can buyers keep their “customer of choice” status?

Authors

Dr. Andrea Patrucco - Florida International University - College of Business

Mrs. Antonella Moretto - Politecnico di Milano

Prof. Tobias Schoenherr - Michigan State University - Eli Broad College of Business

Abstract

Obtaining preferential treatment from suppliers has become essential for many buying firms, as supply networks play a critical role in ensuring differentiation and market success. Once given preferential treatment, what the buyer should do to retain a high level of attractiveness, increase the suppliers' perceived value of the relationship and, ultimately, enhance their commitment? Our research develops a theoretical framework to offer guidance for buyers on how to retain their preferred status. The model is tested

through PLS regression using primary survey data collected from 204 suppliers reporting on their relationship with buyers that they deem as strategic or preferred.

Track

Working Papers

Topic Areas

Buyer-Supplier Relationships

Effects of Virtual Communication and Framing on Buyer-Supplier Negotiations

Authors

Dr. Henrik Franke - ETH Zürich

Dr. Nadine Kiratli - Maastricht University

Dr. Eline van Poucke - Universiteit Antwerpen

Abstract

The objective of this paper is to examine two under-researched realities of managing buyer-supplier (B-S) negotiations. First, it considers that both buyers and suppliers increasingly bring several types of specialists to the negotiation table and, second, picks up the recently accelerated trend of online negotiations via video chats. It sketches a theoretical model combining these elements and their effects on the perceived creative and political climate during the B-S negotiation. The aim of this submission is also to receive feedback on the internal logic of the preliminary hypotheses, potential alternative arguments, or logical extensions.

Track

Working Papers

Topic Areas

Technology and Digitalization, Buyer-Supplier Relationships, Other

Ethical Resource Management In Bottom Of The Pyramid Contexts: Toward A Social Resource Orchestration Theory (SROT)

Authors

Prof. Lydia Bals - Mainz University of Applied Sciences

Prof. Eugenia Rosca - Tilburg University

Dr. Wendy Tate - University of Tennessee

Ms. Feigao Huang - University of Tennessee

Abstract

Beside resource constraints and institutional voids, ethics is an integral part of value creation in BoP contexts. Data was collected via expert interviews, field visits and text analysis with focal firms and support organizations in BoP settings. The focus was on understanding how focal firms engage with external stakeholders to leverage, bundle and structure resources to address environmental contingencies and ethical challenges. The findings imply that companies need to dynamically manage capabilities both internally and externally and engage in resource orchestration with multiple stakeholders. The emergent integrated framework suggests a move toward a social resource orchestration theory (SROT).

Track

Competitive Papers

Topic Areas

Sustainability

Evolutions and disruptions in Procurement Digital Transformation

Authors

Prof. Jean POTAGE - Kedge Business School

Abstract

This paper proposes to unravel what digital technologies have to offer using proven academic models, in order to make a distinction between what may be considered as evolution or disruption in Procurement. The evolution in value creation through process digitization is first of all quantified according to purchasing maturity, and two disruptions are then analyzed: the ongoing platformization of purchases and the upcoming use of Big Data and Artificial Intelligence. At each stage, the operational consequences for the change management to be effected by CPOs are analyzed and discussed. Four tracks for future research in that direction are proposed.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Technology and Digitalization, Buyer-Supplier Relationships

Exploring how startups organize the purchasing function

Authors

Mr. Juliano Tessaro - University of Twente

Dr. Rainer Harms - University of Twente

Prof. Holger Schiele - University of Twente

Abstract

Suppliers are an essential resource for startup success. Startups need suppliers to innovate. Also, a professional purchasing function is vital to manage supplier relationships properly. However, the purchasing function may be immature in startups. As a result, startups may poorly manage supplier relationships. This paper investigates how startups organize the purchasing function through an exploratory approach based on semi-structured interviews conducted with startups in three development stages. Early findings suggest that startups and established companies have similar structures; however, they differ in growth, flexibility, and operative excellence. Also, we offer four propositions for future research.

Track

Working Papers

Topic Areas

Purchasing Competence, Buyer-Supplier Relationships

Exploring Industry 4.0 Professional Roles and Skills within Purchasing and Supply Management

Authors

Mr. Vincent Delke - University of Twente

Dr. Elina Karttunen - LUT

Dr. Stephen Kelly - Edge Hill University

Mr. Klaas Stek - University of Twente

Dr. Michal Tkáč - University of Economics in Bratislava

Abstract

Professional roles, including specific skills for each role, are a step towards higher professionalism and maturity within purchasing and supply management (PSM). The global development towards increasing digitalization, Industry 4.0, globalization, and increasing attention for corporate social responsibility force change within the purchasing organizations. Here, PSM's professional roles and skills are a good starting point to manage these changes by redefining professional roles organized by specific skills and responsibilities. For this reason, based on a systematic literature review and three World Cafés with 29 purchasing professionals, this study compiles a list of Industry 4.0 professional roles and skills in PSM.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Technology and Digitalization

Exploring Supply Chain Finance opportunities in the Agri-food industry

Authors

Ms. Elisa Medina - Politecnico di Milano

Prof. Federico Caniato - Politecnico di Milano

Mrs. Antonella Moretto - Politecnico di Milano

Abstract

Agri-food supply chains' (SC) peculiar characteristics generate financing needs that are not always satisfied at all SC levels, with upstream actors more exposed and struggling to access resources. Innovative financial solutions are needed, and Supply Chain Finance (SCF) can play an important role in solving agri-food financial problems. However, SCF potential in the industry has not been deeply investigated by previous studies. This paper tries to fill the gap in literature regarding SCF implementation in the agri-food industry with a SC perspective, investigating the adoption of different solutions at different SC levels through a series of case studies in Italy.

Track

Competitive Papers

Topic Areas

Supply Chain Finance

Exploring the effects of relational and formal governance on supplier satisfaction

Authors

Mrs. Sigrid Weller - Graz University of Technology

Dr. Niels Pulles - University of Twente

Prof. Bernd M. Zunk - Graz University of Technology

Abstract

The importance of supplier satisfaction has been discussed and shown many times. While supplier satisfaction can impact supplier performance, it can also have an impact on the supplier's pricing policy. In this working paper, we examine how expectations in buyer-supplier relationships shape supplier satisfaction and how this is affected by either relational or formal contracts. We develop hypotheses and describe an experimental setting in which the hypotheses are tested.

Track

Working Papers

Topic Areas

Buyer-Supplier Relationships

Fostering sustainability by the right use of power: a multi-tier supply chain approach

Authors

Ms. Kati Marttinen - LUT University

Prof. Anni-Kaisa Kähkönen - LUT University

Abstract

A firm's ability to cascade sustainability requirements further to the lower tiers of suppliers might be affected by the power relations between the firms. This paper

investigates the sources of power in multi-tier supply chains and studies how power can be used to ensure sustainability in multi-tier supply chains. In this paper, we put the traditional power perspectives to the context of sustainable multi-tier supply chains, and with a case study data of 16 companies, we show that power sources and relations affect the dissemination of sustainability requirements, but also that sustainability complicates the power relationships between the companies.

Track

Working Papers

Topic Areas

Sustainability, Networks, Transparency, Traceability, Visibility, Buyer-Supplier Relationships

Framing the Role of Entrepreneur Suppliers in the Circular Bioeconomy

Authors

Dr. Orlagh Reynolds - University College Dublin

Dr. Aideen O'Dochartaigh - Dublin City University

Prof. Andy Prothero - University College Dublin

Prof. Donna Marshall - University College Dublin

Dr. Enrico Secchi - University College Dublin

Abstract

This action research study examines the factors hindering and facilitating entrepreneur supplier inclusion in circular bioeconomy supply chains through collaborative platforms. Many suppliers in the bioeconomy demonstrate entrepreneurial capabilities and potential which, if fostered, can provide income diversification opportunities, and improve the innovation potential of the circular bioeconomy. We examine the development of a circular bioeconomy platform and the factors facilitating and hindering entrepreneur supplier inclusion by identifying how framing processes shape

'interaction flows'. Through frame analysis, we aim to develop a framework for successful inclusion of entrepreneur suppliers in circular bioeconomy supply chains through platformisation.

Track

Working Papers

Topic Areas

Sustainability, Networks, Buyer-Supplier Relationships

From supplier diversity to economic inclusion: A sustainable model driving social and business value

Authors

Dr. Andrea Sordi - University of Tennessee

Dr. Wendy Tate - University of Tennessee

Ms. Feigao Huang - University of Tennessee

Mr. Ryan Lile - University of Tennessee

Ms. Sahra Nur - University of Tennessee

Abstract

Companies have been launching supplier diversity programs for decades. However, those programs are not a truly sustainable inclusion ecosystem fostering competitive advantage for buyers, suppliers and society. Companies are recognizing the potential of supplier diversity programs in business growth, such as response to the changing demographics and benefits including innovation and flexibility. Yet, challenges remain. Borrowing the 7 pillars Inclusion model from sports, we have renamed it as "The 7 Pillars of Economic Inclusion" to help companies develop sustainable diversity programs, namely, Culture, Competencies, Strategies, Ecosystem, Governance and Structure, Plan & Measure, and Communication.

Track

Working Papers

Topic Areas

Sustainability

Governing blockchain networks

Authors

Mr. Max Emanuel Schwarzer - TU Dortmund University

Abstract

Distributed ledger technologies (DLT) are said to have disruptive potential in operations and supply chain management. Despite the promising outlook, DLT business implementations can rather rarely be observed at the present time. Particularly, a lack of sophisticated governance models turned out to be one of the main problems for practitioners. This note provides a literature review categorizing relevant literature related to DLT governance research. Four different streams of research related to governance of DLT systems were identified. The literature review process also emphasizes the necessity for further research on DLT governance models for inter-organizational applications and platform economies.

Track

Working Papers

Topic Areas

Supply Chain Finance, Technology and Digitalization, Networks, Transparency, Traceability, Visibility

Green public procurement and energy performance contracting Exploring the linkage and improvement opportunities

Authors

Mr. Hasan Hamdan - NTNU

Prof. Luitzen De Boer - NTNU

Prof. Mohamed Hamdy - NTNU

Abstract

Energy Performance Contracting (EPC) is a method to finance energy efficiency investments from cost savings in the building sector. In public projects, public procurement and green public procurement (GPP) are the carrying vehicles of EPC. Though EPC has received much attention in the building sector and can probably be considered among the most effective mechanisms for energy efficiency in the public sector, very few studies have looked at EPC from a public procurement perspective. The current study aims to explore the link between GPP and EPC and propose improvement opportunities for EPC capitalizing on knowledge and practices derived from GPP.

Track

Working Papers

Topic Areas

Sustainability, Projects, Public Procurement

Green Supply Chain Management and Organizational Performance: Analysis of environmental and financial performance in the sports nutrition industry

Authors

Mr. Dieter Wijnen - Open Universiteit

Prof. Janjaap Semeijn - Open Universiteit

Dr. Wim Lambrechts - Open Universiteit

Abstract

This research identifies relationships between Green Supply Chain Management (GSCM) and organizational environmental and financial performance, with focus on supplier collaboration; customer monitoring and regulatory pressures. Quantitative research was set up using the partial least squares method with a sample of 128 respondents in a B2B context. The results imply that supplier collaboration positively affects the implementation of GSCM practices which in turn positively impacts environmental performance. Furthermore, organization size did not seem to affect the relationship between internal GSCM practices and organizational performance, implying that companies of all sizes could see performance benefits through implementing GSCM.

Track

Competitive Papers

Topic Areas

Sustainability, Buyer-Supplier Relationships

Hegemony and dependency in sustainable supply chains

Authors

Mr. Tim Else - The University of Sheffield

Prof. Andrea Genovese - The University of Sheffield

Dr. Sonal Choudhary - The University of Sheffield

Abstract

The UK dairy supply chain is familiar to multifaceted challenges when it comes to sustainable supply chain management. Based on interviews with multiple stakeholders, this study explores the different perceptions of sustainability in the dairy industry, and how power relates to those perceptions. Resource Dependence Theory and the

Cultural Hegemony concept are drawn on to explain influences on sustainable practices. A selection of factors relating to sustainable perceptions emerge from the data, as well as the importance of consumers and their associated loop of power. The central theme of value is then blended with the theoretical lenses.

Track

Competitive Papers

Topic Areas

Sustainability

Here and there: tackling modern slavery in local authority procurement

Authors

Mr. Oliver Kennedy - University of Liverpool

Dr. Joanne Meehan - University of Liverpool

Dr. Bruce Pinnington - University of Liverpool

Abstract

This research sheds light on how Local Authorities account for modern slavery in their procurement practices. Case studies and secondary data were used to explore the interplay between public procurers and political actors. The findings suggest political actors' pressure public procurers to bound efforts to a locality, but this clashes with the unbound nature of modern slavery. We develop the concept of political fidgeting - political interference in operations - to reveal how it harms Local Authorities' ability to tackle systemic modern slavery. The research provides a deeper appreciation of modern slavery by introducing boundaries and tension between public servants.

Track

Competitive Papers

Topic Areas

Transparency, Traceability, Visibility, Public Procurement

Highway to hell: Can collaborative contracting be more than a road paved with good intentions?

Authors

Mr. Tom Aben - Tilburg University

Prof. Wendy van der Valk - Tilburg School of Economics and Management

Prof. Henk Akkermans - Tilburg University

Abstract

Contract literature generally argues that buyers should design contracts to safeguard against self-interested suppliers. However, it could also be argued that suppliers, given their expertise, are better equipped to write contracts, indicating the need to collaborate with suppliers, if not give them the lead. This paper investigates two unique cases in which a supplier leads the contract design process. Preliminary results show that the suppliers are not able to write effective contracts. A plausible explanation seems to lie in the supplier's honest incompetence rather than the self-interested behaviour that suppliers typically should display as assumed in current literature.

Track

Working Papers

Topic Areas

Purchasing Competence, Public Procurement, Buyer-Supplier Relationships

How PSM should manage complex situations. Testing requisite variety theory.

Authors

Prof. Herbert Ruile - Logistikum Schweiz GmbH

Mr. Lukas Lichtsteiner - Logistikum Schweiz GmbH

Abstract

Contemporary purchasing faces ever rising complexity, internally and externally to the company. By investigating how purchasing decision makers act in situations of various complexity, this research attempts to extend on the law of requisite variety. It is assumed, that purchasing decision makers will apply appropriate approaches to cope with increasing complexity. A cross industry survey on managing complex supply projects was performed to investigate senior supply management task recommendation on complex and less complex situations. The analysis of the structural equation model indicates significant correlation between situation and task complexity.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Technology and Digitalization, Networks

How to react to supply chain disruption. A successful case study during COVID-19 pandemic.

Authors

Dr. Margherita Molinaro - University of Udine

Prof. Pietro Romano - University of Udine

Mr. Gianluca Sperone - Zoppas Industries Heating Element Technologies

Abstract

This paper aims at exploring reactive organizational practices to manage the post-disruption phase of extreme events. Even if existing literature clearly identifies them, no specific indications exist on how the reactive organizational practices should be effectively implemented and managed. We address this gap through an extensive case study of an Italian company that successfully dealt with all the disruptions caused by the COVID-19 pandemic. The results show not only the importance of having a structured reactive process coordinated among the functional areas, but also the need of adopting a cyclic rather than linear approach based on a continuous improvement attitude.

Track

Working Papers

Topic Areas

Purchasing Competence, Transparency, Traceability, Visibility

Impacts of Digitization on Freight Forwarding: A Delphi Study

Authors

Mr. Benjamin Müßigmann - Friedrich Alexander Universität

Prof. Evi Hartmann - Friedrich Alexander Universität

Prof. Heiko von der Gracht - Steinbeis University

Abstract

The freight forwarding (FF) industry plays a key role in running global supply chains, with an expected sales revenue of 155\$ billion in 2020. Digitization in supply chain management presents both challenges and opportunities for the FF industry and requires freight forwarders and their customers to adapt. The aim of this study is to examine upcoming changes in the FF industry expected by FF professionals by 2050 against the background of current technological developments in artificial intelligence, big data analytics and blockchain technology. 100 Experts are being surveyed as part of a real time Delphi study, conducted in multiple rounds.

Track

Working Papers

Topic Areas

Technology and Digitalization, Transparency, Traceability, Visibility, Other

Implications of Industry 4.0 implementations on Supply Chain Governance – an interorganizational multi-tier perspective

Authors

Ms. Yuko Melanie Pfaff - Friedrich Alexander Universität

Dr. Hendrik Birkel - Friedrich Alexander Universität

Prof. Evi Hartmann - Friedrich Alexander Universität

Abstract

In the field of Purchasing and Supply Chain Management, organizations no longer compete as individual entities, but rather as integrated supply chains, designed to be economically competitive providing competitive advantage. Their success is based on the integrative ability to manage supply networks of interorganizational relationships. The digital era poses a radical change impacting the structural dynamics of governance beyond organizational boundaries. Contributing to this field by a multiple case study, examining how Industry 4.0 influences governance mechanisms involving multi-tier SCs, the results show a significant impact on relational and contractual governance mechanisms such as new dimensions challenging the existing literature.

Track

Working Papers

Topic Areas

Technology and Digitalization, Networks, Buyer-Supplier Relationships, Other

Industry 4.0 and supply chain resilience

Authors

Mr. Maximilian Gebhardt - Friedrich-Alexander University Erlangen-Nuremberg

Mr. Alexander Spieske - Friedrich-Alexander University Erlangen-Nuremberg

Mr. Matthias Kopyto - Friedrich-Alexander University Erlangen-Nuremberg

Dr. Hendrik Birkel - Friedrich-Alexander University Erlangen-Nuremberg

Abstract

The COVID-19 pandemic has enforced the focus on supply chain resilience (SCRES) and triggered a reevaluation of how digital technologies can support the concept. We provide empirical foresight for the post-COVID-19 maturity of Industry 4.0 technologies in a SCRES context by conducting a two-round Delphi study. We developed 13 future projections, and 64 supply chain management experts evaluated them. We reveal that visibility-enhancing digital solutions will be widely employed for improving SCRES in 2030. Organizations' digital maturity comprising their workforce's digital competencies and their ability to collect and share data in real-time will also be prominent levers.

Track

Working Papers

Topic Areas

Technology and Digitalization, Transparency, Traceability, Visibility

Industry 4.0 influence in supply chains

Authors

Ms. Honey Zimmerman - University of Missouri-St. Louis

Abstract

This study focuses on supply chain relationships and agility in the context of I4.0. Using mixed methods, we set out to answer the research question: Does I4.0 technology influence buyer supplier relationships and supply chain agility, and if so, how? In this exploratory research, we will first interview focus groups from one large buying firm and individuals from its suppliers. Hypotheses will be developed from analyzing the qualitative data and tested in the second phase using surveys of buyer-supplier dyads. The findings of this study add to the supply chain literature around the value and impact of advanced I4.0 technologies.

Track

Working Papers

Topic Areas

Technology and Digitalization, Buyer-Supplier Relationships

Information processing capabilities for managing public procurement complexity

Authors

Ms. Ruth Noemi Francia Sloom - University of Twente

Dr. Hans Voordijk - Univer

Prof. Leentje Volker - University of Twente

Abstract

As governments become increasingly reliant on private organizations for the delivery of public goods and services, public clients in the construction sector increasingly depend on effective procurement capabilities to achieve the required performance of civil infrastructures. For effective procurement, we propose that public clients develop information processing capabilities. Specifically, this study aims to identify and describe information processing drivers and mechanisms in PCP. Based on findings following a qualitative case study, we identified and described three drivers of

information processing needs and four mechanisms for information processing that public clients respectively experienced and employed when procuring complex performance.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Projects, Public Procurement

Innovation intermediaries in a public procurement context: Developing a conceptual framework

Authors

Mr. Maximilian Hammer - Universität der Bundeswehr München

Mr. Ole Schmid - Universität der Bundeswehr München

Prof. Christian von Deimling - Universität der Bundeswehr München

Prof. Michael Essig - Universität der Bundeswehr München

Abstract

In order to solidify the European Union as a world leading innovation location, the European Commission proposes involving innovation intermediaries in public procurement of innovations (PPI). The aim of this paper was to gain a further understanding on innovation intermediaries by analysing the extant literature and developing a conceptual framework on innovation intermediaries in a public procurement context to identify possible research gaps. Concluding, although there has been broad attention attributed to intermediaries and their innovation-inducing effect, there is still need for further research into how intermediaries are involved in and effectively lead to a better adoption of PPI.

Track

Competitive Papers

Topic Areas

Public Procurement

Introducing the presumption map: Who benefits and how the business network is changed?

Authors

Dr. Vojtech Klézl - Örebro University School of Business

Dr. Johan Kask - Örebro University School of Business

Abstract

While there has been an increasing interest in the presumption phenomena, there is still much ambiguity and fussiness, which we aim to address with a proposed multidimensional typology of the presumption phenomena created by integrating extant presumption literature. Four types of presumption are found, each with distinctive meanings, drivers, impacts and business models: co-optional, co-creational, competitive and self-sufficient. This paper follows the typology by graphically representing the typology and introducing the "presumption map", based on two dimensions – main beneficiary and degree of business network change.

Track

Working Papers

Topic Areas

Purchasing Competence, Technology and Digitalization, Networks, Buyer-Supplier Relationships

Invoking resilience during the pandemic

Authors

Prof. Dirk-Jan Kamann - University of Pannonia, Veszprém

Dr. Petra Gyurácz-Németh - University of Pannonia, Faculty of Business and Economics, Veszprem,

Abstract

This contribution, using an innovative methodology incorporating Grounded Theory shows key drivers, processes and topics playing a role in decision making to secure resilience during the pandemic. Adaptability in employment, operations, supplier relations and marketing secured financial survival and availability of products. The background of decision makers and the owner's leadership style determine the attitude governing behaviour, decisions and the degree of shared trust and communication. Adequate responses to daily changing challenges required rapid decision making; decentralized decision authority helped. Obtaining and keeping control was of prime importance. We found high resilience: 97 percent of suppliers were still on board.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Networks, Buyer-Supplier Relationships, Other

Larger, Counter-intuitive and Lasting – The PSM role in responding to the COVID-19 pandemic, exploring opportunities for theoretical and actionable advances

Authors

Prof. Remko van Hoek - Sam M Walton College of Business, University of Arkansas

Abstract

PSM has played an important role in the initial mitigation of risks caused by the COVID-19 pandemic. We explore the nature and scope of this role and develop a roadmap for PSM contributions towards greater supply chain resilience. We find that the role of PSM is (1) multidimensional; responding to supply risks but also to demand and logistics risks, (2) counter to game theory; collaboration increased instead of decrease, (3) multi-stage; beyond the initial response the hardest change efforts are still ahead. The pandemic is accelerating the journey towards future-proof PSM but not necessarily revolutionizing the future of PSM.

Track

Competitive Papers

Topic Areas

Other

Living in a Constant Crisis: Lessons for Public Procurement

Authors

Dr. Jane Lynch - Cardiff University

Prof. Christine Harland - Politecnico di Milano

Prof. Jan Telgen - Public Procurement Research Centre

Dr. Andrea Patrucco - Florida International

Prof. Petra Ferk - Graduate School of Government and European Studies, New University

Prof. Louise Knight - University of Twente

Ms. Esmee Peters - Public Procurement Research Centre, Enschede

Prof. Tunde Tatrai - Corvinus University of Budapest

Dr. Niels Uenk - University of Twente

Abstract

The Covid-19 pandemic is reported as one of the most pervasive crises in the modern world, but it is difficult to ignore the idiosyncrasies between Covid-19 and that of Climate Crisis. Public procurement plays a critical role in tackling crises which are characterized by shortages in food and other critical supplies, not only affecting the quality of life, but causing economic disruption leading to conflict and changes in regulation. The formation of supply networks ensures that volatile demand conditions are met. The purpose of this study is, using interview data from 23 countries, to explore the transferrable lessons from Covid-19.

Track

Working Papers

Topic Areas

Networks, Public Procurement, Humanitarian

Long-term methods in EU centralized public procurement

Authors

Prof. Tunde Tatrai - Corvinus University of Budapest

Ms. Gyongyi Vorosmarty - Corvinus University of Budapest

Abstract

Many central purchasing bodies (CPB) are active in Europe, which have to supply many contracting authorities in the long run. They have serious role in the market of IT procurement and healthcare procurement in the times of Covid. The European regulation allows two methods for this purpose: framework agreements and dynamic purchasing systems. In the paper we examine the activity of CPBs with respect to the two methods. We draw conclusions for the products covered by the main CPBs of 6 EU Member States. Using the Kraljic matrix, we look for a connection between the method and the subject matters.

Track

Working Papers

Topic Areas

Purchasing Competence, Public Procurement

Managing the supply side of platforms: How does complementor management work for data-driven B2B platforms?

Authors

Prof. Wolfgang Buchholz - University of Applied Sciences Münster

Dr. Holger De Bie - Finstreet

Mr. Ralph Kochendörfer - University of Applied Sciences Münster

Abstract

In the so-called ecosystem economy, new data-driven B2B platforms evolve rapidly based on the prospects of digital technology. Thus far, little research has been conducted on service providers, the so-called complementors of data-driven platforms. Therefore, this paper gains deeper insights into the facets of complementor management. For empirical evidence, we draw on semi-structured expert interviews with platform managers. The findings outline a number of differences in managing suppliers compared to managing complementors. In addition, our study shows that the key factors influencing complementor management include platform openness, partnership intensity, strategic fit, and market structure respectively potential.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Networks, Buyer-Supplier Relationships

Manufacturing reshoring: Archetypes development through a systematic literature review

Authors

Dr. Albachiara Boffelli - University of Bergamo

Prof. Hamid Moradlou - Cranfield University

Prof. Luciano Fratocchi - University of L'Aquila

Abstract

Manufacturing reshoring continues to be a growing topic of interest for researchers. Nowadays, there is an increasing demand to create a complete picture of reshoring decision-making. This paper employs the systematic literature review methodology to combine the research on manufacturing reshoring firms and their decision-making. By analysing 63 papers, this article assesses firm factors, motivations, and decision-making. Descriptions of the reshoring motivations of recent papers highlight current trends in the literature. Next, the relationship between decision-making and business characteristics is discussed. Finally, the identification of four archetypical reshoring firms through cross-case thematic analysis proposes a new framework for understanding reshoring.

Track

Competitive Papers

Topic Areas

Networks, Other

Measurability of performance outcomes in digitally enabled environments: A literature review of PBC in the manufacturing sector

Authors

Mr. Luis Prato - Rotterdam School of Management, Erasmus University, Building Mandeville (T), Room T9

Prof. Finn Wynstra - Rotterdam School of Management, Erasmus University

Prof. Wendy van der Valk - Tilburg School of Economics and Management

Abstract

Performance-based contracting (PBC) is gaining importance to manufacturing industries as an innovative business model for the delivery of outcomes. The challenges of availability and cost of information, as well as accurate measurability of performance outcomes, are yet crucial for the implementation of PBC to succeed. Furthermore, the role of Information Systems (IS); namely Digital Technologies (DTs), deserves more attention to minimize these challenges. However, insights into whether and what enhancing effects DTs may have on the measurability of performance outcomes are rather scarce. We intend to reveal these relationships, by conducting a comprehensive review of 32 peer-reviewed empirical publications.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Services, Buyer-Supplier Relationships

Measuring Supply Chain Financial Performance under crisis: A new proposed model

Authors

Mr. Georgios Vousinas - National Technical University of Athens

Prof. Stavros Ponis - National Technical University of Athens

Abstract

Supply Chain Financial Performance has drawn much attention due to the recession created by the global financial crisis of 2008, which caused severe financial problems to companies worldwide and forced them to find new forms of financing their business plans to avoid bankruptcy. The main objective of this paper is to propose a new model for measuring Supply Chain Financial Performance in times of crisis. For this purpose, the SWORD model is developed, a composite rating system that can be applied to every kind of business and based on selected metrics, aims to classify a firm's financial position.

Track

Working Papers

Topic Areas

Supply Chain Finance

Measuring the clients' maturity in smart maintenance supply networks

Authors

Mr. Koos Johannes - Amsterdam University of Applied Sciences

Dr. Hans Voordijk - University of Twente

Dr. Guillermo Aranda-Mena - RMIT University Melbourne

Abstract

This paper aims to develop a tool for measuring the clients' maturity in smart maintenance supply networks. The assessment tool is developed and validated for corporate facilities management organizations using case studies and expert consultation. Based on application of the assessment tool in five cases, conclusions are presented about the levels of maturity found and the strengths and limitations of the assessment tool itself. Also, implications for further research are proposed.

Track

Working Papers

Topic Areas

Technology and Digitalization, Networks, Services

Media reporting on public procurement: an analysis of UK press coverage, 1985-2018.

Authors

Dr. Anthony Flynn - Cardiff University

Dr. Irina Harris - Cardiff University

Abstract

According to agenda-setting theory, the media shapes what issues citizens think about. We take this idea to the procurement field by examining UK press coverage of public procurement. Results show that the press has increasingly placed public procurement on the news agenda, evidenced by indicators like the number of articles published and the incidence of major news stories. The focus of coverage has been on governance failures and socio-economic policy issues. The significance of the results lies in demonstrating how the press has formed a negative narrative around public procurement; one that accentuates failure and missed opportunities.

Track

Competitive Papers

Topic Areas

Public Procurement

Methods of artificial intelligence in procurement: A conceptual literature review

Authors

Mr. Jan Spreitzenbarth - University of Mannheim

Prof. Heiner Stuckenschmidt - University of Mannheim

Prof. Christoph Bode - University of Mannheim

Abstract

Artificial intelligence is a key technology for procurement and its usage is still in its infancy. This work builds upon literature reviews on big data analytics in supply chain management (Min, 2010, Waller and Fawcett, 2013, Souza, 2014, Gunasekaran et al., 2017, Nguyen et al., 2017) focusing on artificial intelligence in procurement. 174 relevant publications have been identified based on a keyword search and consecutive snowball search. These are classified along the procurement process in eleven use case clusters and enriched with practical ideas. Their business value and ease of implementation are assessed through interviews to derive a research agenda.

Track

Competitive Papers

Topic Areas

Technology and Digitalization

Multi-tier sustainable supply chain management: A social systems theory perspective

Authors

Dr. Yu Gong - University of Southampton

Dr. Yan Jiang - Middlesex University

Prof. Fu Jia - University of York

Abstract

This study explores the complexity in multi-tier SSCM through a social systems theory perspective. We conducted a case study on IKEA China's sustainable cotton initiative and examined its five cotton-textile supply chains in China. The findings suggest that in order to cope with environmental complexity in implementing multi-tier sustainable initiatives, focal companies tend to create both internal complexity and collaborative complexity in a variety of forms, such as via supply chain leadership and various governance mechanisms. Furthermore, environmental overlap and available collaborative complexity increase in this process and can feed back into systems to facilitate further creation of requisite variety.

Track

Competitive Papers

Topic Areas

Sustainability, Networks, Buyer-Supplier Relationships

Navigating COVID-19: Legal and Compliance Risks for Supply Chains

Authors

Ms. Caroline Petruzzi McHale - Cleary Gottlieb Steen & Hamilton LLP

Abstract

Management of procurement has become increasingly strategic for companies in recent years due in large part to developments in technology and traceability. The COVID-19 pandemic has brought a new level of complexity to these issues. Companies with geographically-dispersed and multi-tiered supply chains have been among the most affected, facing issues relating to payment or delivery failures, price gouging, supplier solvency and disputes.

This paper presents certain legal and compliance considerations with respect to supply chains, including with respect to operations, corporate governance and liability management as well as an overview of the evolving framework applicable to supply chain due diligence.

Track

Competitive Papers

Topic Areas

Sustainability, Transparency, Traceability, Visibility

On code's content comprehensiveness and ethical compliance

Authors

Ms. Fanny Chen - Rotterdam School of Management, Erasmus University

Prof. Finn Wynstra - Rotterdam School of Management, Erasmus University

Dr. Jan van Dalen - Rotterdam School of Management, Erasmus University

Abstract

Business codes are among the most utilised formal measures to achieve corporate social responsibility. Yet, empirical studies on business codes' effectiveness show diverging results. Some studies found business codes to be effective, others found mixed or counterproductive results. This study examines the effect of business codes' content comprehensiveness on procurement professionals' degree of ethical compliance. Two distinct approaches are applied to measure content comprehensiveness. One using content analysis of business codes and the other using survey responses. Business codes' content comprehensiveness appears, based on the survey responses, to have a positive impact on procurement professionals' degree of ethical compliance.

Track

Competitive Papers

Topic Areas

Other

Procurement under pressure: emerging governance issues in the procurement of medical supplies during the COVID-19 pandemic

Authors

Dr. Jolien Grandia - Erasmus University Rotterdam

Mrs. Rianne Warsen - Erasmus University Rotterdam

Abstract

The outbreak of COVID-19 put healthcare institutions under enormous pressure to quickly procure medical supplies, such as surgical masks and disinfectants, forcing them to engage in new partnerships. Studies show that the successfulness of partnerships is affected by the balance between contractual and relational governance mechanisms. This raises the question if under pressure procurers rely more on relational conditions (e.g. trust) than contractual agreements, which could give rise to various governance issues. We combine insights from public administration, crisis management, and purchasing and supply management to shed light on these governance issues and discuss potential pitfalls.

Track

Competitive Papers

Topic Areas

Healthcare, Buyer-Supplier Relationships, Public Procurement

Proposition of a multilevel digital twin conceptualisation framework: A business perspective

Authors

Mr. Dominik Oehlschlaeger - Bundeswehr University Munich

Prof. Michael Essig - Bundeswehr University Munich

Dr. Andreas Glas - Bundeswehr University Munich

Abstract

Despite its potential impact, the digital twin construct is still vague and has not been fully linked to the supply chain field yet. Therefore, this working paper systematically reviews relevant literature to propose a framework for a sound construct conceptualisation. The framework is built on five constitutional characteristics namely the creation of a digital counterpart, data synchronisation, the capability to enable simulations, the capability to enable life-cycle management, and dynamic data interaction and convergence. By analysing their respective degrees of specification, a multilevel paradigm is proposed, which provides value to the scientific community by mitigating conceptual ambiguity.

Track

Working Papers

Topic Areas

Technology and Digitalization

Public procurement as an attractive customer: A supplier perspective

Authors

Dr. Elina Karttunen - LUT University

Mr. Mika Matela - LUT University

Prof. Jukka Hallikas - LUT University

Dr. Mika Immonen - LUT University

Abstract

To ensure competition in public tendering, the perceptions of suppliers regarding the attractiveness of the public sector must be understood. This study investigates the interaction between suppliers' innovativeness and supply chain ambidexterity and their perceptions on information management capability and customer attractiveness of public organizations. The study is based on a survey of private companies in Finland.

The findings indicate that the ambidexterity of suppliers influences the information management and customer attractiveness of public organizations. Supplier innovativeness has an influence on information management, which in turn influences customer attractiveness.

Track

Competitive Papers

Topic Areas

Public Procurement

Public procurement stimulating Open Data reuse

Authors

Mr. samuel renault - Luxembourg Institute of Science and Technology

Ms. Prune Gautier - Luxembourg Institute of Science and Technology

Mr. Sebastien Martin - Luxembourg Institute of Science and Technology

Dr. Slim Turki - Luxembourg Institute of Science and Technology

Abstract

This paper relates a case study and an action research on the use of public procurement as a stimulator for value generation based on Open Data. The research method consists in State-of-the-Art of Open Data value generation approaches, an analysis of public procurement regulation, the observation of 11 Open Data projects during 3 years, interviews with project managers and awarded SMEs to collect feedback and a review of procurement documentation. While hackathons and acceleration programs are the main way to generate value based on Open Data, this research works shows that traditional public procurement can be used to stimulate innovation.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Public Procurement

Purchasing and Supply Management Research: A text-mining network analytics perspective

Authors

Dr. Robert Suurmond - Maastricht University

Prof. Finn Wynstra - Rotterdam School of Management, Erasmus University

Mr. André Vermeij - Kenedict Innovation Analytics

Mr. Erick Johan Haag - Rotterdam School of Management, Erasmus University

Abstract

Purchasing and Supply Management (PSM) as an academic field has seen a major development in terms of its maturing status, wider topical focus, and increasing methodological rigor as well as variety. We examine research on purchasing and supply management in the form of 3477 journal publications from the period 1995-2019, by means of network analytics. Using text-mining of abstracts, we identify 37 clusters of publications. Based on high-scoring noun phrases and expert review, we provide content-based labels for these clusters and discuss cluster characteristics, in particular the prevalence of disciplines and journals and of specific authors.

Track

Competitive Papers

Topic Areas

Networks, Other

Purchasing and supply management skills and competences for innovation and sustainability: an initial framework

Authors

Mrs. Murielle Francillette - ESSCA School of Management

Mrs. Murielle Francillette - ESSCA School of Management

Dr. Katia picaud bello - ESSCA School of Management

Dr. Volker Koch - Gra

Prof. Holger Schiele - University of Twente

Abstract

This paper provides a theoretical framework of specific PSM competences needed for innovation and sustainability. The sources of the framework are academic literature reviews and analysis of practice-oriented sources such as job advertisements for PSM, sustainability manager positions, innovation managers and a combination of sustainability purchasing and innovation purchasing. Findings indicate the two streams are running in parallel. We contribute to the literature by opening the so far black box "innovation purchaser" and "sustainability purchaser", identifying a dozen of special skills needed for each. We also provide insights to merge the two roles and enable a fulfilment of the Porter-hypothesis.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Sustainability, Other

Purchasing in the area of Innovation and Sustainability: A Study into Current and Future Competences

Authors

Dr. Volker Koch - Graz University of Technology

Mr. Klaas Stek - University of Twente

Dr. Katia picaud bello - ESSCA School of Management

Abstract

This research aims to find current and future competences for purchasing professionals in the area of sustainability and innovation. Quantitative and qualitative methods were used: a survey and expert discussions. The survey participants rated their current innovation sourcing and sustainability competence levels. The expert discussions focused on future competences. In both studies common grounds were found (e.g. legal, innovation and sustainability knowledge; interpersonal skills and creativity.) whereas the expert discussions newly identified "out of the box thinking for radical innovation", "start-up management" and "self-development" competences. It is essential that purchasers open up themselves and think different for change to come.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Sustainability

Recontextualizing information sharing in supply chains 4.0: evidence from the European automotive industry

Authors

Mrs. Giovanna Culot - University of Udine

Dr. Guido Orzes - Free University of Bozen-Bolzano

Prof. Marco Sartor - University of Udine

Prof. Guido Nassimbeni - University of Udine

Abstract

Information sharing has a long-lived history in supply chain management research. Despite the promise of tangible benefits, previous studies have raised doubts about its real practice. Over the last few years, digital technologies have increased dramatically the opportunities for data generation, storage, analysis and access. Few studies have investigated whether these opportunities relate to a new stance on information sharing. This paper develops a case study analysis within automotive extended supply chains. Results show that – alongside already theorized dynamics – new trends can be seen at the horizon requiring scholars to rethink some assumptions underpinning existing frameworks.

Track

Working Papers

Topic Areas

Technology and Digitalization, Transparency, Traceability, Visibility

Resilience through supply ecosystems

Authors

Mr. Christopher Münch - Friedrich Alexander Universität

Mr. Emanuel Marx - Friedrich Alexander Universität

Prof. Evi Hartmann - Friedrich Alexander Universität

Prof. Martin Matzner - Friedrich Alexander Universität

Abstract

COVID-19 is an example of supply chain disruption and illustrates how vulnerable existing supply chains are. Fundamental restructuring is necessary to ensure the robustness and resilience of supply chains in the future. The transformation of supply

chains into ecosystems enables increased resilience but is associated with challenges. This working paper addresses this issue and examines the resulting challenges within a supply chain ecosystem by conducting a multiple case study. The results show that the actors' roles will change, which will lead to challenges, especially in the internal organization of the operator and the coupling to the customer.

Track

Working Papers

Topic Areas

Technology and Digitalization, Networks, Transparency, Traceability, Visibility, Buyer-Supplier Relationships

Rethinking business models and CSR during a crisis: View on supply chain relationships

Authors

Dr. Anne Söderman - University of Vaasa

Dr. Päivi Jokela - University of Turku

Abstract

The study focuses on scrutinizing the interplay between business model, corporate social responsibility, and buyer-supplier relationships during a crisis. The study also aims at demonstrating how CSR is perceived in relation to the business models and risk management. Data based on interviews will be collected in SMEs in Finland, Israel, and Spain. The study contribute to theory building in both business model and CSR literature by increasing understanding about the link between them in the context of buyer-supplier relationships. Moreover, the study introduces best practices, responding to the call for conducting empirical research on CSR in the context of SMEs.

Track

Working Papers

Topic Areas

Sustainability, Networks, Buyer-Supplier Relationships

Re-thinking Desert-Locust Emergency Operations Supply-Chain In the age of worldwide pandemics

Authors

Mr. Davide Blancato - Food Agriculture Organization (FAO)

Abstract

This paper will introduce first the Desert Locust crises recurring supply-chain challenges faced by FAO. Then, it will present the specific context of the still ongoing, crisis, and how the Covid-19 World-wide Pandemic affected the supply chain. Finally, it will explain how FAO had to adjust its initial sourcing and supply-chain strategy, developed in Jan 2020, to the new context determined by the Pandemic. This analysis will support three concrete proposals, which are the ultimate objective of this essay, for possible reinforcement of DL emergency supply-chain setup and FAO's possible future role to support governments facing new Locust crisis.

Track

Competitive Papers

Topic Areas

Sustainability, Technology and Digitalization, Projects, Public Procurement, Humanitarian

Reverse Logistics Capabilities and Supply Chain Performance in Ugandan Pharmaceutical Industry

Authors

Ms. Zam Namweseza - Abacus parenteral drugs Ltd / Kyambogo University

Dr. Charles Ndandiko - Kyambogo University

Dr. Peter Obanda - Kyambogo University

Abstract

Efficient reverse logistics in pharmaceutical industry is essential for the proper management of returns and recalls as medicines are high-value products critical to the health of consumers and protection of the environment. In this study we establish the effect of reverse logistics capabilities on supply chain performance in Uganda's pharmaceutical industry. We randomly selected pharmaceutical companies in the central region. Three capability constructs namely, information management systems, process formalization and flexibility, were established to significantly affect supply chain performance. However, hierarchical regression found no significant moderating effect of top management support between reverse logistics capabilities and supply chain performance.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Healthcare, Transparency, Traceability, Visibility, Other

RPA improves procurement process and support digital transformation

Authors

Mr. Fabio Fontes - Universität Twente

Prof. Holger Schiele - University of Twente

Abstract

The intention of this paper is to support procurement professionals on practical RPA (Robotic Process Automation) implementation and contribute further for the digital road map and applicable science for procurement. The research scope starts analysing catalogue system prices update process after negotiations and reach a future price management fully automatic scenario in a pharmaceutical company in Brazil. The main finding concentrates on RPA efficiency as an application if proper implemented and how DSR (Design Science Research) methodology can contribute to the digital transformation by addressing an opportunity or problem through artefacts generating useful guides and new scientific knowledge.

Track

Working Papers

Topic Areas

Technology and Digitalization

Self-perceived Gender Differences in Purchasing

Authors

Mr. Klaas Stek - University of Twente & Graz University of Technology

Ms. Tess Bijl - University of Twente

Dr. Aldis G. Sigurðardóttir - University of Twente

Abstract

Females account for only 12 per cent of the CPOs in Europe, which raises questions regarding gender differences and performance among purchasing and supply (chain) management (PSM) professionals. This study found that gender differences in competence levels depend on age or stage of life; no gender differences of purchasers in their twenties and fifties are found. However, in their thirties and forties, females assess

themselves significantly lower on several competences than males. This study emphasises diversifying and nurturing the female PSM work staff to answer the "talent war", which both leads to competitive advantages.

Track

Competitive Papers

Topic Areas

Purchasing Competence

Social Accountability 8000 discontinuation and the implementation of alternative initiatives

Authors

Ms. Irene Marcuzzi - Università degli Studi di Udine

Dr. Guido Orzes - Free University of Bozen-Bolzano

Prof. Guido Nassimbeni - University of Udine

Abstract

Several initiatives exist today to aid companies in operating in a socially sustainable way and to signal this commitment to their stakeholders. Out of these, SA8000 stands out as a global social management standard (Koster et al., 2018). Despite a forecasted certification growing trend, data reveal many certified firms are abandoning SA8000. This aspect remains still unexplored.

This study will contribute to the existing debate by conceptually providing a theoretical advancement towards the reasons that drive companies in discontinuing SA8000, and by shifting the focus to the firms that choose not to renew their certification (Mosgaard and Kristensen, 2020).

Track

Working Papers

Topic Areas

Sustainability

Sourcing Online Review Services - Differences in Preference Structures between Online Retailers and Traditional Companies

Authors

Prof. Tatjana König - Saarland Business School, htw saar, Saarbrücken

Ms. Nika Hein - Saarland Business School, htw saar, Saarbrücken

Ms. Vivien Nimsgern - Esch Brand Consultants

Abstract

Increasingly companies are challenged by complex sourcing decisions. This paper focuses on the value exchange between suppliers and companies sourcing online review services. Conjoint analysis is used to measure preference structures for these services in two company surveys ($n_1 = 135$ online retailers, $n_2=115$ traditional companies). Results show that price is the most, and communication channels the second most important criterion in both segments. Value contributions differ significantly for individual channels and for individual suppliers. Service providers in this field need to know the preference structures of different customer segments in order to design and price their offers accordingly.

Track

Competitive Papers

Topic Areas

Sustainability, Services, Buyer-Supplier Relationships

Strategic Cost Management from a Purchasing Perspective: Development of a conceptual research framework

Authors

Mr. Moritz Brandstetter - Procurement Working Group, Bundeswehr University Munich

Prof. Christian von Deimling - Universität der Bundeswehr München

Prof. Michael Essig - Universität der Bundeswehr München

Abstract

This paper explores strategic cost management from a purchasing and supply management perspective. The supply side of any organization is gaining increasing attention as companies focus on their core competencies and see potential in outsourcing goods and services. Hence there is a need to assess, plan, and control the down-stream part. A problematizing literature indicates weaknesses on the conceptual stage and a lack of holistic research. A conceptual research framework is proposed, and the paper offers first empirical evidence from two research streams for the presumed linkage between strategic cost management and purchasing and supply management.

Track

Working Papers

Topic Areas

Supply Chain Finance, Purchasing Competence, Networks, Transparency, Traceability, Visibility

Strategy of supply chain finance selection for working capital optimization

Authors

Ms. Anastasiia Ivakina - Graduate School of Management

Prof. Nikolay Zenkevich - Graduate School of Management

Ms. Yana Kuzmina - Graduate School of Management

Abstract

The study addresses the problem of companies facing the critical need for liquidity and profitability improvement by developing models and algorithms for joint working capital management (WCM) through supply chain finance (SCF) instruments selection and further adoption for the case of the three-stage supply chain. Firstly, a sequential application of models provides optimal working capital levels for minimal total SC financial costs on working capital under the specific constraints, including liquidity-profitability tradeoff and individual costs on working capital maintenance. Secondly, it clearly identifies ways to achieve minimal total SC costs on working capital and higher liquidity.

Track

Competitive Papers

Topic Areas

Supply Chain Finance, Buyer-Supplier Relationships

Supplier Diversity in Brazilian Firms

Authors

Prof. Priscila Miguel - FGV-EAESP

Prof. Maria José Tonelli - FGV EAESP

Prof. Cristiane Biazzin - Northern Kentucky University

Ms. Vittoria Loviscek - FGV EAESP

Abstract

This paper aims to empirically investigate how buying companies in Brazil are implementing volunteered supplier diversity program. This study identified enablers and barriers for such initiatives based on interviews with buyers, suppliers, and third-

party organizations based on interviews with companies' representatives, minorities suppliers and NGOs. Among others, our findings provide evidence that while an organizational culture of diversity and customer-focus motivate organizations, the barriers are mostly related to buyers' profile, lack of a clear guideline, lack of qualified minority suppliers and prejudice.

Track

Competitive Papers

Topic Areas

Sustainability

Supplier Performance Measurement for Embedded Software Projects in Automotive Industry: Developing a conceptual research framework.

Authors

Mrs. Maria Hannewald - Universität der Bundeswehr München

Prof. Christian von Deimling - Universität der Bundeswehr München

Prof. Michael Essig - Universität der Bundeswehr München

Abstract

In today's cars, software runs engines, controls safety features, entertains passengers and connects each car to mobile and GPS networks. The employed software is the result of complex software development projects that are often realized by a multitude of software supplier networks. In order to secure the success of those software development projects, it seems necessary for OEMs to not only exercise a dyadic supplier performance measurement but to extend it to a supplier network level. Against this background, a conceptual research framework is developed to systematize the research field of supplier (network) performance measurement for embedded software development projects.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Networks, Buyer-Supplier Relationships

Supplier selection with a “lottery” component - Empirical analyses of rank reversal

Authors

Mr. Gijsbert Engh - University of Twente

Mr. Yoran Nijenhuis - University of Twente

Prof. Fredo Schotanus - Utrecht University

Prof. Jan Telgen - University of Twente

Abstract

Relative scoring methods are often used in supplier selection models. A disadvantage of relative methods is the possibility of rank reversal: a changed order in supplier ranking after removal or entrance of another bid. We show how often this can occur based on a large dataset. After adding fictional losing bids, in 1 out of 5 tenders rank reversal occurs. In simulations without adding bids, for curved relative methods rank reversal can occur in 1 out of 7 to 1 out of 25 tenders in common circumstances. We argue that such methods should not be used in public procurement.

Track

Competitive Papers

Topic Areas

Public Procurement, Other

Suppliers' Roles in Sustainability in Early Product Development Phases

Authors

Mr. Benjamin Groeneveld - University of Twente

Ms. Shantal Kartoidjojo - University of Twente

Ms. Paulien Kuiper - University of Twente

Mr. Dolf Reineman - University of Twente

Mr. Klaas Stek - University of Twente

Abstract

Firms depend on suppliers in early product development phases regarding sustainability. Governments introduce due diligence requirements legislation; firms are held accountable for violations by upstream suppliers. This study identifies five supplier roles in early product development phases in sustainability: the suppliers' role as a 1) knowledge source, 2) co-creator, 3) innovator, 4) moderator, and 5) disseminator. Traditionally, suppliers provide knowledge by supplying sustainability-oriented innovative solutions or co-creators to co-develop new green products. Relatively new are overarching moderating roles when contributing to environmental practices and performance and the disseminator role in which the supplier communicates the focal firm's sustainability standards upstream.

Track

Competitive Papers

Topic Areas

Sustainability, Buyer-Supplier Relationships

Supplier willingness to engage in outcome-based contracts in a multi-party setting

Authors

Mrs. Anna Nikulina - Rotterdam School of Management, Erasmus University

Prof. Finn Wynstra - Rotterdam School of Management, Erasmus University

Abstract

Performance-based contracts (PBC) research accumulated substantial knowledge on reward design and ways to reduce outcome uncertainty. However, it primarily looks at buyer-supplier dyads, while suppliers often depend on their sub-suppliers for outcome creation. Through a comparative case study, we identify how PBCs can be designed in a multi-party setting in such a way that (sub)suppliers are motivated to accept the contract, despite low outcome attributability and high financial risks. We find that both contractual and relational governance affect supplier motivation. Our study adds to the knowledge on PBC in multi-party settings, and to the more fine-grained understanding of relational governance.

Track

Competitive Papers

Topic Areas

Networks, Projects, Buyer-Supplier Relationships, Other

Supply base taxonomy: A geographical analysis in the textile-fashion industry

Authors

Dr. Albachiara Boffelli - University of Bergamo

Mr. Sebastian Birolini - University of Bergamo

Dr. Mattia Cattaneo - University of Bergamo

Prof. Matteo Kalchschmidt - University of Bergamo

Abstract

In the last decades, industries have been characterized by a growing supply chain expansion towards international locations. Among others, the textile-fashion industry has been increasingly characterized by a global presence, with multinational companies acting as focal firms. In this study, we aim to investigate whether the geographical distribution of the supply base can play a crucial role in ensuring firms a competitive advantage within today dynamic and globalized markets. By analysing the supply base of 50 focal firms in the textile-fashion industry, we find two archetypes of supply base and link them with end-market characteristics and performance results.

Track

Working Papers

Topic Areas

Networks, Transparency, Traceability, Visibility

Supply Chain Finance: delivering on its promises? A post-adoption supplier perspective

Authors

Mr. Christiaan de Goeij - Windesheim University of Applied Sciences

Dr. Luca Mattia Gelsomino - Windesheim University of Applied Sciences

Prof. Federico Caniato - Politecnico di Milano

Mrs. Antonella Moretto - Politecnico di Milano

Dr. Michiel Steeman - Windesheim University of Applied Sciences

Abstract

In Supply Chain Finance (SCF) literature there is a knowledge gap on post-adoption research. In this study, we do stage research wherein we use data from both before and after adoption to explore how the adoption process of Reverse Factoring (RF) for

suppliers is guided and affected by changes in relevant variables over time. Grounding on Innovation Diffusion Theory (IDT) and SCF literature, this study proposes a novel research model for assessing the advantages and disadvantages of RF for suppliers. Our results show clear differences in perceived benefits of RF for suppliers before and after the adoption.

Track

Working Papers

Topic Areas

Supply Chain Finance, Sustainability, Technology and Digitalization, Transparency, Traceability, Visibility, Buyer-Supplier Relationships

Supply chain finance: how do supply chain strategies perform in mitigating supply chain disruption and commodity price volatility risks?

Authors

Dr. Roberta Pellegrino - Politecnico di Bari

Abstract

Although growing interest in Supply Chain Finance (SCF), it remains an understudied topic in the field of operations and supply chain management. We adopt the supply chain-oriented perspective to investigate how operations and supply chain management decisions, particularly sourcing decisions such as multiple sourcing, may help firms in dealing with two major challenges of SCF, supply chain disruptions and commodity price volatility (CPV). We develop a model that combines a novel problem setting to holistically investigate the effect of multiple sourcing under supply disruptions and price volatility.

Track

Competitive Papers

Topic Areas

Supply Chain Finance, Other

Supply chain management & COVID-19

Authors

Prof. Karine Doan - Institut du Management des villes et du territoire, Haute école de gestion Arc

Mr. Mathias Rota - Institut du Management des villes et du territoire, Haute école de gestion Arc

Abstract

The measures put in place in Switzerland and around the world to limit the spread of COVID-19 have profoundly affected supply chains, which have been expanding globally since the 1980s. This unprecedented disruption has exposed the many flaws in today's supply chains. Based on a survey submitted to Swiss SMEs and semi-directive interviews, this exploratory study highlights that vulnerabilities lie primarily in forecasting, volatile customer demands and dependency on suppliers. To overcome this situation, the most efficient measures taken by companies is to strengthen collaboration with stakeholders, increase visibility of the supply chain and build up safety stocks.

Track

Competitive Papers

Topic Areas

Other

Supply Chain Resilience during the COVID-19 Pandemic: Learnings from a Multiple Case Study Design

Authors

Mr. Alexander Spieske - Friedrich-Alexander University Erlangen-Nuremberg

Mr. Maximilian Gebhardt - Friedrich-Alexander University Erlangen-Nuremberg

Mr. Matthias Kopyto - Friedrich-Alexander University Erlangen-Nuremberg

Dr. Hendrik Birkel - Friedrich-Alexander University Erlangen-Nuremberg

Abstract

The COVID-19 pandemic revealed important gaps in companies' risk management and scholars' previous contributions to supply chain resilience literature. We present empirical evidence from a multiple case study design to identify specific supply chain challenges caused by a pandemic and potential mitigation measures. Based on a new supply chain resilience framework, we analyze companies' challenges, countermeasures, and resilience objectives during the COVID-19 pandemic. Furthermore, we perform a cross-case analysis and develop insights on steering supply chains successfully through a pandemic. Our findings reveal that strengthening the existing supply base and leveraging digital technologies are promising mitigation measures in a pandemic.

Track

Working Papers

Topic Areas

Technology and Digitalization, Transparency, Traceability, Visibility

Supply chains must evolve into supply chain ecosystems: why, and lessons from the COVID-19 pandemic

Authors

Dr. Godfrey Mugurusi - Department of Industrial Economics & technology management in Gjøvik, Norwegian University of Science and Technology.

Abstract

This paper builds further on the theses of Ketchen Jr et al, (2014) and Millar (2015) that the linearity of term supply chain (SC) omits the nature of complexity many firms face today. In this paper I advance the idea that viewing SCs as ecosystems offers a much better perspective to problems that the SC view has failed to solve over the years. I draw lessons from the COVID-19 pandemic to advance that the SC ecosystems view offers a platform for SC actors to easily collaborate, share resources "equally", and scale up/down their assets which speeds decision-making in SC networks.

Track

Working Papers

Topic Areas

Networks, Transparency, Traceability, Visibility, Buyer-Supplier Relationships

Supply chain traceability systems as a governance mechanism to combat agency problems

Authors

Mr. Rob Glew - University of Cambridge

Dr. Ala Arvidsson - Chalmers University of Technology

Abstract

This paper focuses on the role of 'supply chain traceability system's (SCTS) as a governance mechanism to deal with supplier opportunism and information asymmetry upstream of the supply chains. Building on the tenants of Agency Theory, and the

potential generated from the advances in digital technologies, we develop a framework discussing how SCTS can contribute to supply chain relationship governance. Our framework articulates which SCTS design dimensions are best suited to govern relationships in a given supply chain and, and in doing so, provides a general toolbox for practitioners to design SCTSs.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Transparency, Traceability, Visibility, Buyer-Supplier Relationships

Supply Chain Transparency, Visibility & Traceability

Authors

Mr. Raghu K - Working Professional (Project Sourcing Buyer); Under Graduate Student of Mechanical Engineering, Vidya Vikas Institute of Engineering and Technology, Mysore.

Mr. Anil Kumar - Working Professional (Project Sourcing Buyer)

Mr. Satish M - Working Professional (Lead Sourcing Specialist); Under Graduate Student at Visvesvaraya College of Engineering

Abstract

The ambition of this paper focuses on mapping the whole supply chain and to upkeep the growing markets, companies to have their supply chain process agile, effective and efficient. To undertake this companies need the product's records and their historical information throughout the supply chain process. An automatic traceability system allows them to track the location of product in downstream and trace the processing history and other treatment of the product in upstream. But the major challenge is that the companies don't want to share the information globally. Our study examines the literatures about traceability system in supply chain process.

Track

Working Papers

Topic Areas

Transparency, Traceability, Visibility

Sustainable Supply Chain Management in Luxury Brand Conglomerates: Window Dress to Impress?

Authors

Dr. Wim Lambrechts - Open Universiteit

Dr. Kim Janssens - Open Universiteit

Dr. Pınar Özuyar - Istinye University

Mr. Jason Mandels - Open Universiteit

Abstract

Consumers have become increasingly aware of unethical and unsustainable conditions in globalized supply chains. The Rana Plaza factory collapse in 2013 led to public outrage, and however mainly associated with the fast fashion industry, luxury brands were also accused of unethical sourcing practices. Through a qualitative thematic analysis, this study focuses on how luxury brand conglomerates recontextualize sustainability in their supply chain to fit their (luxury) narrative. It was found that they frame the concept of sustainability to match their narrative, however, it was decoupled from luxury value. Furthermore, in recontextualizing sustainability, issues of ethical sourcing and responsibility are ignored.

Track

Competitive Papers

Topic Areas

Sustainability

Sustainability and buyer-supplier relationships – in search of a novel perspective

Authors

Mr. Sepehr Ebrahimian Amiri - Tampere University

Prof. Jussi Heikkilä - Tampere University

Abstract

The objective of this paper is to investigate the recent literature on the intersection of buyer-supplier relationships and sustainability and identify underexplored research questions and a novel perspective on the topic. To start, a literature review is conducted on the relevant body of knowledge. Based on the initial review, it is concluded that a promising avenue exists to advance the knowledge on the topic with several gaps and research questions requiring further investigation.[JH(1) In particular, the study of social sustainability through the management of buyer-supplier relationships is emphasized as an underexplored potential research avenue.

Track

Working Papers

Topic Areas

Sustainability, Buyer-Supplier Relationships

Taking disruptions personal: The effects of personality factors on supply chain disruptions and resilience

Authors

Mr. Sebastian Gehrlein - University of Mannheim

Prof. Christoph Bode - University of Mannheim

Abstract

Individuals and the role of their personality have received scant attention in research on supply chain disruptions and resilience. This study seeks to address this issue. To this end, we review the basic concepts of the supply chain disruption and resilience literature, as well as of the personality-related literature and then develop hypotheses that predict the effects of different personality traits on supply chain resilience of immediate business environments of individuals. These predictions will be tested using survey data collected among supply chain managers. In a subsequent experimental study, we scrutinize underlying reasons and mechanisms of such potential differences.

Track

Working Papers

Topic Areas

Purchasing Competence, Buyer-Supplier Relationships, Other

The Caiman management in the Cuniã Lake Extractive Reserve: A Community of Practice lens

Authors

Ms. Cassia Yamanaka - Federal University of Rondônia

Dr. Mariluce Paes de Souza - Federal University of Rondônia

Dr. Leonardo Marques - COPPEAD Graduate School of Business

Abstract

The study of sustainable supply in indigenous populations is scant in our literature. The management of alligators, in specific *Caiman crocodylus* and *Melanosuchus niger*, carried out in the Cuniã Lake Extractive Reserve has been implemented based on communal development of knowledge. Our study characterizes such development through a Community of Practice (CoP) lens. The case shows that learning through collective culminated in economic development and safety for the residents, in addition to recognition regarding quality of caiman meat produced. Results show a

CoP as a driver of sustainable supply based on Amazonian natural resources and valuing collective learning.

Track

Competitive Papers

Topic Areas

Sustainability

The digitalisation of purchasing - An empirical analysis on the impact of new technologies on organization

Authors

Dr. Jacopo Colombo - University of Bergamo

Prof. Hervé Legenvre - THE EUROPEAN INSTITUTE OF PURCHASING MANAGEMENT

Prof. Matteo Kalchschmidt - University of Bergamo

Dr. Albachiara Boffelli - University of Bergamo

Dr. Lucia Monzio Compagnoni - University of Bergamo

Abstract

The study aims to analyse the impact of digitalization on purchasing. Starting from a preliminary analysis of activities and data characterizing the purchasing process developed by the research team, a multiple-case study approach is adopted to explore the impacts of digitalization on purchasing. The results show an organizational evolution at macro-, in terms of role within the organization, but also at micro-level, in terms of impact on people. The research thus contributes to add relevance to the socio-technical perspective, already adopted to study the technological and organizational evolution induced by the introduction of new Industry 4.0 technologies.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Technology and Digitalization, Buyer-Supplier Relationships

The Financial Performance of Backshoring Firms: The Impact of Innovation

Authors

Prof. Alessandro Ancarani - Università di Catania

Dr. Carmela Di Mauro - Università di Catania

Abstract

This study investigates the link between backshoring motivated by product and process innovation and firms' post-backshoring short-term profitability. Findings offer evidence of a positive link between product innovation and profitability, therefore providing support for the contention that backshoring is an appropriate location strategy if motivated by the need to shorten the geographical distance between production and development.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Public Procurement

The Human Aspect in Purchasing and Supply Management - Traits as a Proxy for Personal Skills Development

Authors

Mr. Klaas Stek - University of Twente

Dr. Desirée van Dun - Twente

Mr. Rafal Wisniewski - University of Twente

Abstract

Personal skills are gaining importance in the Purchasing and Supply Management (PSM) discipline. A systematic literature review is performed to determine which personal skills are highly evaluated. Based on the PSM skills cross-sectional survey sample, ANOVA competencies are identified that do not develop over time. Three survey items are regarded as personal traits: willingness to learn, holistic thinking and empathy. Finally, a polynomial regression with response surface analysis is applied. The results identify these personal traits as predicting variables for developing personal PSM competency. These three personality traits serve as a proxy for further development of personal skills over time.

Track

Competitive Papers

Topic Areas

Purchasing Competence

The impact of Additive Manufacturing on Supply Chain design, strategy and performance: a systematic literature review

Authors

Mr. Alessio Ronchini - Politecnico di Milano

Prof. Kai Foerstl - EBS Business School

Mrs. Antonella Moretto - Politecnico di Milano

Prof. Federico Caniato - Politecnico di Milano

Abstract

The potentials of additive manufacturing (AM) for supply chain management (SCM) have been studied for more than three decades now. With this paper we are taking

stock of the academic literature at the interface of AM and SCM based on a systematic literature review. We developed a framework covering drivers and barriers of AM adoption, contingency factors, AM effects on SC design, strategy and performance. As a result, we synthesize the main literature streams and contributions in the field and set future research directions that need to be investigated to cover the relevant knowledge gaps that still remain today.

Track

Competitive Papers

Topic Areas

Technology and Digitalization, Other

The impact of Artificial Intelligence on the Procurement process: exploring the state of the art and setting the research agenda

Authors

Ms. Michela Guida - Politecnico di Milano

Mrs. Antonella Moretto - Politecnico di Milano

Prof. Federico Caniato - Politecnico di Milano

Abstract

The presented research is an exploratory study of the impact of Artificial Intelligence in the procurement process, conducted on the basis of a mixed methodology. Through a narrative and bibliometric literature review and the analysis of primary and secondary data, the current situation about Artificial Intelligence in procurement and the identification of potential future developments are presented.

Track

Competitive Papers

Topic Areas

Technology and Digitalization

The impact of Blockchain Technology in Sustainable Supply Chains

Authors

Mr. Asterios Stroumpoulis - University of Piraeus

Dr. Evangelia Kopanaki - University of Piraeus

Abstract

Sustainability, Blockchain Technology (BT) and Sustainable Supply Chain Management (SSCM) are the main study areas of this research. In an era where environmental and social responsibility is increasingly more important, Sustainable SCM is very significant for the survivability and competitiveness of organizations. Blockchain Technology may facilitate sustainable practices, as they support supply chain processes, decrease costs and enable control and monitoring of operations. The aim of this research is to clarify the meaning of Blockchain Technology and Sustainable Supply Chain Management and examine the impacts of BT in SSCM.

Track

Working Papers

Topic Areas

Sustainability, Technology and Digitalization, Transparency, Traceability, Visibility

The impact of ISO certification awareness on purchase intention – the mediating role of perceived quality, brand image and customer satisfaction

Authors

Dr. Jos Schijns - Open University of the Netherlands

Ms. Lotte van Ekert - Archipel Zorggroep

Dr. Cees J. Gelderman - Open University of the Netherlands

Dr. Wim Lambrechts - Open Universiteit

Abstract

ISO certification is widely accepted as a standard for quality assurance. Research suggests that customers' level of ISO certification awareness is positively related to perceived product quality, but literature is inconclusive about the effects on customer satisfaction, brand image and purchase intention. We developed and tested a model with survey data from 114 managers in the electronic component industry. Although ISO certification awareness positively affects brand image, we found no direct effect on customer satisfaction. The results emphasize the mediating effects of ISO certification awareness through product quality. Improving perceived product quality positively impacts customer satisfaction and purchase intention.

Track

Competitive Papers

Topic Areas

Buyer-Supplier Relationships

Theory of Agency in Supply Chain Finance: Taking a Hermeneutics Approach

Authors

Dr. Luca Mattia Gelsomino - Windesheim University of Applied Sciences

Dr. Rob Dekkers - University of Glasgow

Dr. Ronald de Boer - Windesheim University of Applied Sciences

Mr. Christiaan de Goeij - Windesheim University

Dr. Michiel Steeman - Windesheim University of Applied Sciences

Dr. Qijun Zhou - University of Glasgow

Abstract

This article investigates theory of agency as a theoretical underpinning in the field of supply chain finance. Specifically, through a hermeneutic approach, the authors

examine the development of the theory, its postulations and assumptions, and its use in the field of supply chain finance. This leads to three conclusions: the theory is currently adopted rather superficially; there is potential for further developments by investigating non-standard configurations; and there is an increasingly relevant set of articles in supply chain finance that seems to be positioned within the boundaries of the theory of agency but makes no mention of it.

Track

Working Papers

Topic Areas

Supply Chain Finance

The role of knowledge conversion in developing operational capabilities in purchasing and supply management: An organisational routines perspective

Authors

Dr. Stephen Kelly - Edge Hill University

Prof. Lydia Bals - Mainz University of Applied Sciences

Mr. Klaas Stek - University of Twente

Dr. Heike Schulze - Mainz University of Applied Sciences

Abstract

The extant capabilities literature has mainly focused on identifying specific types of capabilities or showing how they impact organisational performance, but there is less coverage of how they are actually developed. Using qualitative interview data from 38 practitioners, applying the concept of organisational routines and the Socialisation-Externalisation-Combination-Internationalisation model of knowledge conversion in a Purchasing and Supply Management (PSM) setting contributes to our understanding of operational capabilities development. We also provide an intra-organisational perspective that complements the traditional PSM focus on inter-organisational

interaction and generate practice improvements by identifying relevant barriers at different stages of the knowledge conversion process.

Track

Competitive Papers

Topic Areas

Purchasing Competence

Toward economic and social viability of supply chains in poverty settings: A relational view on the role of intermediaries

Authors

Prof. Eugenia Rosca - Tilburg University

Dr. Wendy Tate - University of Tennessee

Ms. Feigao Huang - University of Tennessee

Prof. Lydia Bals - Mainz University of Applied Sciences

Abstract

In Base of the Pyramid (BOP) settings there can be institutional voids. Data was collected via expert interviews and field visits with multiple intermediaries and focal firms operating in BOP settings to understand how intermediaries can serve as instruments of public policy and influence the adoption of sustainability issues in global supply chains. Drawing on the relational view, the findings suggest that strong ties with public, private and hybrid intermediaries can enable BOP businesses to achieve economic and social viability through: formalization, legitimacy for vulnerable stakeholders, social capital development, and acquisition of complementary resources through the extended network of intermediaries.

Track

Competitive Papers

Topic Areas

Sustainability

Transformation towards PBC: Implementation of a new supplier management

Authors

Ms. Cornelia Molitoris - Universität der Bundeswehr München

Dr. Andreas Glas - Bundeswehr University Munich

Prof. Michael Essig - Universität der Bundeswehr München

Abstract

Previous research on Performance-based Contracting (PBC) examined the content and strategic aspects of PBC or focused on the effects of PBC usage. Surprisingly few contributions address the implementation process of PBC. This is the starting point of this paper which explores how supplier management transforms towards PBC, building on a literature review of a convenience sample of sources. The findings show that PBC research addressed implementation issues, but the stock of knowledge is heterogenous referring to the implementation understanding, dynamics, process and content. This points to the major proposition for future research to analyze PBC following a holistic implementation framework.

Track

Working Papers

Topic Areas

Public Procurement

Two purchasing strategies during the COV 19 Crisis

Authors

Mr. Mickaël CITA - UNIVERSITE DES ANTILLES

Abstract

Firstly, we set a reminder of the ways in which crises have made it possible to highlight different interests and practices of the purchasing function.

Next, we will see how in France there have been two reactions to Covid-19 : the first one from the French government regarding the purchase of masks, and the second, from CNA members.

The first strategie will be analysed in the light of the press to highlight some of the mistakes that have been made. The second one, we use the CNA forum to see how the buyers create a network to better respond to difficulties.

Track

Working Papers

Topic Areas

Purchasing Competence, Networks, Public Procurement, Buyer-Supplier Relationships

Understanding Scope Three Emissions in the Supply Chain

Authors

Dr. Lance Saunders - University of T

Dr. Lisa Ellram - Miami University

Dr. Wendy Tate - University of Tennessee

Abstract

This research investigates scope three emissions by companies. Scope three emissions represent all emissions generated by outsourced transportation, manufacturing and service production of suppliers, employee commuting and travel, and customer use

and disposal of products. The purchasing function has an inordinate impact on these emissions, as they are all emissions in a company's supply chain not financially owned by the firm. Because this category is so large and complex, it has been understudied in the literature, and companies are just beginning to address most scope three emissions. Given the importance of climate change, this is a timely topic for study.

Track

Working Papers

Topic Areas

Sustainability, Transparency, Traceability, Visibility

Valuing life: A pilot experiment on medical device purchasing

Authors

Dr. Juri Matinheikki - Aalto University

Prof. Katri Kauppi - Aalto University

Ms. Katie Kenny - Aalto University

Prof. Erik van Raaij - Erasmus University

Prof. Alistair Brandon-Jones - University of Bath

Abstract

Value-based procurement (VBP) involve the selection of medical devices based on health outcomes and not simply purchasing price. Whilst VBP has strong intuitive appeal, its application remains sparse which may result from poorly aligned incentives, lack of trust, and limited clinical evidence, all distorting purchasing managers' decision-making. This paper describes a vignette-based scenario experiment designed to test the effects of such barriers and reports results of a pilot study (n=64). Preliminary results indicate that cost saving incentives may prevent decision-makers from opting for value-adding devices and that risk sharing and clinical evidence can only partly offset this negative effect.

Track

Working Papers

Topic Areas

Healthcare, Public Procurement, Buyer-Supplier Relationships

What is the right supply chain for your project? An empirical exploration of the link between environmental uncertainty and innovation project management strategies

Authors

Dr. Andrea Patrucco - Florida International University - College of Business

Dr. Federica Ciccullo - Politecnico di Milano

Dr. Kostas Selviaridis - Lancaster University Management School

Abstract

Innovation projects are more and more characterized by internal and external collaboration. In this sense, supply chain integration choices are key for successful project management. With the development of project management methods other than stage-gate, such as agile, opportunities for collaboration and integration have also evolved. By collecting data from multiple informants in ten focal companies in their supply chains, this paper explores the characteristics of innovation project management strategies – i.e., the combination of supply chain integration decisions and project management method – by elaborating four propositions adopting the lens of the contingency theory.

Track

Working Papers

Topic Areas

Networks, Projects

What is value in public procurement?

Authors

Ms. Iryna Maliatsina - LUT University

Dr. Elina Karttunen - LUT University

Prof. Aki Jääskeläinen - Tampere University

Prof. Katrina Lintukangas - LUT University

Prof. Anni-Kaisa Kähkönen - LUT University

Prof. Jussi Heikkilä - Tampere University

Abstract

Despite the significant body of research on the benefits of public procurement, the subject of multidimensional public procurement value has received no explicit research attention. The purpose of this paper is to fill the gap by analyzing the value components and means of value creation developed through public procurement activities. We conduct a systematic literature review during which we analyze 120 research papers to organize existing insights and knowledge on value offered through public procurement. We propose a theoretical framework that can serve as a conceptual basis for understanding the multidimensional nature of public procurement value creation.

Track

Competitive Papers

Topic Areas

Purchasing Competence, Technology and Digitalization, Networks, Public Procurement

Who develops the suppliers? The role of third parties in bringing about supplier development.

Authors

Mr. Leandro dos Santos - Norwegian University of Science and Technology, Trondheim, Norway

Prof. Elsebeth Holmen - Norwegian University of Science and Technology, Trondheim, Norway

Prof. Ann-Charlott Pedersen - Norwegian University of Science and Technology, Trondheim, Norway

Abstract

Third parties are often involved in supplier development. However, their involvement has received little explicit attention in the literature. In a systematic review, we analyze and conceptualize third party involvement in supplier development. We find that third parties are primarily other buyers, complementary suppliers, government organizations, NGOs, and consultancy companies. We outline six different manners in which third parties can be involved in supplier development. Finally, we suggest four reasons why third party's involvement in supplier development is beneficial.

Track

Competitive Papers

Topic Areas

Sustainability, Networks, Buyer-Supplier Relationships, Other



I P S E R A

Published by:

International Purchasing and Supplier Education and Research
Association (IPSERA)

Postbus 217

Hallenweg 17

7522 NH Enschede

The Netherlands

ISSN 2772-4379