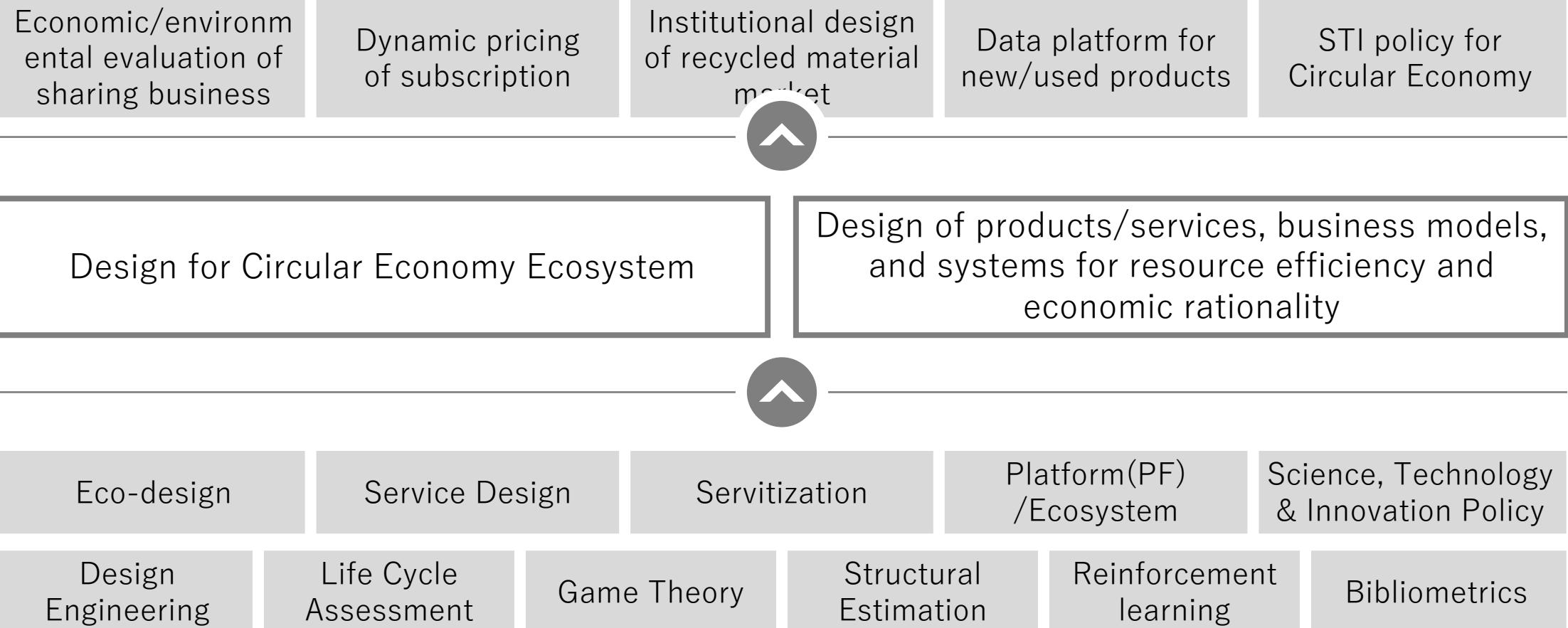


Graduate School of Engineering
The University of Tokyo
Kimita Laboratory

Research Themes



Research Projects

環境研究総合推進費

Evaluation of environmental impact of service-oriented Circular Economy businesses



PIPPA © CLAS

科研費 基盤(C)

Development of Environmental and Economic Simulations of Digital Technology in Product Service Systems

Joint Research

Environmental and Economic Evaluation of PC Reuse (SS Market)
Utilization of LCA in Corporate Management (Lively)



科学技術・学術政策局 研究開発戦略課
研究開発局 環境エネルギー課



木見田研究室

CE Ecosystem Design

CE Research and Policy Analysis

Academic Advisors

Lecturer

三菱電機-東京大学
未来デザイン会議

持続可能な循環経済型
未来社会デザイン講座

cooperation

mercari
R4D 優値交換工学
ShareWell. 東京大学内リユース
プラットフォーム

TOKYO SUTEAM
CIRCULAR STARTUP TOKYO

Circular economy Start-up support program

東京大学エクステンション
UTokyo EXTENSION

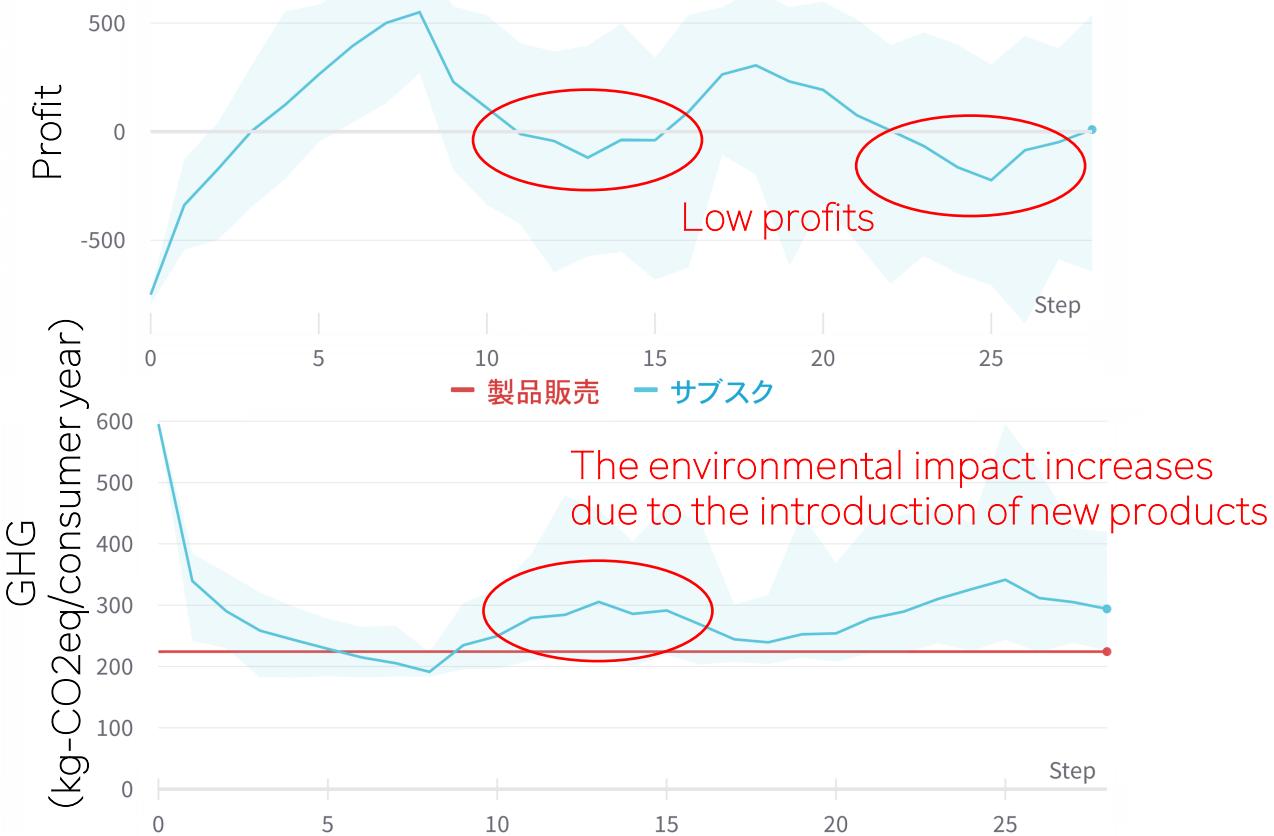
Circular Economy School
CE Business Design Course

経済産業省
Ministry of Economy, Trade and Industry

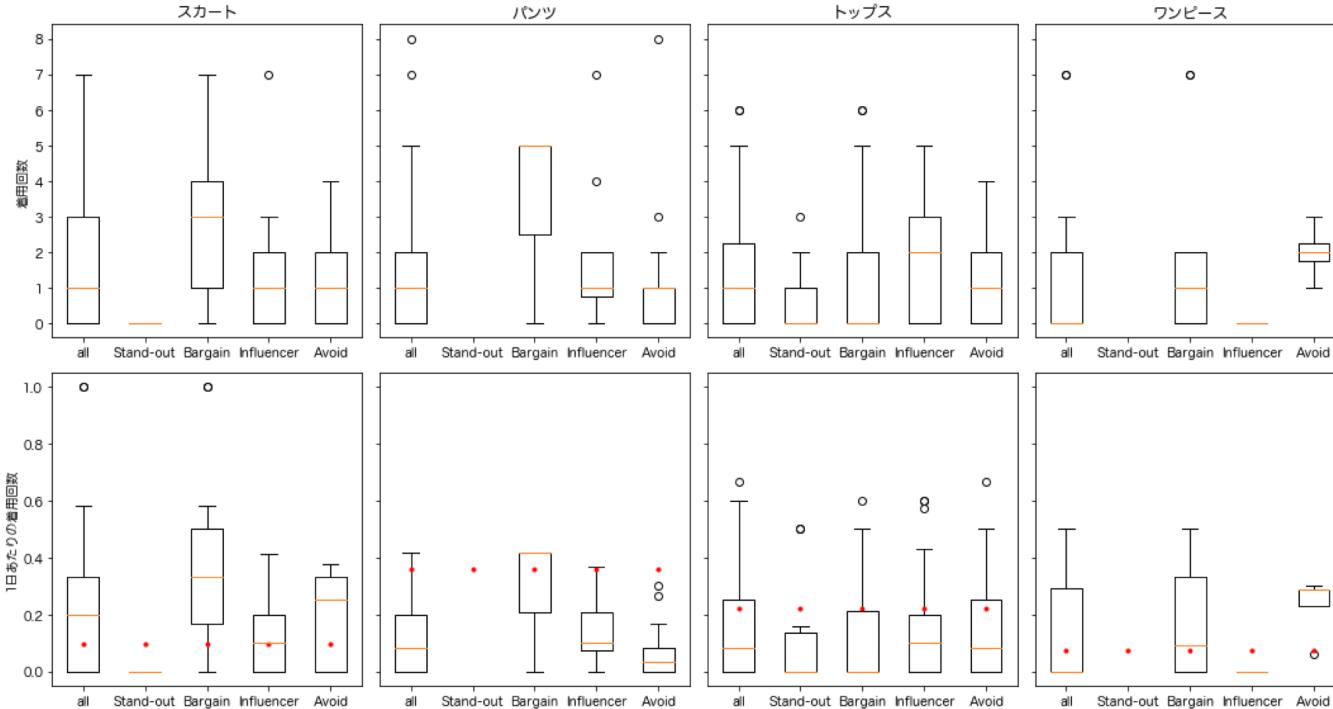
産官学サーキュラー
エコノミーパートナーシップ
情報流通プラットフォーム構築WG

Case studies

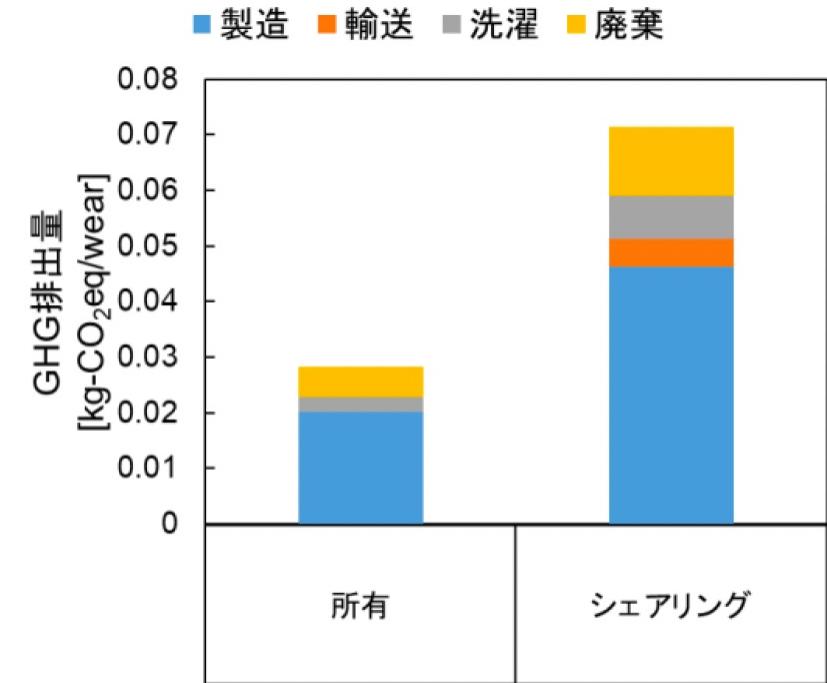
Economic/Environmental Simulation of Home Appliance Subscriptions



Economic and environmental evaluation of clothing sharing



Stand-out: 人とは違う、ユニークな服を買う
Bargain: バーゲン服やセールしている服を買う
Influencer: 流行している服を買う
Avoid: 服は必要になった時だけ買う



ニット・セーター

Sustainable Circular Economy Future Society Design



WPO : Circular ecosystem design

- WP1～WP4の統合、循環エコシステムの設計方法論の構築
- 循環エコシステムのモデリング手法とシミュレータの開発
- シナリオ設計などを用いて循環エコシステムのあるべき姿の設計と評価

↓↑

WP1

Business Model transition

CEビジネスモデルの
環境性・経済性の評価

↓↑

WP2

Products & Circulation Integrated Design

動静脈データ連携のあ
るべき姿の探索

↓↑

WP3

Life cycle management

データ駆動型ライフサイ
クルマネジメント手
法の開発

↓↑

WP4

Institutional design

エコシステムへの参加
を促す規制等の検討

↑↓

Case

(Mitsubishi Electric's Business; FA, air conditioning, home appliance…)

ShareWel

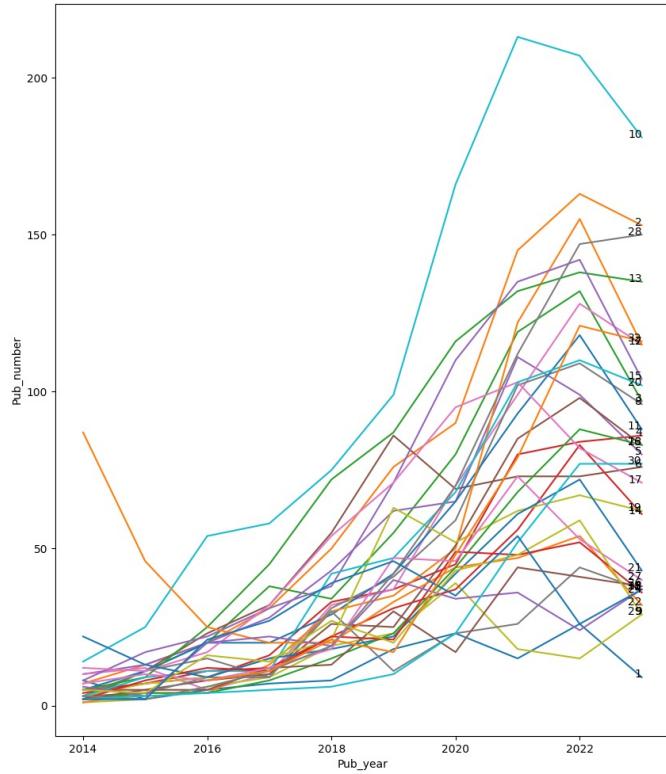
- A platform for reusing and sharing items within the university
 - Effective utilization of research equipment and reduction of waste
 - Promoting cross-disciplinary human resource exchange and the circulation of knowledge through the circulation of goods
- Pilot experiment starting in November 2023 at the Graduate School of Engineering
- Number of registrants: 613, Number of items listed: 260, Number of transactions: 81
- Various researchers from fields such as Mechanical Engineering, Informatics, Management of Technology and Strategy, Systems Innovation, and Economics are participating
- Collaboration with Mercari (hosting workshops, etc.)

The screenshot shows the ShareWel website interface. At the top right are tabs for 'リユース' (Reuse) and 'シェア' (Share). Below them is a search bar with a '検索' (Search) button. To the right of the search bar is a checkbox labeled '出品中' (For Sale). The main content area displays a grid of 12 item cards, each with a thumbnail image, item name, and a '取引終了' (Transaction Complete) button. On the left, there's a sidebar with a 'すべて (39)' link and a 'カテゴリ' (Category) section listing various item types like Furniture, Electronics, and Consumables. At the bottom, there's a detailed view of one item, a Sharp AQUOS LCD monitor, with its product description, condition, and transaction history.

A photograph of a group of people sitting in front of a large 'mercari' logo, indicating a collaboration between ShareWel and Mercari.

STI Policy for Circular Economy

Paper Analysis



Cluster Analysis Using Natural Language Processing



Extraction of research themes using ChatGTP

- 1 Revolutionizing Waste Management in Eco-villages
- 1 Advancements in Polymer Recycling Techniques
- 2 Ecological Economics and Regenerative Society Development
- 2 ???
- 2 Green Logistics In Digital Transformation Era
- 2 Advancing Novel Bioeconomy Through Bioplastics Production
- 2 Advancements in Waste-to-Energy Conversion Technologies
- 2 Integration of Bio-Waste in Aquaculture Industry
- 2 Innovative Trade Frameworks in a Zero-Waste Economy
- 2 Advancements in Eco-conscious Public Procurement Strategies
- 3 Advances in Agriculture Eco-Efficiency Development Models
- 3 ???
- 3 Digital Product Passports in Data Governance
- 3 Digitalization's Role in Eco-Friendly Manufacturing

Developing analytical methods to support decision-making in STI policy