

GLOBAL SUPPLY CHAINS WITH SUSTAINABLE SOURCING: NAVIGATING GLOBAL CHALLENGES

Master course (ECTS: 7)

**also for Bachelor students in their final year*

Course leader:

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Marko Budler is a full-time lecturer and researcher at School of Economics and Business University of Ljubljana (SEB LU). Marko teaches Purchasing, International Business Logistics, and Informatics. His research interests include business models, business logistics, and supply chain management. Marko published a paper on business model approach in a highly-ranked journal (3-star Supply chain management: an International Journal), has been a lead author for an investigation of business models in internet-distribution systems (published in Tourism Economics) and has been constantly presenting his work-in-progress at top-ranked conferences such as AOM Meeting, R&D in Management, TEMSCON, and AMCIS among the others. Marko holds a certificate for a personal trainer and nutritionist.

Aims of the course:

"The era of globalization is over." (The Economist, 2021).

In today's interconnected business environment the cooperation and competition no longer occurs between single companies (or even countries!) but between digitalized supply chains that have spanned globally for the past decades, and more recently tend to have become "glocalized" and "resilient". Therefore, the students and leaders of tomorrow must understand various aspects of efficient global supply chain management (SCM 4.0) with nuances of localization, necessary changes in organizational structures and business processes, the relevant metrics, the potential risks and turbulences in the chain, the importance of procurement, and the role of technology in the resilient and sustainable supply chains.

The course aims to deliver the novel SCM insights to the students who should be able to:

- understand contemporary issues in global supply chain and logistics;
- have an overview of the impact of digital transformation and Industry 4.0 on SCM, business sourcing models, and purchasing;
- identify the main risks and possible mitigation actions in supply chains, understand the role of logistics in SCM, and identify opportunities for their companies;

- identify and use different supply chain configurations and network designs with the case analyses of world-renowned Apple, IKEA, CAT, Danfoss, Hella, L’Oreal, Wal-mart, Amazon, & DHL;
- understand the role of reverse logistics and the inclusion of sustainability in GSCM, sustainable procurement, and business models;
- adhere to the extended purchasing/sourcing process in various industries and choose an appropriate sourcing model for their “future” companies/suppliers;
- use decision support tools such as BMC, WFS Method, Kraljič’s Matrix, and Sourcing model for better, more resilient and optimized supply-chain operations.

Throughout the course the students develop the ability to conceptualize, design, and implement companies in supply chains aligned with product, market, and customer characteristics. Since supply-chain networks try to become customer-oriented and digitalized across the board, managing the flow of products, information, and revenue among the organizations is different. By improving these flows, the industry and digital procurement solutions enhance the ability of supply networks to fulfil customer needs.

Prerequisites:

None.

Course content:

| DATE | DAILY TOPIC/SESSION |
|--------------------|---|
| Monday, 8 July | Course introduction (1h) |
| Tuesday, 9 July | Contemporary global issues and trends (ASEAN and trade wars, protectionism, Manufacturing 2.0, end-to-end visibility, and post-COVID-19 sourcing: from JIT to JIC) |
| Wednesday, 10 July | Introduction to global SCM 4.0 (Linear and circular supply chains: Apple’s circularity, pull and push models, agile vs. lean (Zara), and SCOR) |
| Thursday, 11 July | E-Commerce & Omni-channel fulfillment (distribution-network design, distribution channels, multimodal transportation, the Amazon and e-commerce strategy) |
| Friday, 12 July | Logistics companies and outsourcing: 3PLs, 4PLs (DHL) & Uberization (in-house logistics, contracting out, the role of 3PL and 4PL companies, logistics activities, TCO) |
| Monday, 15 July | Supply chain configuration “simulation” (Decision-making within value chains: the steps of and activities within the value chains) |
| Tuesday, 16 July | Strategic, Managerial & Organizational issues |
| Wednesday, 17 July | Procurement and Sourcing models (sourcing and shoring strategies; business models for purchasing: a workshop) |
| Thursday, 18 July | Transportation and Warehousing 4.0 |

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| | (INCOTERMS 2020 & technology) The cases of Waberer, Maersk, & DSV |
| Friday, 19 July | <i>No lectures (day off)</i> |
| Monday, 22 July | Sustainable SCM in the era of Resilience (Economical, environmental, and social aspects of SSCM, circular-economy & SC resilience), LCA analysis and ISO20400 |
| Tuesday, 23 July | Digitalized SC Lecture, Q&A with revision for final examination |
| Wednesday, 24 July | Final examination - writing (Essay Exams) |

List of suggested supplementary readings:

Budler, M., Trkman, P., & Quiroga, B. Supply chain transparency: a review of antecedents, technologies, types, and outcomes. *The Journal of Business Logistics*. JBL, 2024.

Christopher, M. (2016). *Logistics & supply chain management*. Pearson UK, 5th edition. ISBN-13: 978-1292083797

Chopra, S. and Meindl, P. (2016). *Supply chain management: Strategy, Planning and Operation*. Prentice Hall, 6th edition. ISBN-13: 978-0133800203.

Budler, M., Jakšič, M., & Vilfan, T. (2021). Logistics Outsourcing in Large Manufacturing Companies: The Case of Slovenia and Lessons from Other Countries. *EBR*, 23(3), 3.

Teaching and examination methods:

E-blended learning (e-materials) via Canvas:

Short quizzes

Podcasts

Infographics

Supply Chain Game (business simulation)

Frontal in-person lectures

Final-grade distribution (examination methods):

Supply Chain "Simulation" (25 %)

Case-study/Workshop (25 %)

Final "interpretative essay" exam (50 %)

Grading scale:

| DEFINITION | % | LOCAL SCALE | ECTS SCALE | Grade (USA) |
|---|--------|-------------|------------|-------------|
| exceptional knowledge without or with negligible faults | 92-100 | 10 | A | A+, A, A- |
| very good knowledge with some minor faults | 85-91 | 9 | B | B+, B |
| good knowledge with certain faults | 77-84 | 8 | C | B |
| solid knowledge but with several faults | 68-76 | 7 | D | C+, C, C- |
| knowledge only meets minimal criteria | 60-67 | 6 | E | D+, D |
| knowledge does not meet minimal criteria | <60 | 5 | F | |