



Business Models for Sustainable Urban Mobility

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Brest

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Does it make any sense ?

What is a Business Model ?

- A business model is a conceptual tool that contains a set of elements and their relationships, as required by an organization (public or private) to **deliver value** to its clients, while generating **sustainable revenue streams**
- The term “business model” was used for the first time in a paper in 1957 but only in the 90’s it become common in the literature
- The roots of the concept of business model are in transaction cost economics



Properties for a sustainable urban mobility system



- **Robustness**, i.e. stability and long-term sustainability;
- **Efficiency**, i.e. high productivity in the ability to change the basic resources into products and these consumer units, providing the best result at the lowest cost;
- **Adaptability**, i.e. dynamic capability of adapting services to the requirements of developments in society and technology.
- **Diversity**, ability to meet the aspirations of different customer segments with different services in a continuous adjustment between supply and demand of the urban mobility system

How well are we doing ?

- ✓ **Robustness** – only at a low quality levels, financial sustainability being the main weakness;
- ✓ **Efficiency** – improving but still much below the possibility frontier;
- ✓ **Diversity** – conventional public transport is insufficient to satisfy citizens aspirations;
- ✓ **Adaptability** – low flexibility to adjust the system, barriers to innovation emerge at regulatory and organizational level in many cities and countries

Intervention of Public Authorities



- Virtually everywhere in the safety and environmental protection dimensions
- Virtually everywhere in the definition and scheduling of infrastructure investments (even when they are financed by private parties)
- In significant parts of the Transport Services markets, for needs of coordination (dense agglomerations) or of coverage (low density areas, isolated regions)
- Have the right to define the rules of the games (preserving non-discrimination of providers and of clients), which reduces the degrees of freedom of companies to design their **Business Models**

Do we observe the fundamentals of a Business Model ?

✓ Just follow Drucker's questions:

- Who is the customer?
- What does the customer value?
- How do we make money in this business?
- What is the underlying economic logic that explains how we can deliver value to the customers at an appropriate cost?

✓ Frequently, business models are not perfect at the outset (because market preferences and their valuations are not perfectly understood)

- they must be perfected by observing and studying the market (market reading)

✓ When Business models don't work it's because

- They fail the narrative test (the story doesn't make sense, it has incorrect assumptions on customer behavior); or
- They fail the feasibility test (Profits and Losses are not reasonable)

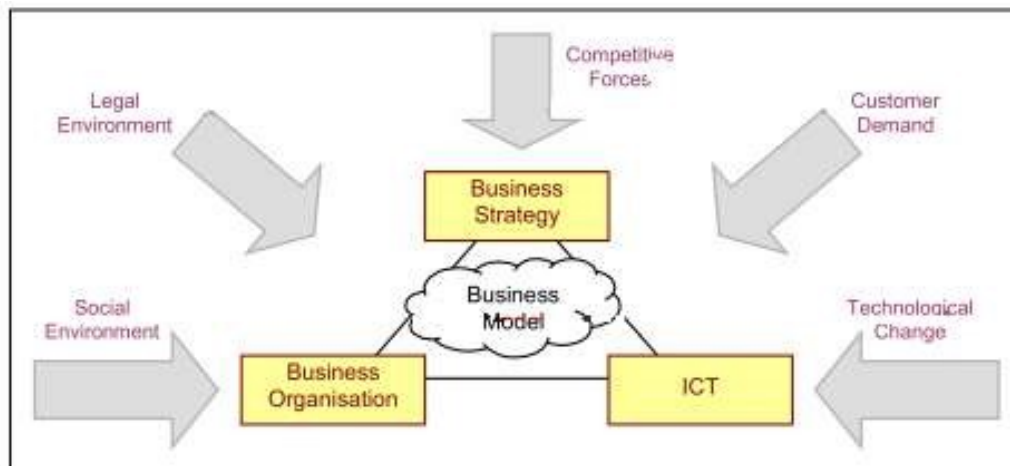
Business Model brings rigour and vision

When used correctly, BM forces managers to think rigorously about their business

- Their great strength as a planning tool is that it focuses attention on how the elements of the system fit into a working whole

But a Business Model is not the same as a strategy

- A strategy includes how to deal with competition
- A strategy includes execution and implementation while the business model is more about how a business works as a system

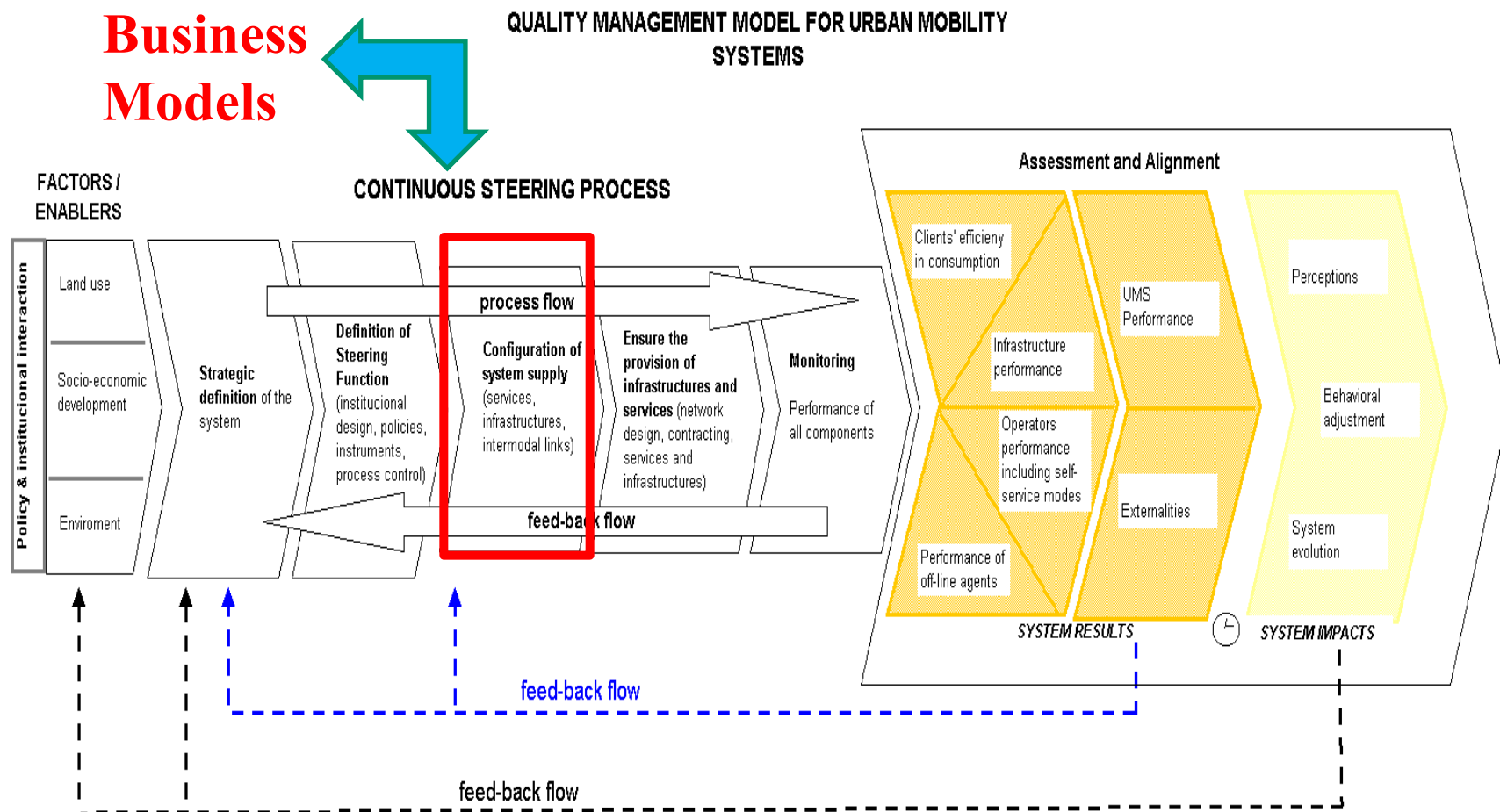


ICTs have made it *possible to reach customers in new and innovative ways and through a multitude of channels.*

Affordable ICTs have *reduced transaction and coordination costs*

Source: Osterwalder, Pigneur and Tucci, 2005

But BM are just one piece to manage UMS !

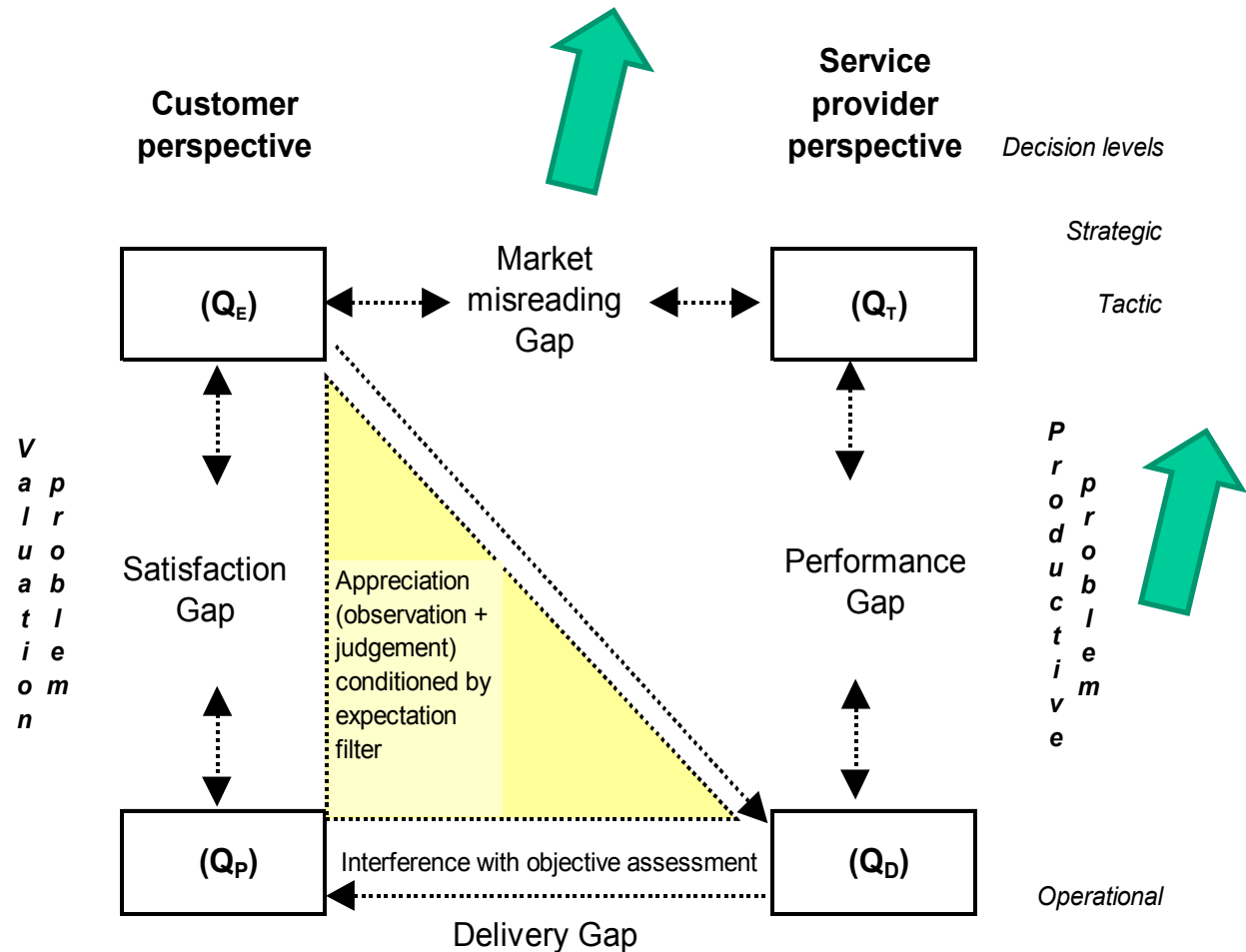


Source: Macário, 2005

Quality is a driver to change Business Models

Constant pressure to change business models:

- Innovation in technology
- Changes in laws / regulations
- Competitors moves
- Change in consumers preferences



Source: Macário, 2003

Capturing the Potential of Innovation



- ✓ **Many firms have difficulties in managing innovations that fall outside of their previous experience**
 - An innovative Business Model must be a device that enables bridging between technology development and economic value creation

- ✓ **The challenge of a business model for technology managers is that it requires linking the physical domain of inputs to an economic domain of outputs, in a context of technical and market uncertainty**
 - The realization of economic value from technology derives from the economic and social structure of the situation, and not only from the technology itself

- ✓ **Innovation optimizes resources and processes. Enables to do more with less and takes cognition of the complexity of the mobility process ;**

Need for a permanent innovation system in support of urban mobility

Institutional base setting
for innovation,

Human capital
to build and sustain
a technical
foundation

Interactive processes

Evolutionary
process of
innovative design
and development of
solutions.

Monitoring and learning

Assess short term
outcomes and long
term impacts
(monitor change)

Feedback and adjust
structures and
processes

This time it isn't who does what, but how we can do it together .

**Hope it
makes
sense to
you too !**



Thank you for your time !

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