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Innovation Practices Impact on Supply Chain Configuration

“Working Paper”

PhD Candidate: Yasmine Sabri





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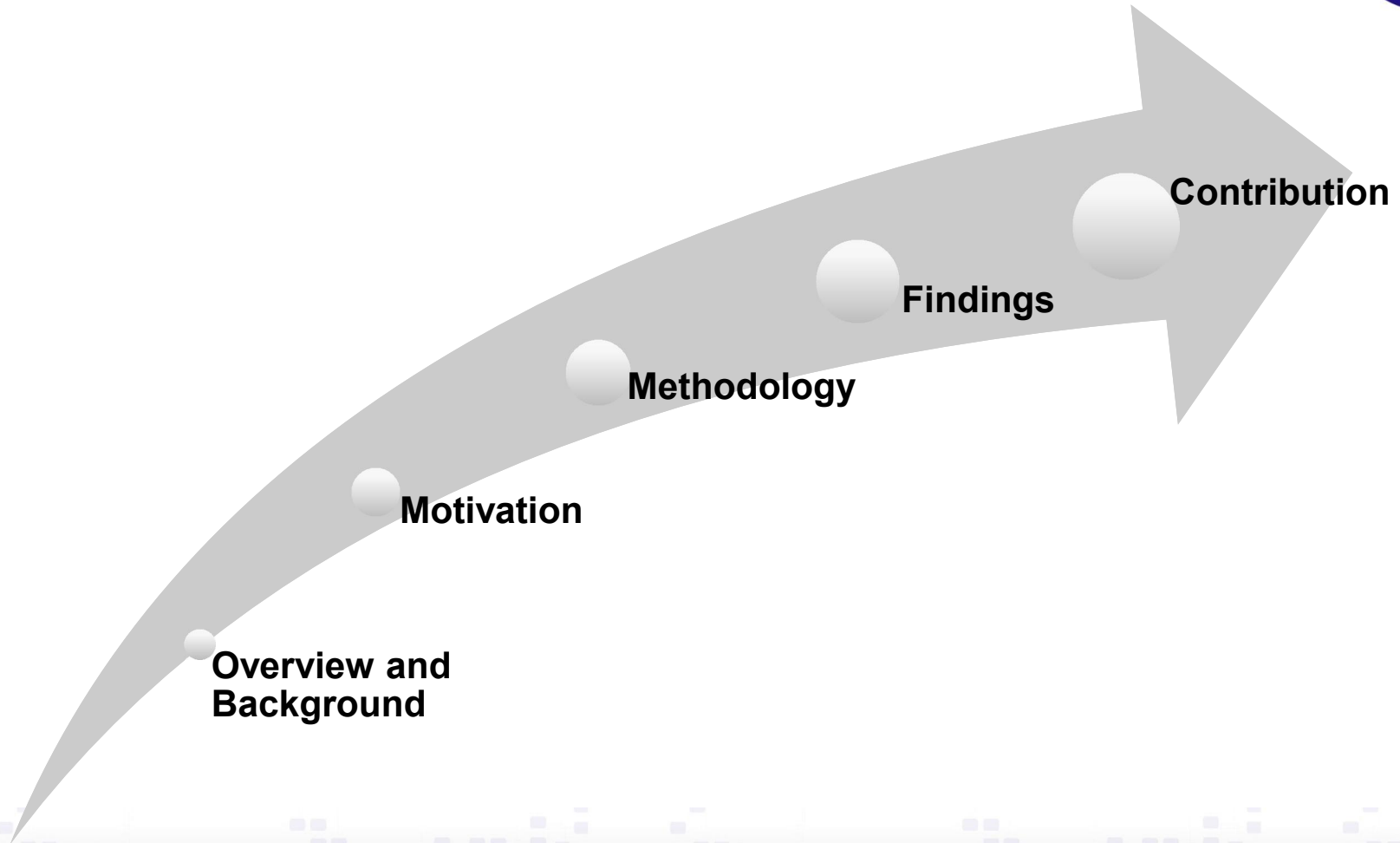
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Polimi Supervisor: Guido Micheli

KTH Supervisor: Cali Nuur



Agenda



**Overview and
Background**

Motivation

Methodology

Findings

Contribution

What?

Analysing the impact of innovation practices (introducing new or improved product/process) on supply chain configuration, within various contexts

Why?

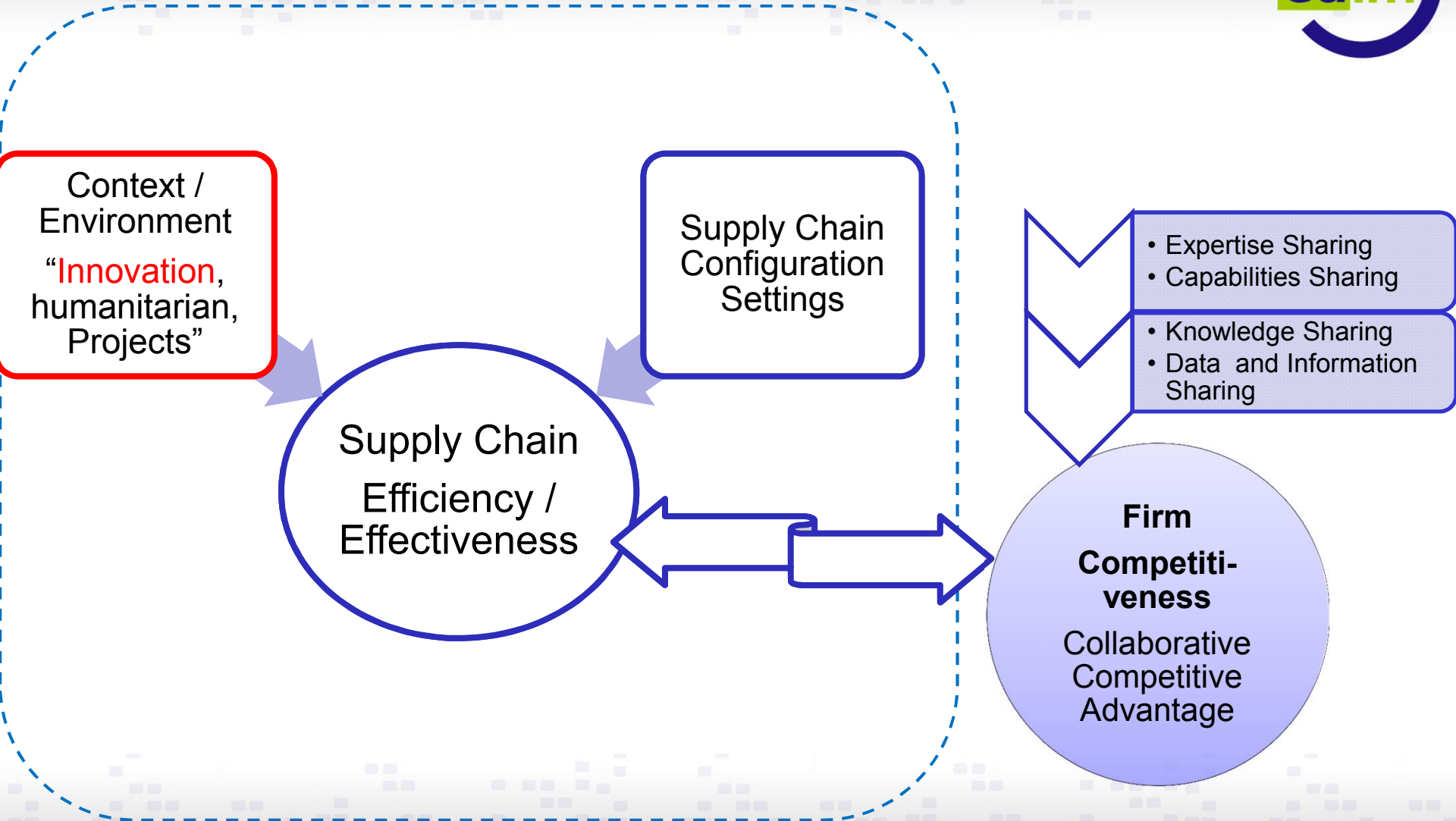
To improve Supply chain performance (efficiency and effectiveness)

How?

Research Methodology

- Systematic Literature Review

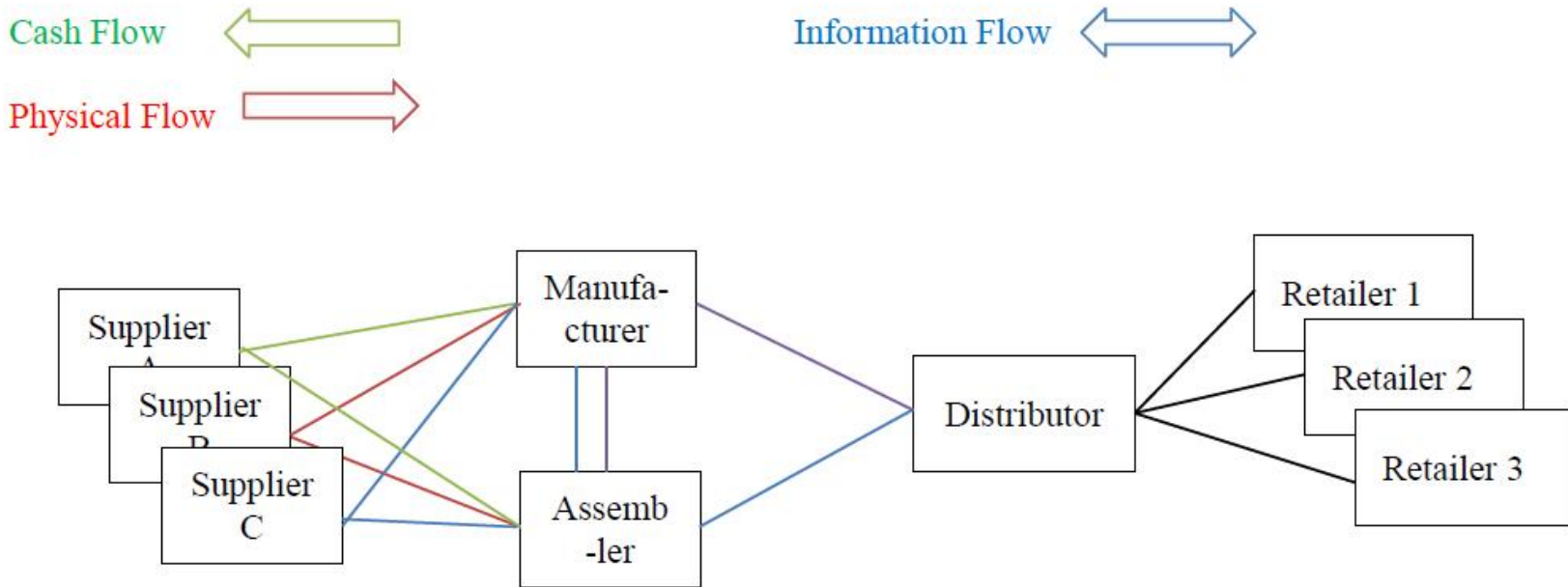
Overview Cont'd



Background



Supply Chain - Supply Chain Configuration



Background

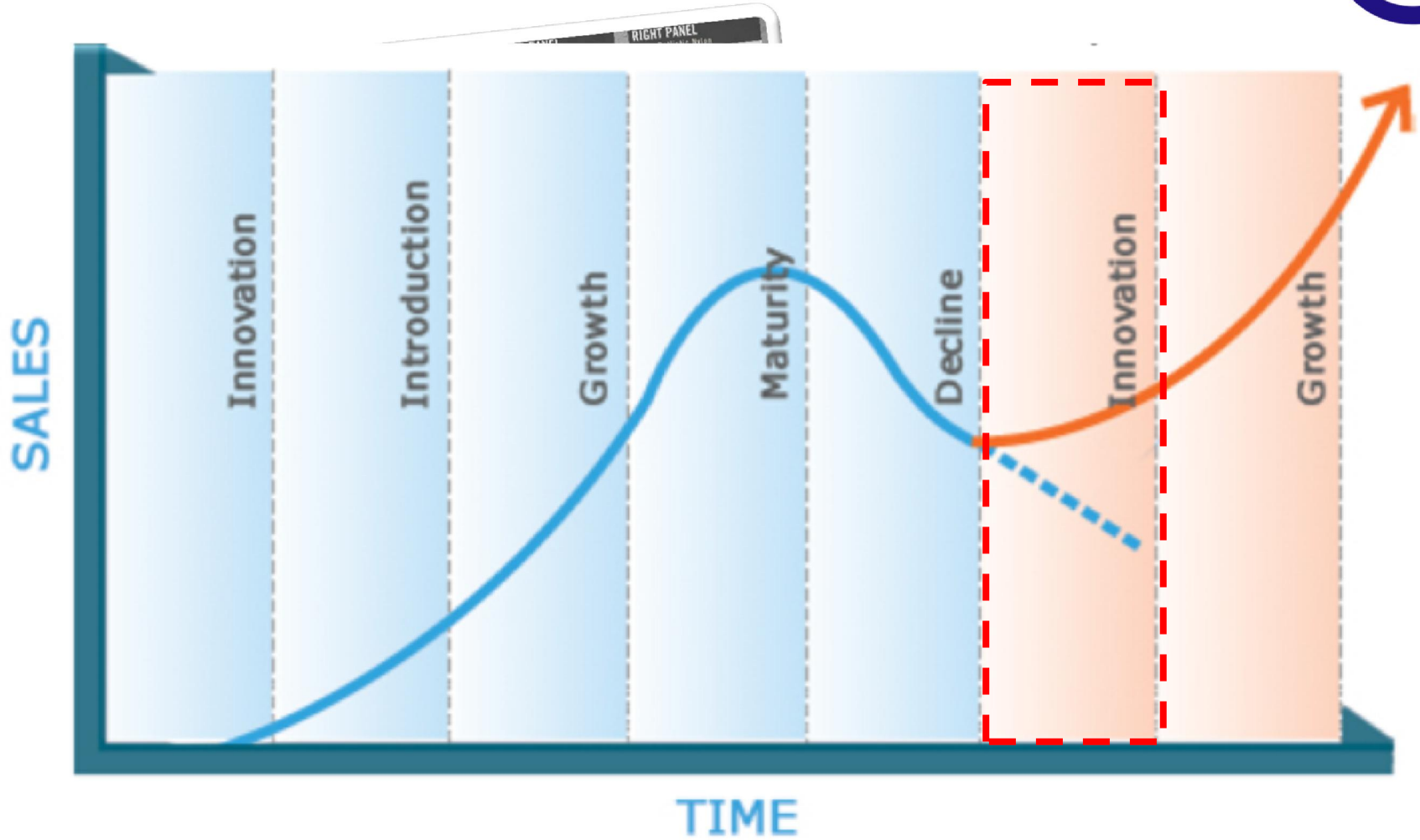


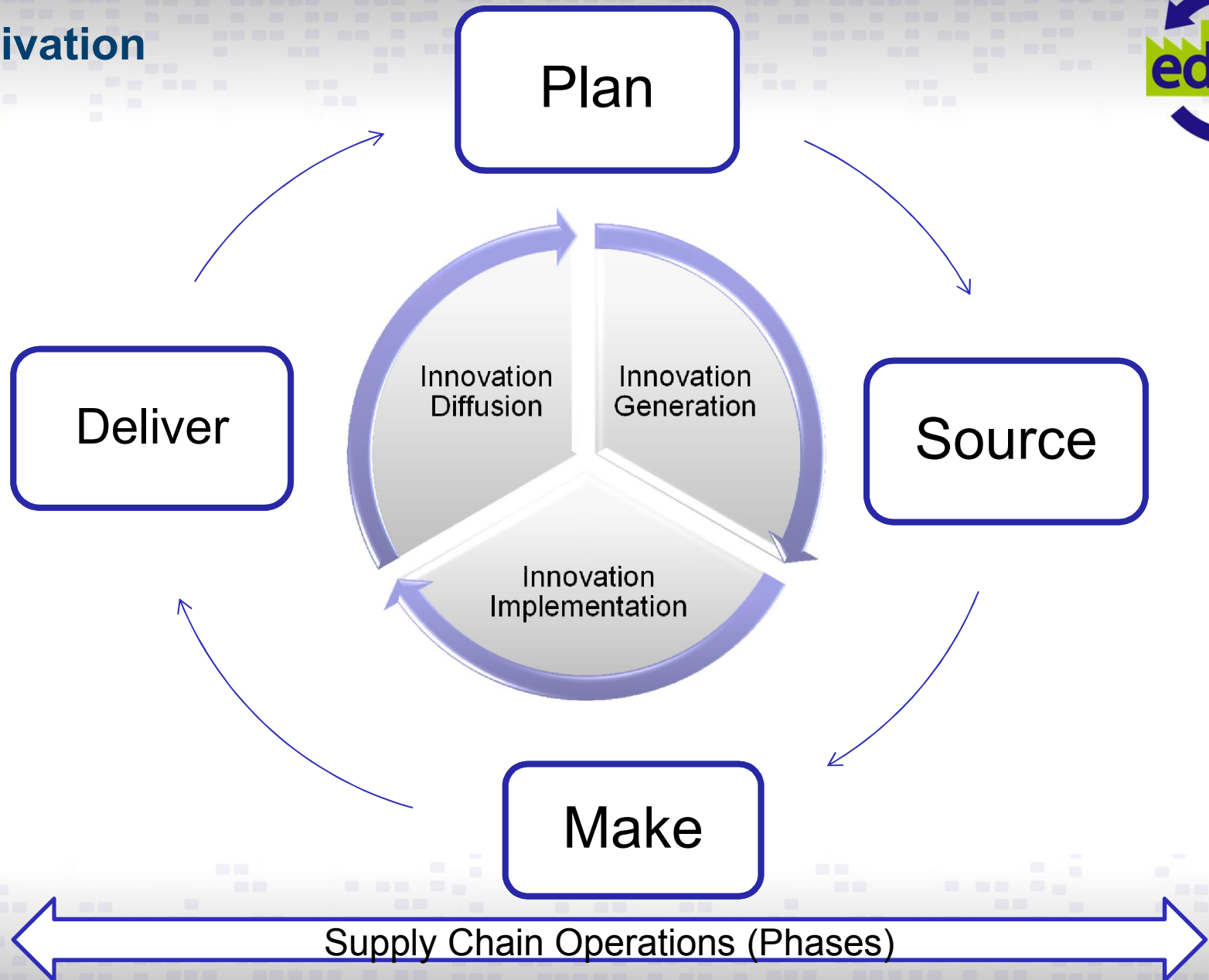
- Most of the innovation practices are reflected within the supply chain context as strategic/operational/functional decisions
- Many of innovation activities coincide with supply chain research stream.

Background Cont'd

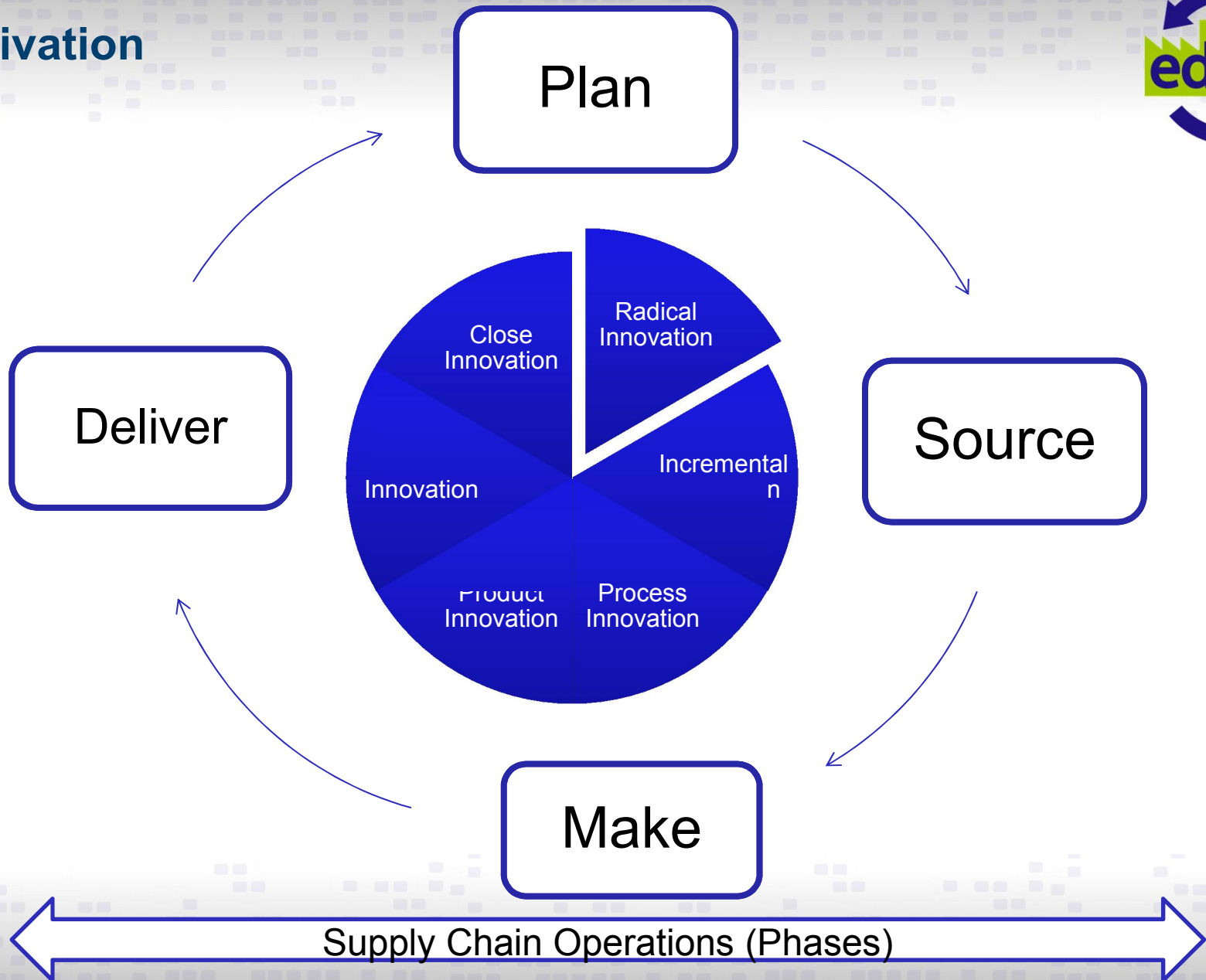


Motivation





Motivation



Motivation Summary



- **Trend for mass customisation of products**
- **Shorter product life cycle**
- **Rapid technological progress, associated with process improvements**
- **Innovation practices generation, development and implementation take place within the physical supply chain**

Methodology – Systematic Literature Review



Variable	Parameters	Query Keywords	Perspective of publications	Inclusion Criteria
Supply Chain Configuration	Process, Relationships, nodes, location	Supply Chain Configuration, Supply Chain Design, Supply Chain Structure	According to condition; e.g. Industry / Cross Country / local vs. global .. etc.	Papers with SC Configuration as dependent variable, from 2000-2014
Innovation Practices	Introducing new or improved product/process	New Product Development, Process Improvement	Product/ Process Radical / Incremental	Papers with Innovation practices as explanatory variable from 2000-2014
Innovation	Definitions	Innovation Definition, Innovation classification, Incremental Innovation, Radical Innovation	Literature review papers	Papers covering Innovation definitions, no date restriction
Supply Chain Management	SC Definitions, Collaboration measures	Supply chain Management	Literature review papers	Papers covering SC management definitions, no date restriction

- Introducing innovation practices affect supplier network design
→ Implementing improvements on process/product, leads to supplier networks re-design, due to raw material and products/process specifications modifications.
- Introducing innovation practices affect distribution channels design
→ Introducing new process/product, leads to redesign of distribution channel due to allocation of retailers.
- Product Innovation (New Product Development) is usually followed by process innovation/improvement.

Findings Cont'd



- Innovation impacts supply chain performance metrics;
 - Manufacturing Costs
 - Delivery Times
 - Lead Times
 - Inventory Investments
 - ROI
- The extant literature is mostly linking innovation practices with supply chain stream of research in radically introducing new product
- There is lack of research on process and incremental innovation and their impact on supply chain configuration and performance.

Future Research Prospects



It is worth exploring in future research;

- Incorporation of Innovation management within supply chain management; how innovation can be investigated as a function of the supply chain operations, rather than a separate process.
- Impact of supply chain collaboration strategies on innovation generation and diffusion, on the supply chain level (i.e. suppliers, manufacturers and distributors)
- Analysing and considering supply chains as innovation-driven business clusters, and how this would impact the collaborative competitive advantage.



Thank You



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