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SCHOOL OF BUSINESS, ECONOMICS AND LAW

BUSINESS LOGICS FOR BIOECONOMY COLLABORATIONS

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Financed by the Swedish Energy Agency.



Background & Purpose

- Policy goal – Zero net greenhouse gas emissions by 2045.
- Solution – A biobased economy that leverage Sweden's “green gold”.
- Challenge – Commercializing sustainable innovation is costly and time-consuming as well as organizationally challenging for incumbent firms – collaboration is a path forward.
- Research gap – How do actors from different industries collaborate to create entirely new value chains and build niche markets for sustainable innovations?
- Purpose – To explore the business logics of newly formed collaborations that cut across industry value chains in order to create new markets for bio-based, sustainable innovations.

Theoretical setting

- Commercialization requires a suitable business model.
- Business models function within markets sandwiched in global value chains.
- What is assessed as a viable business model is evaluated against its business context – the context is possible to conceptualize as a "business logic".
- The business logic describes conditions for the content and development of business models within that industry.
- Business logic is a description of success factors that builds on an overlap of theory (how the world works), history (what we have been and are), experimentation (what works and not), and practice (how we do things here).
- So, when collaborating across value chains the business logic will be of key importance in order to understand the context that fosters vital markets and business models.

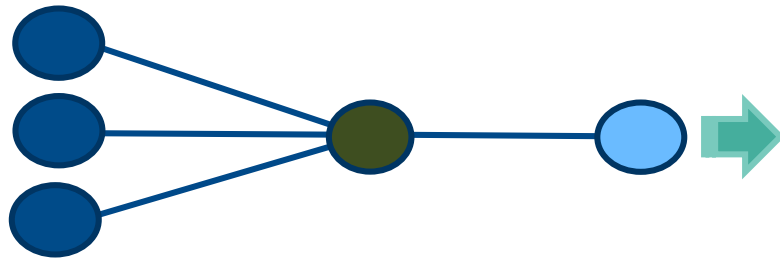
Method

- Case study approach – identifying cases of cross-industry value chains.
- Examining the context in which the initiative exist (business environment and policy setting) – studying policy documents and interviewing experts in each industry.
- Examining the business model of each initiative as well as the business logic it answers against (interviews, annual reports, homepages etc.) .
- Reliance on interviews with key stakeholders – Founder, CEO, investor, etc.
- Key challenge: Difficult finding suitable cases – extremely rare with successful collaborations across value chains (2015-2018).

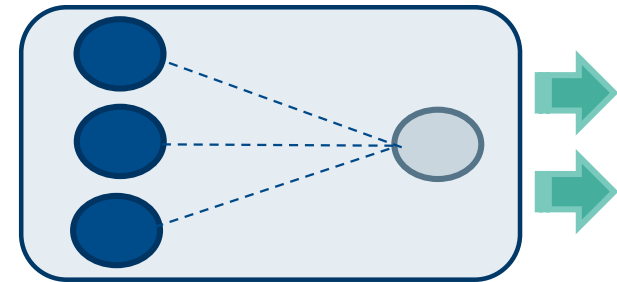
Results

Case study	Business logic	Collaborative focus	Technology and infrastructure	Substitution strategy	Market scope
Joint venture from wood to wheel	Secondary product	Combining resources	Mix of new and existing technologies and infrastructure	Drop-in fuel, incremental	Existing market
Ethanol-based system solution for heavy transport	Bundled product	Combining products	New technology and new infrastructure with customer	Dedicated infrastructure and fuel ("all-in")	New market
Wood-based beverage cartons	Mixed product	Third party certification based	Mostly existing technologies and infrastructure	Drop-in chemical, mass balance	Existing market
Symbiotic industrial systems	Multi product	Combining processes	New infrastructure, mix of new and existing technologies	Various strategies	Several new markets

Results



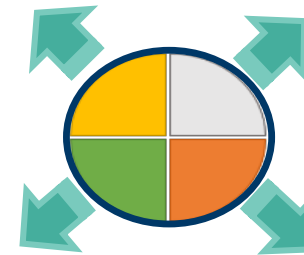
SECONDARY PRODUCT



BUNDLED PRODUCT



MIXED PRODUCT



MULTI-PRODUCT

Conclusion

- The potential for scaling is limited and contentious (EU policy vs. Swedish ambitions).
- Four initiatives that exemplify highly diverse business logics.
- The diversity indicates that there should be potential for other success-stories which adopt key features from the cases.
- However, very few cases of successful cross-industry value chains.
- Hence, these cases might have unique characteristics (timing, resource, policy etc) that are impossible to copy.