

Value modelling with e^3 value



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The take-home message ...

- Before **embarking** on an **development project** for **multi-enterprise** information systems supporting **IT-enabled value propositions**:
- You'd better first **explore** the constellation of enterprises from an **economic perspective**
- And **understand why** the multi-enterprise IS is needed from the business point of view in the first place.

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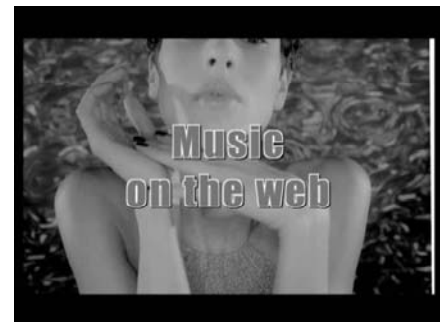
What are networked value constellations...?

- "A construct where **actors** come together to **co-produce value** with each other" (Normann & Ramirez)
- Similar to: **value & business webs**:
 - "contributors that come together to create value for customers and wealth for their stakeholders" (Tapscott)
- Emerged due to widespread use of the Internet
- Examples:
 - Cisco Systems, Dell, but also industries such as
 - Electricity supply
 - Most Internet services such as news, market places, entertainment

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An example: Internet radio



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While designing constellations ...

- Concerns are:
 - **Multiple enterprises**: in case of conflicts **no central decision taking authority**
 - **Multiple stakeholders**: often **confusion** about which product/service we offer with whom, **long before talking about IT**
 - **Short timeframe**: ~weeks available for designing a constellation offering a particular service (**time to market**)
 - **Economic & technical feasibility**

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What do we model in case of value constellations?

- A **wide range** of possibilities:
 - Business processes, coordination mechanisms, information systems, trust, security, ...
- **But**:
 - do these really explore **feasible constellations** from an **economic value perspective**? and,
 - within a **reasonable timeframe**?
- **So**:
 - Focus on **economic value** first; a first class citizen
 - Introduce "**separation of concerns**" to reduce complexity
 - Create first understanding of and agreement about the **business case**
 - Abstracting away from lots of issues, but specifically from **coordination & business processes and information systems**

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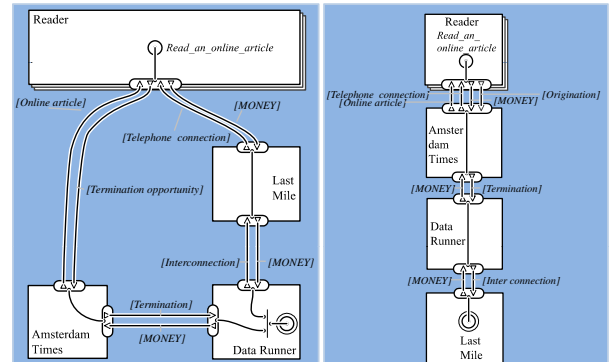
Why do we want to model value constellations

- A precise and shared understanding of the constellation
- Checking common business rules:
 - For business requirements and profitability
 - e.g. “one good turn deserves another”
- Analysis of (economic) feasibility: scenarios
- Starting point for Information Systems development: *networked* value constellations
 - e.g. for assessing technical feasibility

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Networked Value Constellations “Free” news: A design question



“Business Modeling for the CxO”



August 21, 2007
Henry Peyret, Forrester

“Academic research on high-level business modeling. Jaap Gordijn from the Vrije Universiteit in Amsterdam has developed a methodology — *e³value* — along with models and a simulation tool to calculate economic value across enterprises. This is particularly useful for validating new business models for networked enterprises — such as those in the music industry, in the deregulated European energy sector, or in the telecom industry — where firms need to explore revenue-sharing opportunities with service providers.”

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The *e³value* ontology: A tool for representing, modeling and analyzing Networked Value Constellations

	Profit			
Scenarios	Amst. Times	Last Mile	Data Runner	Hoster
<i>Null scenario</i>	164,400	102,000	133,800	8,000
Sensitivity Analysis				
Forecast >> Actual	-28,560	10,200	26,680	8,000
Decrease in interconnection	164,400	346,800	-8,600	8,000
Decrease in revenue sharing	-19,200	102,000	205,600	8,000

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Next lectures: The *e³value* approach

Steps:

- State the e-business idea
 - Assumption: The idea is available
- Design a value hierarchy for the idea
- Design a base-line value constellation
- Assess economic sustainability of the value constellation
- Revise the value constellation if necessary

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More information: www.e3value.com

The *e³value* toolset

© 2008 The latest available version of the e3value toolset is version 3.0.3

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Download the latest version of the e3value for Windows XP

The *e³value* methodology has been used in a number of academic modeling studies including international energy, procurement, banking, trade dynamics, and energy infrastructure modeling studies. Check out some related blogs we made with our open study partners.

The *e³value* methodology is described in a series of papers. Here is a list of our articles.

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