

Faculty Information

RICO LUGO Sinndy Dayana

Specialization:

Innovation and Operations Management (IOM)

Research Area:

Sustainable management and strategic decision-making in circular economy contexts from a systems thinking and multi-stakeholder collaboration perspective.

Keywords:

Circular Economy, Sustainable Supply chains, Strategic Incentives, Sustainable Business Models, Game Theory, Multicriteria Decision-Making, Co-Creation, Multi-Actor Collaboration, Systems thinking, Policy and Governance, Evidence-Based Management.

Seminar Topic:

Strategic Decision-Making for Circular Economy and Sustainable Management: Incentives, Policies, and Multi-Stakeholder Collaboration.

This seminar explores how business leaders and policymakers can develop and implement circular economy strategies that are economically viable, socially inclusive, and environmentally effective. We examine multi-actor decision-making frameworks and incentive mechanisms for sustainability transitions, integrating theory with real-world applications from global supply chains.

Seminar Teaching Method:

This seminar is structured as a research-driven and discussion-oriented space that encourages critical thinking, independent inquiry, and practical relevance. In the early sessions, key theories, frameworks, and methods related to sustainability, circular economy, and strategic decision-making will be introduced. As the sessions progress, students will identify and refine their individual research topics. Regular seminar sessions will include student presentations, peer feedback, and in-depth discussions to help sharpen research questions, clarify arguments, and strengthen methodological approaches. Emphasis will be placed on connecting academic insights with real-world applications.

Possible Research Topics for Students:

- Strategic incentives for circular business models in the agrifood, manufacturing, or tech sectors
- Co-creation mechanisms for sustainable innovation in supply chains
- Comparative policy analysis of circular economy implementation in different countries
- Game-theoretic modeling of collaboration, competition, or co-opetition between firms in a circular ecosystem
- Multi-criteria decision-making frameworks for circular procurement
- Economic experiments on consumer behavior/stakeholder preferences toward product-service systems
- Designing incentive-compatible mechanisms for reverse logistics
- The role of digital technologies in enhancing circular supply chain transparency

Research Method:

This seminar takes a multidisciplinary approach, combining qualitative, quantitative, and hybrid methods based on the topic and interests of each student. Some examples are:

- Quantitative approaches: multi-criteria decision analysis (MCDA); survey design and statistical analysis; economic and behavioral experiments; game theory; simulation modeling.
- Qualitative approaches: Interviews and content analysis; case study research; policy analysis and institutional mapping
- Mixed approaches: Combining stakeholder interviews with experimental design; using MCDA in conjunction with qualitative field data; scenario-building through participatory methods.

Emphasis will be placed on methodological clarity, critical thinking, and the ability to connect research to practical implications in sustainable management.

Research Projects for Supervision:

- Master's Thesis
- Independent Final Report

Comments:

This seminar is a great opportunity to explore how sustainable management and circular economy strategies can shape real-world business practices. If you are curious, open to discussion, and eager to work on meaningful research with real impact, I look forward to working with you!

APU Researcher Database:

<https://researcher.apu.ac.jp/apuhp/KgApp?resId=S001742&Language=2>