



Linköping University

Logistics Management

Business Models for City Logistics

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LiU EXPANDING REALITY

Why this outbreak session on business models?

- **Many demonstrators today** are technical driven – not business driven.
 - Demonstrators indicating large technical, environmental and operational feasibility, but there are considerations to the economic feasibility (Quak, 2011).
- Long term success in practice requires a viable business model that secures **financial feasibility** (Quak et al., 2014).
 - To define city logistics business model is considered an important foundation for the involved stakeholders (Macário et al., 2008).
- **Lack of business models is identified as a major barrier** to implement city logistics in Sweden
 - “Roadmap for city logistics (Lindholm et al., 2014).
 - A Vinnova-project “Business Models for City Logistics”

Content

1. Short introduction with existing theories on city logistics business models
 - Business models in theory
 - Logistics based business model
 - Business models for city logistics
2. Business model for city logistics in practice, TripleX vision
 - Birgit Hendriks, ECO₂City
3. Components in a City Logistics Business Model
 - Discussions and “workshop”



Mats Abrahamsson, Linköping University

1. BUSINESS MODELS IN THEORY



Business Models in theory

Two different forms of definitions:

1. The value/customer-oriented business model definition

- More “outward looking” with a focus on offerings

“It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams”. (Osterwalder et al. (2005)

2. The activity/role-oriented business model definition

- More resource based with a focus on division of roles

“is the set of which activities a firm performs, how it performs them, and when it performs them as it uses its resources to perform activities, given its industry, to create superior customer value (low-cost or differentiated products) and put itself in a position to appropriate the value” (Afuah, 2004)

In practice: A business model represents a

- Planned and conceptual way to perform and do business
- Translation of the strategy into operations

A focus on components and dimensions

Osterwalder and Pigneur (2002) describes four pillars:

- **Product innovation** (The company's value proposition to the target customer segment);
- **Customer relationship** (The information strategy and target customers)
- **Infrastructure management** (Resources base, own and partners')
- **Financials** (Revenue model and the cost model and consequently profit and loss).

Fritscher and Pigneur (2010) business model consists of nine building blocks:

- **Value proposition, Client relationships, Client segments, Distribution channels, Key activities, Key resources, Partner network, Cost structure and Revenue flows.**

Kindström (2005) identifies three dimensions in the business model:

- **Market positions** (How the company positions itself on a market),.
- **Operative platform** (The operative platform, resources, concepts, capabilities and processes)
- **Offering** (Product or services, described as the interaction between the two others).

Inditex Business Model

Adding value beyond profits

Three guiding principles:

1. Close the communication loop
2. Stick to the rhythm across the entire chain
3. Leverage your capital assets to increase supply chain flexibility

“End to end control of the supply chain”

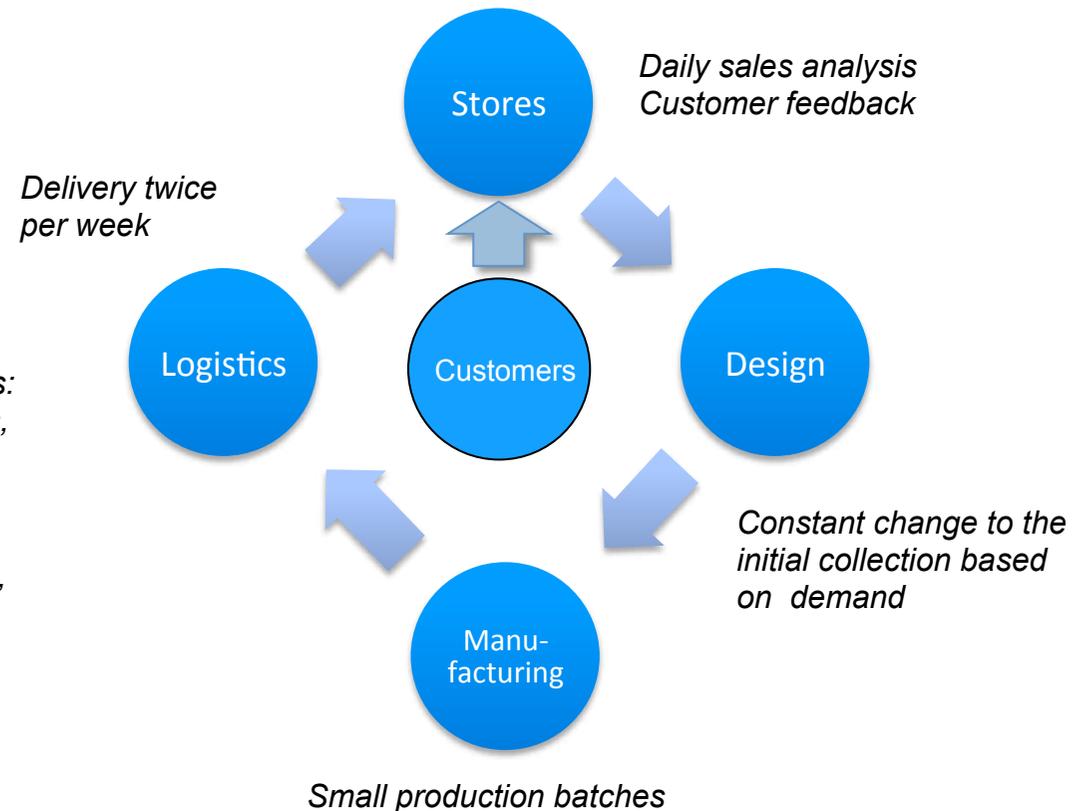
Market position through several brands and concepts:
Zara, Pull&Bear, Massimo Dutti, Bershka, Stradivarius, Oysho, Zara Home and Uterqüe

Operational platform:

Textile design, manufacturing and distribution facilities, all of which are located in Spain

Offerings:

Fast fashion: Adapting to what the customer wants as quickly as possible offering them sustainable fashion



Logistics based business model

- A logistics based business model is vital for companies where logistics plays an important role for the strategy of the firm
 - The flow of goods represents a large part of total cost and where availability is important for creation of customer value

(Sandberg, Kihlén & Abrahamsson, 2011)

Characteristics:

1. A logistics-based business incorporate **activities along the entire supply chain**, including internal as well as external coordination of the flow of goods.
2. It emphasises the **integration between logistics activities and market aspects**.
3. It **integrates the logistics activities with the IT function**.
4. It enables **new approaches on lean and agile strategies** in the supply chain
(Different combinations of Lean and Agile)

Business model for city logistics

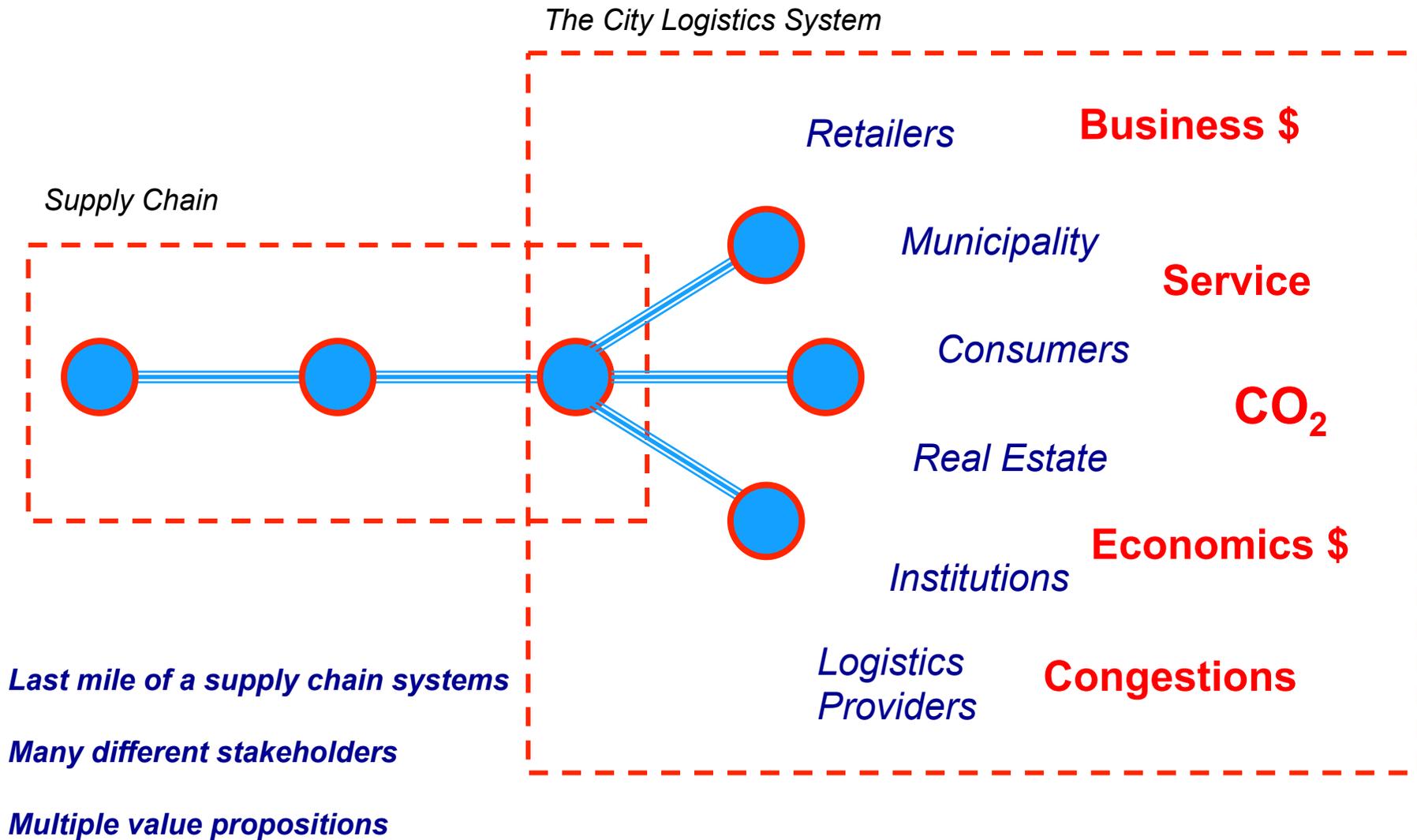
Characterised by:

- Represents a the last mile of a more or less integrated supply chain
- Many stakeholders: municipality, retailers, institutions, service providers, etc. (not just supplier – customer relation)
- Different value propositions for business customers (cost, service) and for the society (CO₂-emissions, congestions, etc.).

Critical financing and viability issues (Benjelloun et al, 2010):

1. Infrastructure financing (who finance)
2. Operation financing (when and who finance)
3. Management and control (who is the manager)
4. Competitive advantage (benefits or disadvantages for participating companies).

Business model for city logistics



Business model for city logistics

Questions looking for an answer



1. What type of business model?
 - Value/Customer oriented BM?
 - Role/activity based BM?
2. What should be included in a city logistics business model?
 - Models for division of roles between actors in a city logistics system
 - Models for management and control
 - Models for performance measuring
 - Models for payment, costs, investments

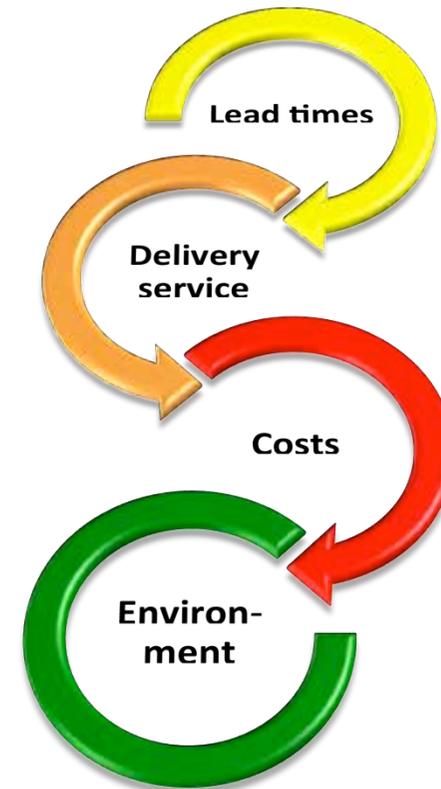


Birgit Hendriks, ECO₂City

2. TRIPLEX VISION

Maria Björklund, Linköping University

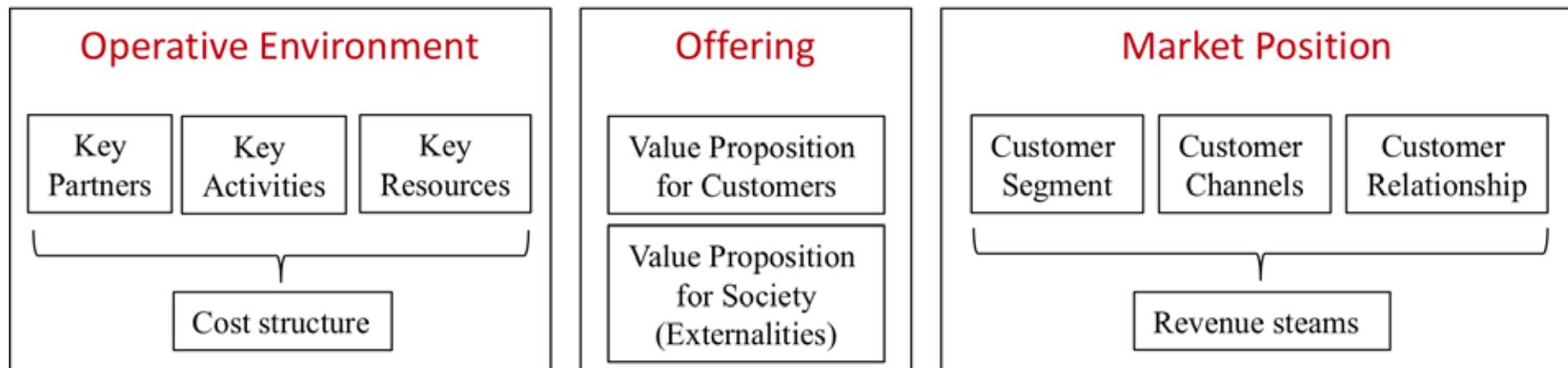
3. WORKSHOP & DISCUSSIONS



Discussions

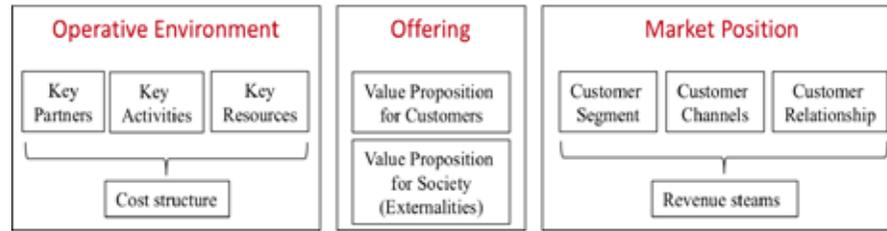
- 1. Experiences on city logistics business models (Round the table)**
 - Good experiences, are there “Best Practice”?
 - Bad experiences, failures?
- 2. What should be included in a city logistics business model for small and mid scale cities (< 300 000 habitants). (Fill in data sheet)**
- 3. How to evaluate socio-economic benefits e.g. environmental benefits in a city logistics business model.**
- 4. Are the business model components the same for:**
 - Commercial city logistics, e.g. Binnenstadservice?
 - Municipality controlled city logistics, e.g. Lucca?
- 5. Key success factors for successful implementation of city logistics?**

Components in a city logistics business model



What is missing in this generic business model for city logistics?

Workshop



Important?
Rank 1 to 7

1 = Not important
7 = Very important

Components		Questions	[based on Quak et al., 2014]
Market position	Customer Segment	Who is the main customer(s) for the specific product/service?	<input type="text"/>
	Customer Channels	-How are these customer(s) reached?	<input type="text"/>
	Customer Relationships	-What type of relation has the company with the customer? -How can the solution improve customer relationships?	<input type="text"/>
	Competitive strategy	-How does the solution add to our competitive strategy? -How can this strengthen us in our markets?	<input type="text"/>
	Revenue Steams	-For what value are the customers willing to pay?	<input type="text"/>
Operative environment	Key partners	-Which partners are used? -What roles do they play? -Which key resources are acquired from partners?	<input type="text"/>
	Key activities	-What activities are undertaken?	<input type="text"/>
	Key resources	-Which resources are used? -What are our key competences?	<input type="text"/>
	Cost structure	-What are the costs associated with the solution? -Which key resources and key activities are most expensive? -Who finance the solution?	<input type="text"/>
Offering	Value proposition to customers	-How does the undertaken operation result in value for the customers?	<input type="text"/>
	Value proposition to society	-How does the undertaken operation result in value for the society? -How are externalities measured and evaluated?	<input type="text"/>

What is missing to make the business model complete?

Components	Questions