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Sustainability and Effectiveness in Global Supply Chains

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1st. International Conference on Dynamics in Logistics
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Agenda

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- Scenario and Logistic Systems
- Aims
- Systemic Perspective
- Descriptive Model
- Conclusions
- Future Research

Scenario and Logistic Systems

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Invest where you get maximum returns, source talent, raw materials, products and services from where it is best available, produce where it's most cost-effective, and sell where the markets are, without being constrained by national boundaries.

(IHT, 2007)

Scenario and Logistic Systems

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Distance Dimensions

Cultural	Administrative
Different languages	Absence of colonial ties
Different religions	Absence of shared monetary
Different social norms	Absence of political association
Different ethnicities	Political hostility
Lack of connective ethnic	Government policies
Lack of connective social networks	Institutional weakness
Geography	**Economic**
Physical remoteness	Consumer incomes differences
Lack of a common border	Differences (cost and quality):
Lack of sea or river access	Natural resources
Size of country	Financial resources
Weak communication links	Human resources
Weak transportation links	Infrastructure
Differences in climates	Intermediate inputs
	Information or knowledge

Cultural elements, government policies and technological evolution can be more relevant in nation's trade and integration than, for example, geographic distance alone.

(Ghemawat, 2001)

Scenario and Logistic Systems

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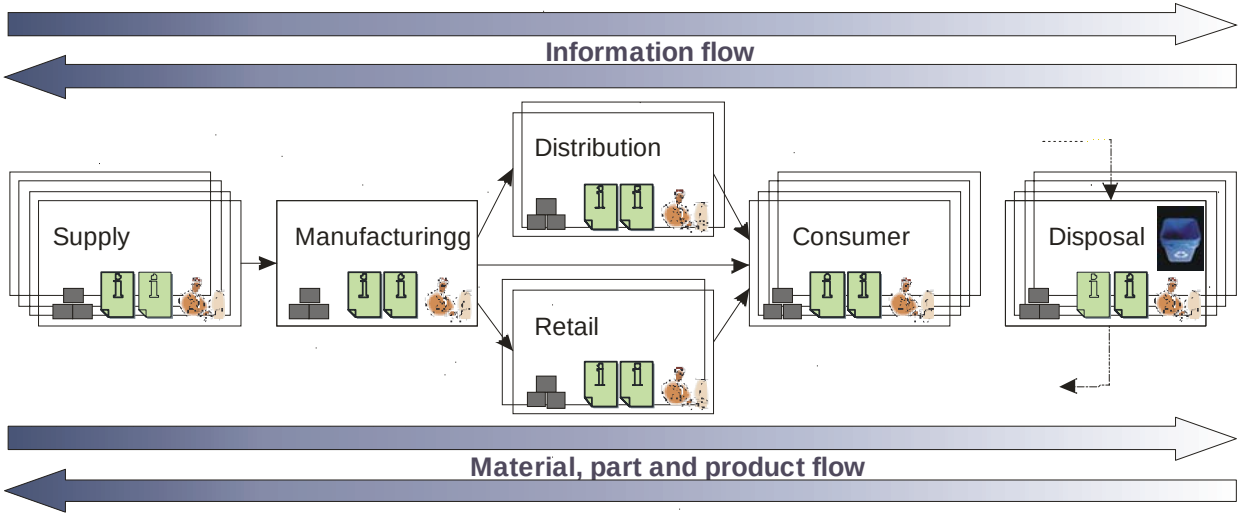

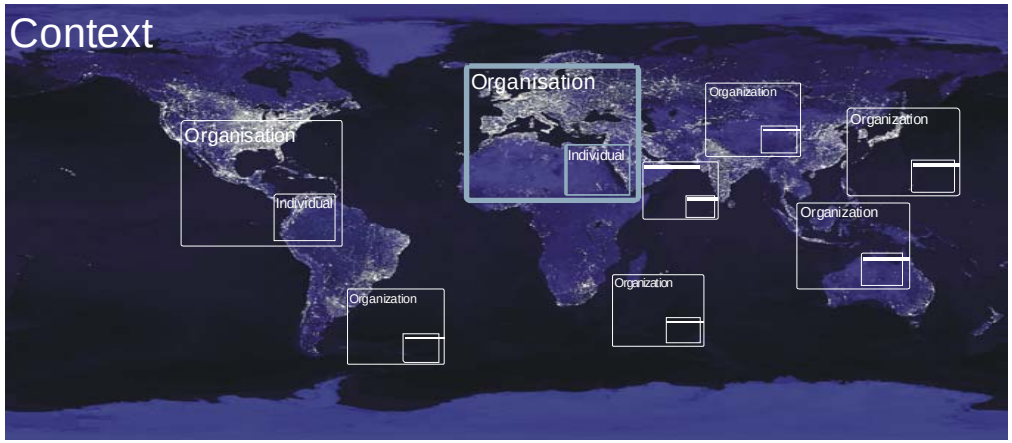

Business Scenario
- global
- competitive

Logistics
- strategic fit
- effective
- sustainable

Aims

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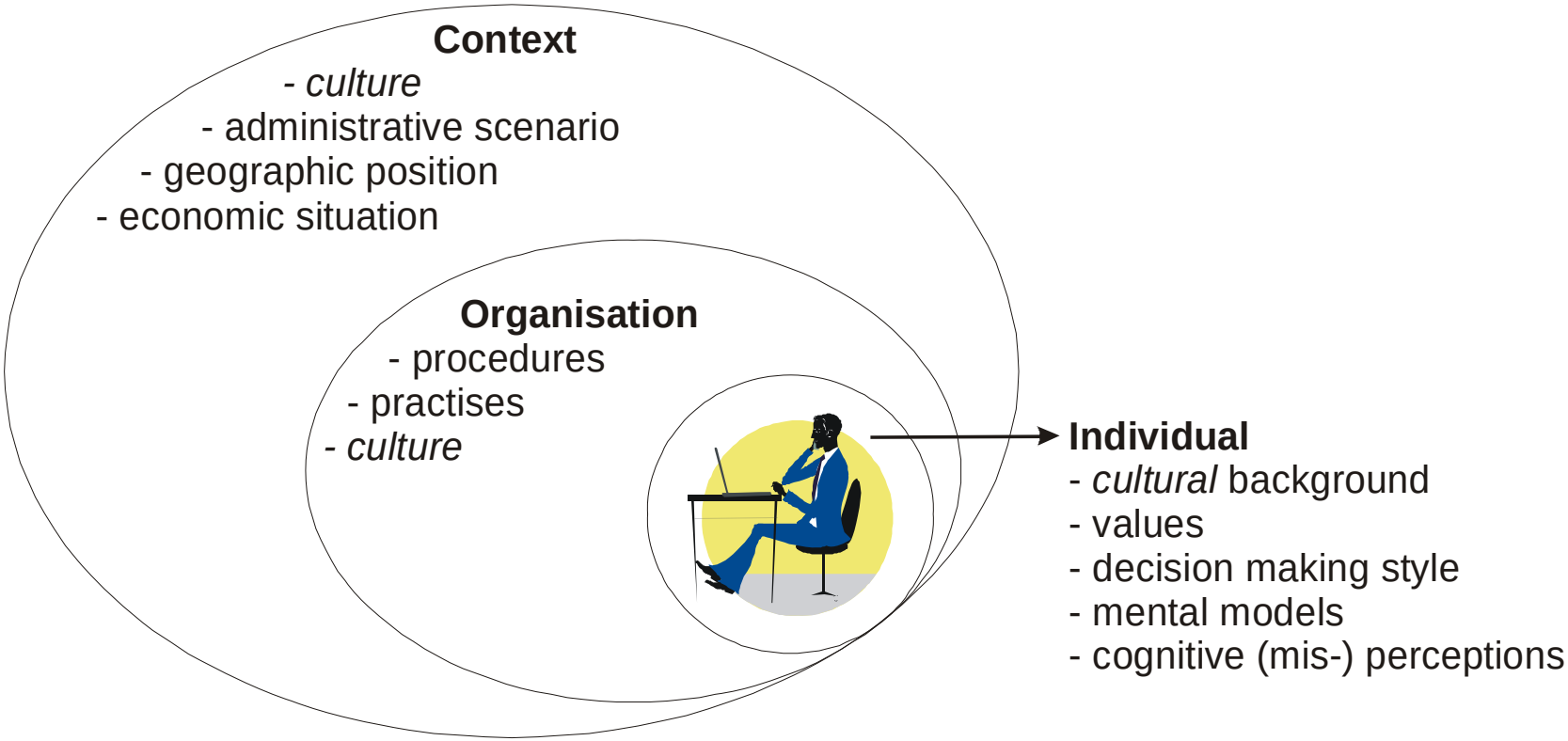
- address current scenario and logistic systems
- circumscribe some aspects impacting on dynamics in logistics
- propose a descriptive model and introduce future research steps

Main research attributes:

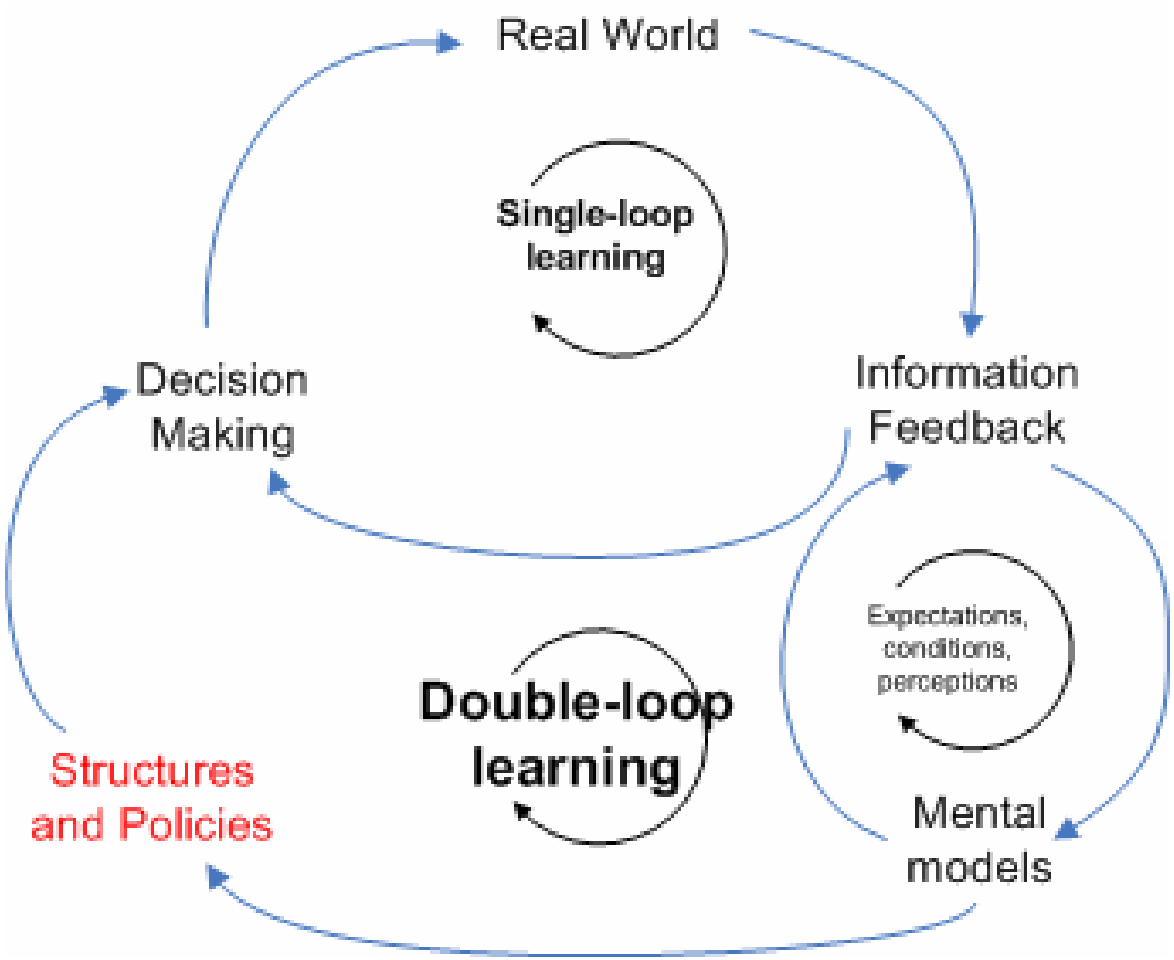
- systemic perspective embracing context, organisation and individual aspects
- strategic viewpoint exploring the interrelation between external knowledge and the resulting competitive advantage
- literature review and exploratory approach within a doctoral project

Systemic Perspective (1/4)



Organisational culture is borrowed from and bound up with larger cultural processes associated with the context. The most immediate sources of outside influence are the individuals. (Hatch, 1997)

Systemic Perspective (2/4)



(Sterman, 2006)

Learning

- through study/experience
- acquiring knowledge, skills, values

Double-Loop Learning

- persistent, measurable
- new mental constructs

Systemic Perspective (3/4)

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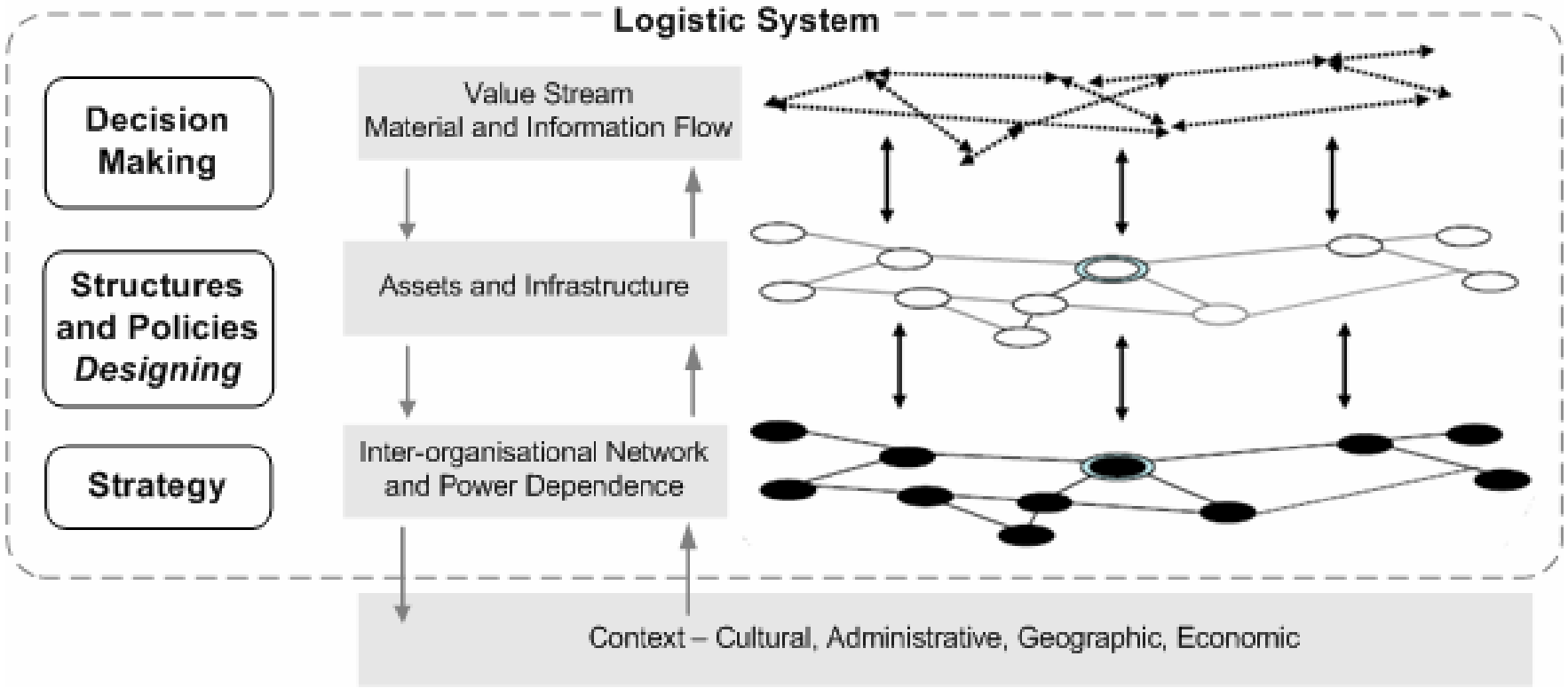
Logistic systems represented as linked levels and interdependent universe of actions.



(adapted from Peck, 2006)

Systemic Perspective (4/4)

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Specifically regarding to a logistic network, competitive advantage and a long-term evolution can be created by developing **knowledge that is embedded in the cooperation context** and thus hard to imitate

(Hülsmann et al. 2005)

Innovation

- evolution of social and physical technologies coordinated under evolving business plans (Beinhocker 2006) plays a central role in today's economy

- iterative matching of technical possibilities to market opportunities; through both market and non-market interactions, feedbacks and learning processes

(Foxon et al., 2005)

- distinctly challenging in an interwoven world impregnated with external knowledge, characterised by evolving and cyclical opportunities and threats

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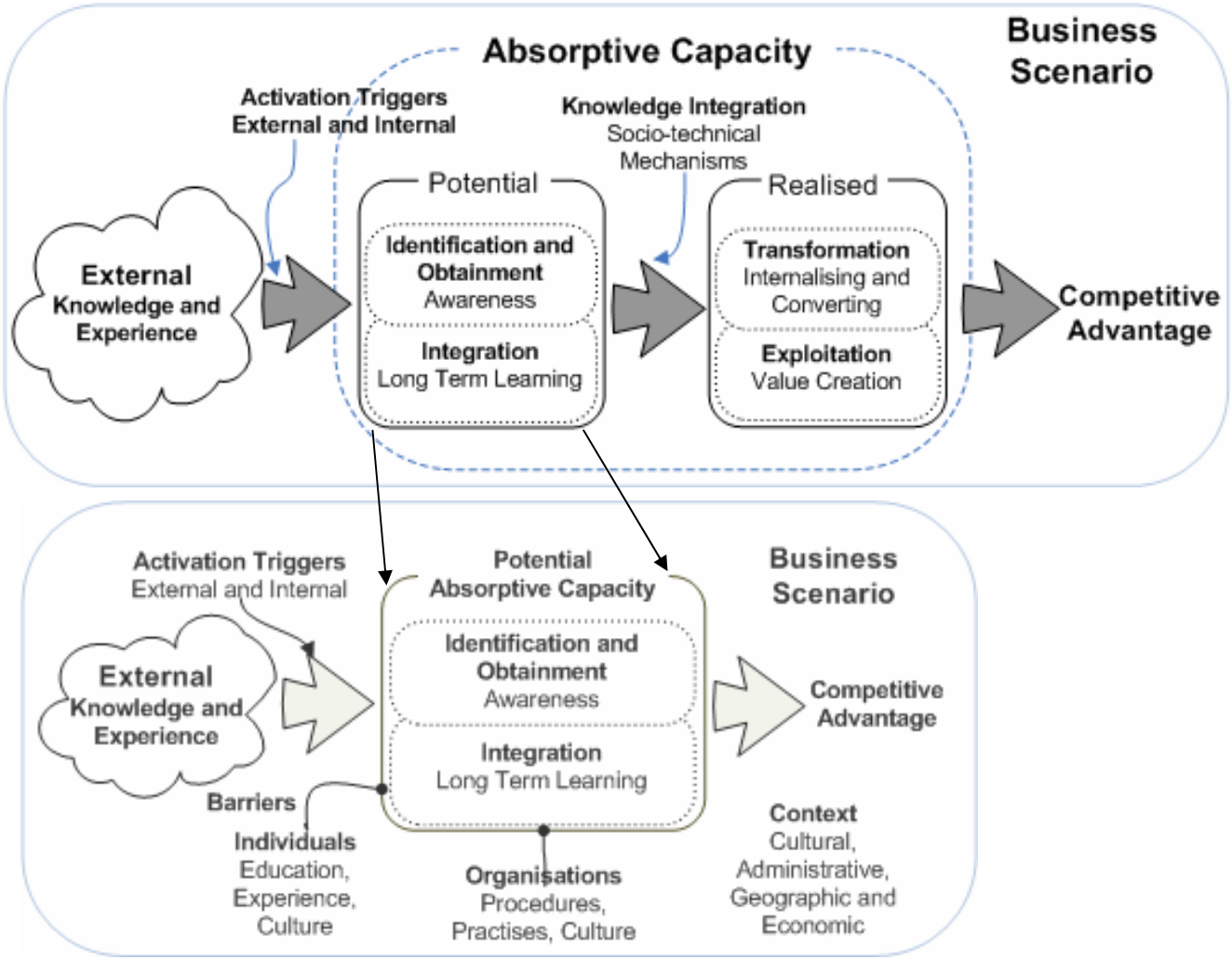
Descriptive Model

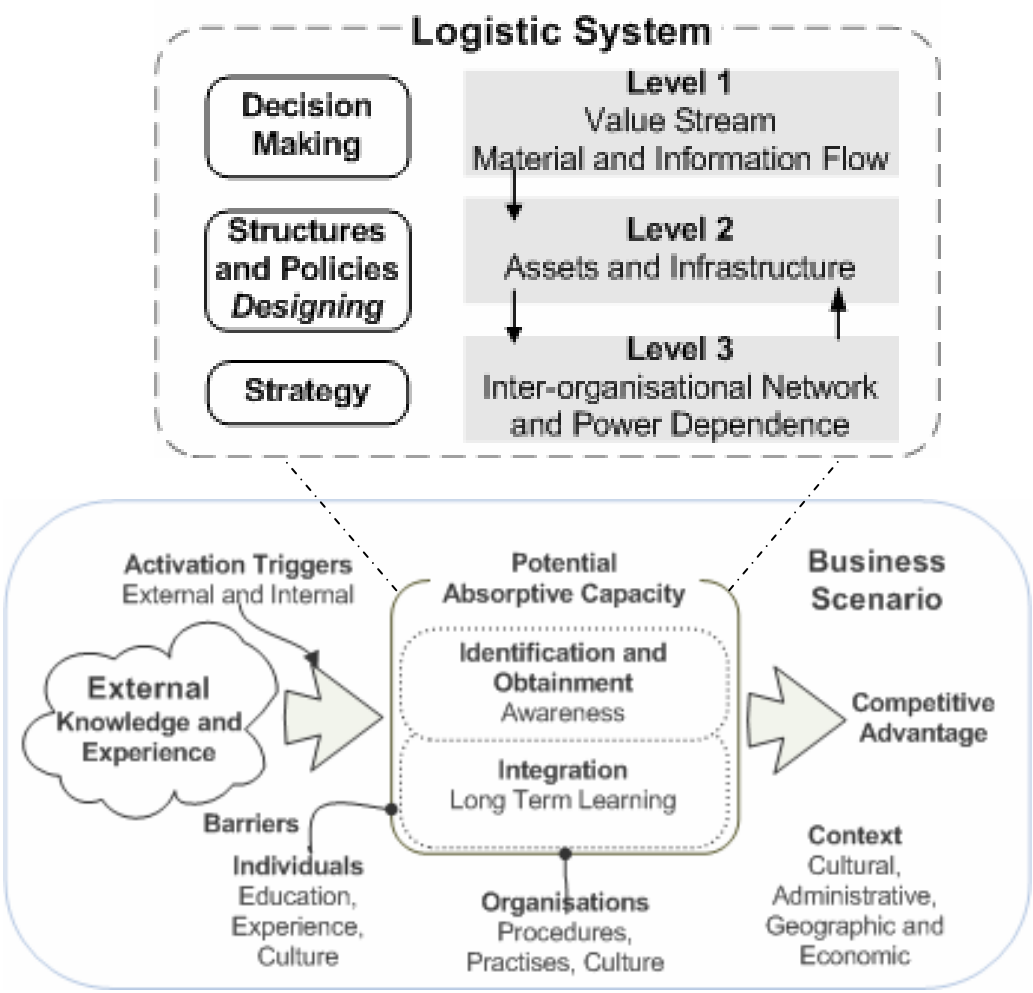


Absorptive capacity

firm's ability to acquire, assimilate, transform and exploit knowledge

(adapted from Zahra and George, 2002)

Descriptive Model



Potential absorptive capacity

- ability to recognize the value of new information, assimilate and integrate it
- increasingly relevant in dynamic marketplaces with abundant and diversified external knowledge

Conclusions

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- **Diversity** apart from the *potential* positive influence on awareness also brings new challenges to logistic systems
- **Explanation / causal models** could be build upon this descriptive model in order to approach causal interrelations within logistic systems
- **Suitable long-term learning processes** should taken into account individuals' background, the context in which it takes place as well as organisational aspects

Future Research

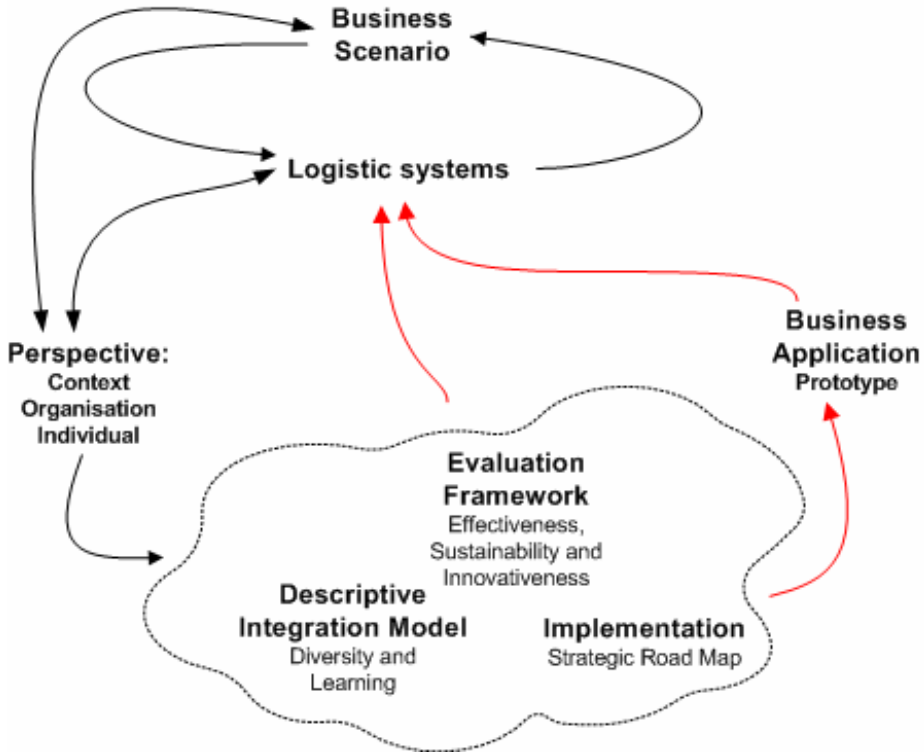
Scientific Purpose

- **deepen the understanding** about cultural diversity and its influence in the design, planning and implementation of logistic systems (e.g. global supply chains)

Business Purpose

- **enhance knowledge and information transferring** between supply chain partners in cross-cultural contexts

***Paramount goal**: contribute to the comprehension and improvement of logistic systems within current challenging scenario*



Questions?

Thank you !

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