

Examining impacts of in-store circularity initiatives on retail store sales and implications for the circular economy: exploratory case studies with Toronto-based start-ups

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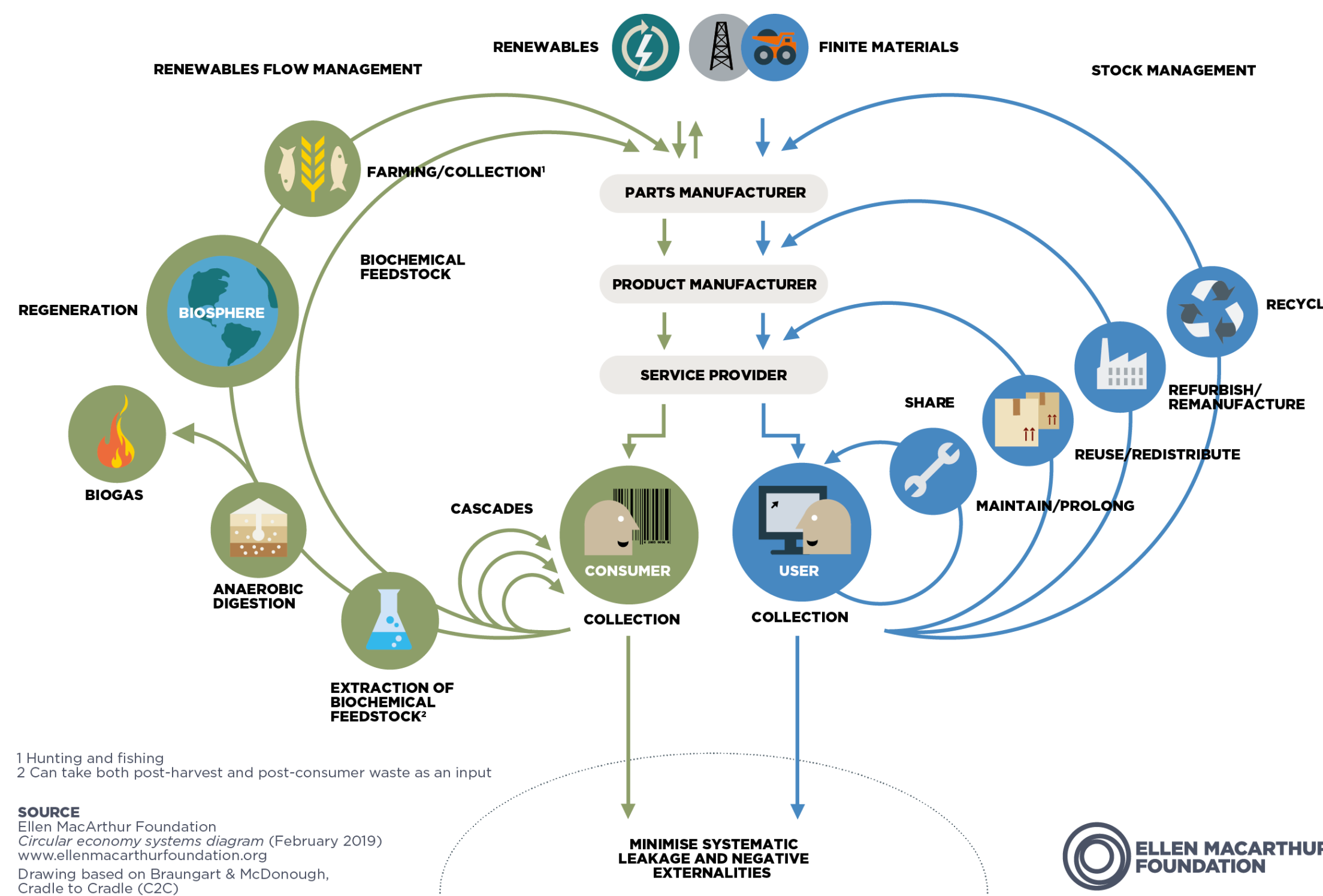
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Course Code: SSM1100Y

Background

Circular Economy Overview¹



The circular economy is increasingly cited as a path towards a **sustainable society**, involving the decoupling of economic growth from resource consumption and waste.

Firms are evaluating how to incorporate elements of circularity into their business models, whether internally or through engaging external partners.

Most firms are pursuing niche or pilot initiatives instead of holistically embedding circular principles².

This project addresses a gap in existing literature by examining the impact of circularity initiatives on sales and profitability.

A key supporting consideration is the net system impacts on sustainability given the potential for increased sales.

Case Study Subjects

CASE

CASE is headquartered in Toronto, operating in the GTA only. They were founded in 2021.

Focus Area: Reducing plastic waste through container re-use

Operational Model: Collecting donated plastic takeout containers through in-store drop-box containers; selling collected containers to restaurants.

400,000 containers diverted from landfill³

28,000+ individual drop-offs³



Flashfood is headquartered in Toronto, operating across North America. Their app launched in 2017.

Focus Area: Reducing food waste

Operational Model: Offering a mobile app for users to purchase imperfect or soon expiring food at a steep discount, then pick it up at participating grocery stores.

1500+ participating grocery stores^{4, 5}

50M pounds of food diverted from landfill^{4, 5}

Methodology

Research Question: *What is the effect of circularity initiatives on foot traffic and store sales at retail stores in the Greater Toronto Area?*

Supporting Questions:

- Can increased sales/purchases negate positive sustainability benefits of a circularity initiative?
- What motivates businesses to launch in-store circularity initiatives?
- How do businesses track the impact of these initiatives on consumer behaviour?

Semi-Structured Interviews

- Interviews with key stakeholders from case study subjects
- Thematic coding of transcripts to categorize and analyze findings

Qualitative Survey Data

- Survey data provided by case study subjects, collected from their user base
- Received in aggregated format

Results

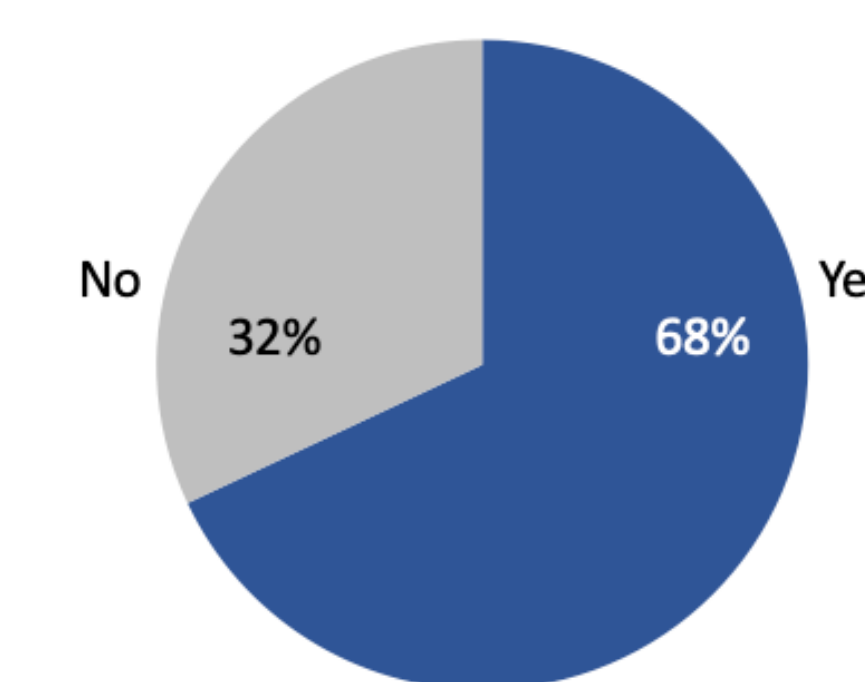
Key Survey Findings

60 - 68% of participants **purchase more items in-store** through the circularity initiative

47% of Flashfood respondents are more likely to frequent grocery retail locations partnered with Flashfood.

63% of Flashfood respondents spend \$11 or more on additional purchase

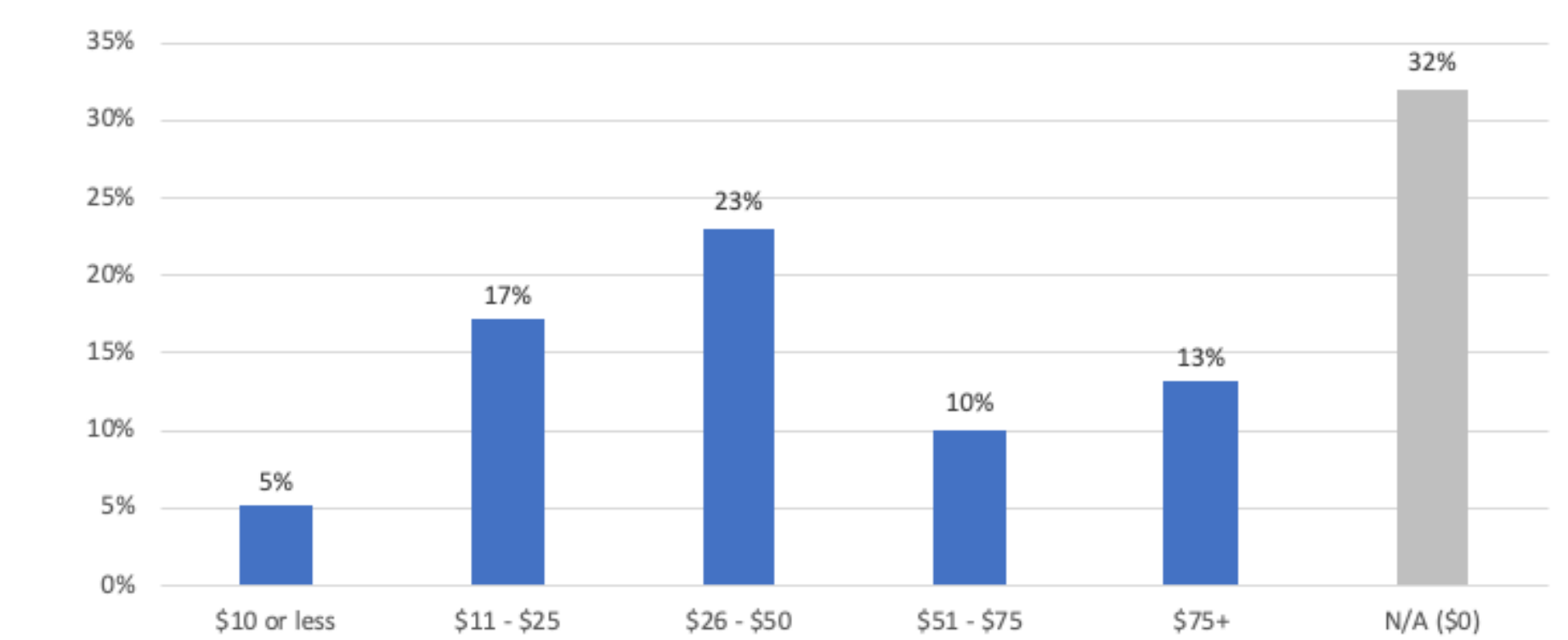
Figure 1. Yes/No responses when asked if additional purchases are generally made when participating in circularity initiatives and going to retail stores. (n= 3868)



Key Interview Findings

- Key motivations for retailers to partner with CASE and Flashfood:
 - Positive brand image
 - Profitability through increased sales
- CASE participants are intrinsically motivated to reduce plastic waste & have a positive environmental impact
- Flashfood participants primarily extrinsically motivated through saving money on purchases; food waste is secondary motivation

Figure 2. Reported \$ amount of additional in-store spend for Flashfood Participants (n= 3868)



Areas for Further Research

Key areas identified:

- Longitudinal case studies following businesses over a period of months/ years
- Broadening focus to a range of firms and industries
- Technical analysis to quantify net impacts of circularity initiatives (e.g. LCIA, Carbon Inventory)
- Tensions between circular and linear economic models

Research methodologies to draw inspiration from:

- *Toward circular economy of fashion: Experiences from a brand's product take-back initiative* (Hvass & Pederson, 2019)⁶
- 3-year longitudinal case study on a major Scandinavian fashion brand's take-back program
- *Experimenting with a circular business model: Lessons from eight cases* (Bocken, Schuit & Kraaijenhagen, 2018)⁷
- Comparative case study analysis of 8 companies experimenting with incorporating circularity into their business models

Conclusion

The case study analysis employed in this research contributes to an emerging yet under-researched area in academia.

Findings from both case studies indicate that the initiatives drive an increase in sales and increased cadence of store visits. Several areas for further research are proposed as an output.

Future research should take a holistic, systems approach in considering key sustainability impacts of circular business models and examining tensions stemming from the status quo linear economy.

References

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