

# CARISCA Supply Chain Research Summit 2021



UNIVERSITEIT VAN PRETORIA  
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## Faculty of Economic and Management Sciences

Fakulteit Ekonomiese en Bestuurswetenskappe  
Lefapha la Disaense tša Ekonomi le Taolo

100  
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*Advance*

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An investigation of the relationship between  
the diffusion and adoption of sustainable  
supply chain management practices,  
organizational capabilities development and  
firm innovativeness

Study supervisor: Prof A. Oke



# Introduction

*“Looking at the world through a sustainability lens not only helps us ‘future proof’ our supply chain, it also fuels innovation and drives brand growth.”-Paul Polman (CEO, Unilever)*



# Introduction

- Achieving sustainability is a **difficult task**
  - Coordination of all the firms and actors in the supply chain in **radically redesigning** the SC (Pagell & Shevchenko, 2014; Roy, 2019).
- The adoption of **SSCM practices influences various performance outcomes of the firm**, influencing its attractiveness for firms implementing such practices (Gimenez & Tachizawa, 2012).
  - Does implementing SSCM initiatives actually pay- off (especially economically)? (Magon, Thomé, Ferrer & Scavarda, 2018; Pagell & Shevchenko, 2014).
  - Trade-offs between performance outcomes, social, environmental and economic performance (intended performance outcomes).
- Firms adopt sustainable SSCM practices differently-**more or less proactive** (Gosling et al., 2016:262; Harms et al., 2013; Schaltegger & Burritt, 2014; Van Tulder, Van Wijk & Kolk, 2009).
- However, firms can also experience unintended performance outcomes from SSCM practices (Roy, 2019; Carter & Ketchen, 2020)
- Gap: Process of adoption and relationship to unintended performance outcomes. Would firms that adopt SSCM differently (*more or less proactive*) based on different kinds of pressures, witness different kinds of performance outcomes? How?

# Research questions

Study divided into two interrelated essays:

## Essay 1-RQ 1:

- How do internal and external factors influence a focal firm's adoption of SSCM practices, more or less proactively?

## Essay 1-RQ 2:

- Under what conditions do firms adopt SSCM more or less proactively?

## Essay 2-RQ 3:

- What type of capabilities do firms attain when they adopt SSCM practices, more or less proactively?

## Essay 2-RQ 4:

- How do the capabilities developed from the diffusion and adoption of SSCM practices relate to innovativeness of the firm?

# Theoretical background

## Diffusion of innovation theory (DOI) by Rogers(2003)

- Adoption strategies of firms
- 5 adopter categories

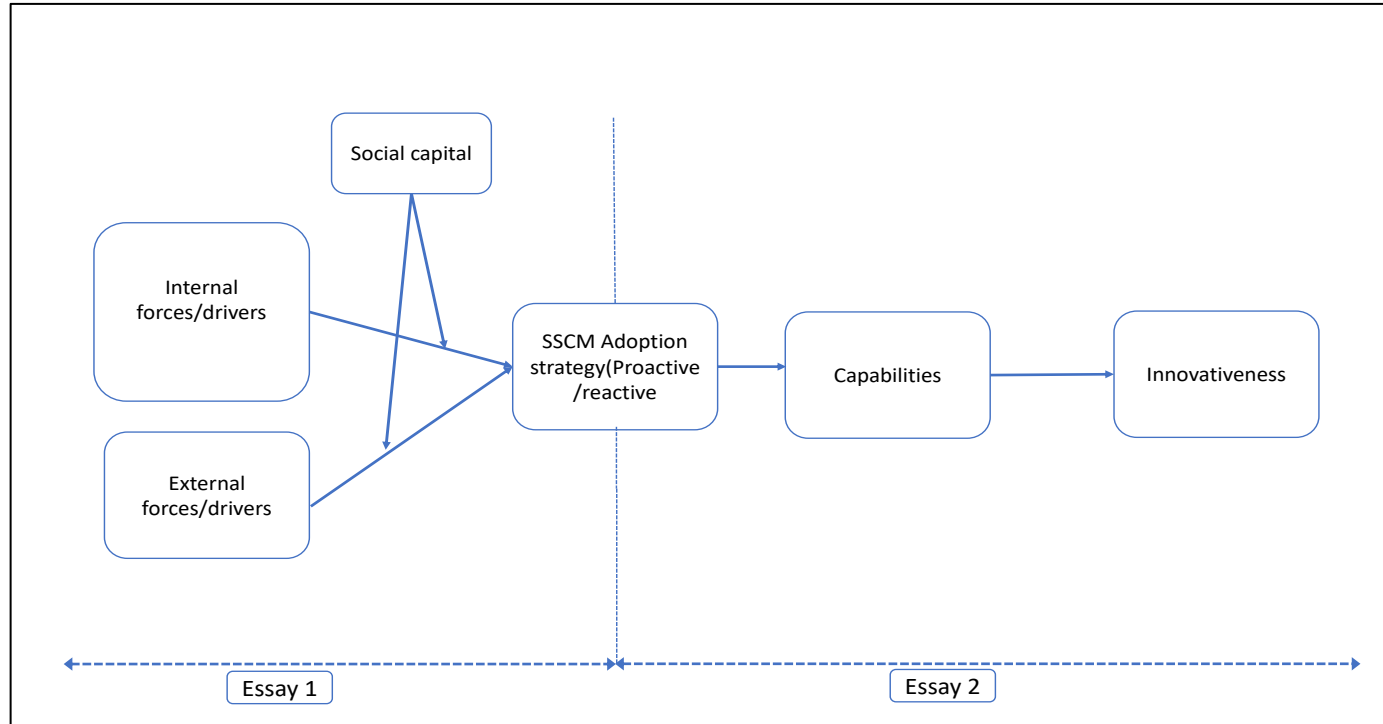
## Institutional theory - DiMaggio & Powell (1983)

- External factors/pressures influencing sustainability adoption
- Coercive, normative and mimetic pressures
- **Internal factors-** from literature

## Social capital theory (Nahapiet & Ghoshal, 1998)

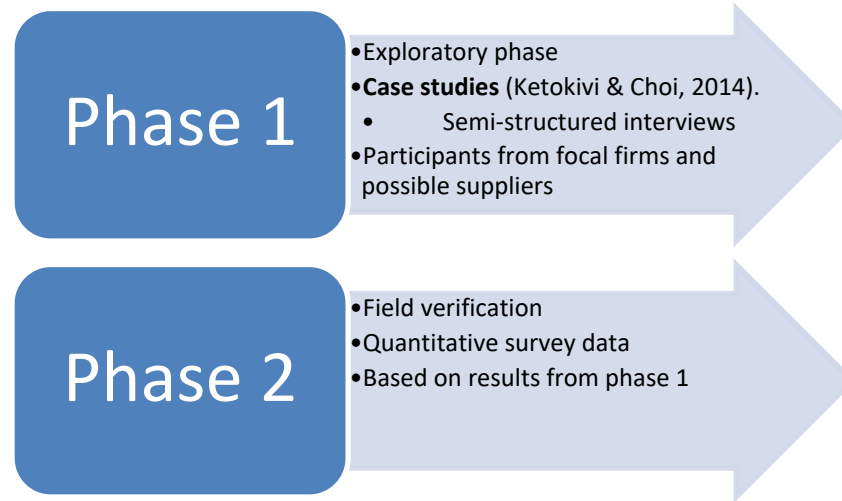
- Conditions in which firms adopt SSCM more or less proactively
- Cognitive, structural and relational dimensions

# Conceptual model



# Planned methodology

- Mixed methods (Sequential approach)
  - Justified using Edmondson and McManus (2007:1155) framework for evaluating and promoting “methodological fit”
  - Data coding to be conducted via Atlas-ti software



# Preliminary findings-data collected

| Company profile  | Main data collected                       | Other data collected  |
|--|---|---|
| C1: Food and clothing retailer   | 9 interviews<br>1 interview with supplier | Sustainability report and other reports related to the research questions   |
| C2: Manufacturer of frozen vegetables (potatoes especially)                              | 7 interviews                              | Supplier interviews awaiting confirmation<br><br>Sustainability and other reports related to the research questions |
| C3: Producer and marketer of spirits, fine wines, ciders and ready-to-drinks (RTDs)      | 9 interviews                              | Sustainability report   |
| C4: Manufacturer of high-quality cosmetics, perfumes, hair care, and skin care products. | 7 interviews                              | Sustainability reports<br><br>Archival data   |
| C5: Manufacturer of tissue paper   | 5 interviews                              | To be collected   |
| C6: Manufacturer of branded and private label foods                                      | 2 interviews so far                       | To be collected   |



# Raw preliminary findings

- Evident relationship between SSCM adoption strategy and firm innovativeness
  - **C1 and C4 exhibit risk-taking characteristics, experimentation, creativity and innovation (internally motivated)**
    - various sustainability programmes in place
    - recognised for their achievements in innovation as well as sustainability (awards)
    - launched new and innovative products
    - **Collaboration with suppliers and other parties-** focus and drive on local sourcing (SCT)
    - Capabilities: Development of performance measurement, managing a complex supply chain (supply networks) collaboration with multiple stakeholders and supply chain partners. Knowledge of traceability and transparency
  - **Proactive adopters more innovative-DOI**
  - **Less proactive firms:**
    - Laggards (wait and see approach)-solar panels
    - Cost reduction vs sustainability trade-off
    - How can we improve our current processes (e.g., truck utilisation) to reduce cost and can we impact sustainability simultaneously?
    - Various cost-savings opportunities have been identified that simultaneously fulfil sustainability criteria

# Impact of research for Africa

- Fastest growing economies in the world
- Vast social issues-e.g. labour conditions and poverty (SDG 1)
- Africa is losing 4 million hectares of forest every year, twice the world's average deforestation rate.
  - Short-lived agricultural productivity as land nutrients are depleted
- Continent's coastal areas continue to confront problems
- Role of institutions, especially government is lagging behind
- Firms can drive sustainability initiatives throughout their supply chains-bigger reach **extending to supply networks** (SDG12 responsible consumption and production)
- **Proactive approach** can contribute to innovative solutions



# Thank You

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