

Understanding **Business Strategies** of **Networked Value Constellations** using **Goal-** and **Value Modeling**

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Networked value constellations (NVC)

- “A construct where **actors** come together to **co-produce value** with each other” (Normann & Ramirez) or “contributors that come together to create value for customers and wealth for their stakeholders” (Tapscott)
- Enabled by **information technology**
- Well known examples:



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Management perspectives on “Business strategy” for NVC’s

- Time:
 - **Long term goals** (mission statement) of enterprise to ensure the ultimate business goal: **economic sustainability**
- **Classification of goals:** e.g. a la Porter:
 - Cost Leadership
 - Differentiation
 - Focus
- **Positioning** in the industry (so considering the companies **context**)
 - **Competition**
 - **Power** of suppliers & customers
- Strategy as “how to **accomplish**” the goals:
In case of networked **business models**:
 - “The things of economic value actors transfer with each other”

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Modeling business strategies for networked value constellations: Why?

- **Aims:**
 - Reaching a **shared understanding** of the business strategy in a multi-enterprise setting (case studies have shown various misunderstandings here)
 - Software-supported **analysis** of long term **sustainability**
 - Starting point for **IS/RE-processes** for value constellations (as most are enabled by IT)
- **Requirements:**
 - Easy **communication** (at the managerial level), so:
 - Lightweight
 - Graphical, yet sufficiently formal to allow various semi-automated analyses
 - Guidance in **strategic goal elicitation**
 - Support for **intra-** and **inter** actor long-term **conflicts**, as well as value proposition conflicts
 - Clear **relation** between **long term goals** analysis and operationalisation of these in terms of **value transfers**
- **Approach:**
 - Simplified **ontology for strategic goals** (similar to i^* but much simpler)
 - Value modeling (e^3value) to understand the operationalisation of a strategy

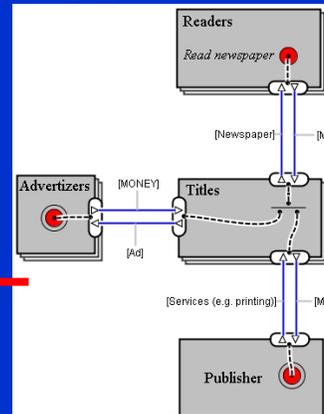
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Case study: Online news provisioning

- Strategic goals
 - Enterprises: Long term economic sustainability
 - Customers: Increase utility
- Put strategy into operation in terms of value transactions

	A	B	C	D	E	F	G
1	Value Interface	Value Part	Value Transfer	Occurrences	Valuation	Economic Value	Total
2	[Ad publication; MONEY]	out: Ad publication	(all transfers)	7500000	7500000	0	3000000
3		in: MONEY		7500000	0.4	3000000	0
4				7500000			-10650000
5	[MONEY; Services (e.g. printing)]	out: MONEY		7500000	1.42	-10650000	0
6		in: Services (e.g. printing)		7500000	0	0	0
7				7500000			7500000
8	[Newspaper; MONEY]	out: Newspaper	(all transfers)	7500000	7500000	0	0
9		in: MONEY		7500000	1	7500000	0
10				7500000			0
11				7500000			0
12	COUNT		4				0
13	INVESTMENT						0
14	EXPENSES						0
15	total for actor						-1500000



Conclusion: Title's and Publisher's cash flow: ↓
Why? A more detailed goal analysis

“Lightweight” strategic goal-modeling: what should be represented?

Goal: A state of something that an actor wants to achieve or maintain...

State: a valuation of some variable (current or desired)

- Enterprises: Level of Economic Sustainability, Profit, Market share, ...
- Consumers: economic utility

Objective: Goal which can be measured using some scale

Causal relations between goals:

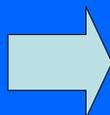
- +/- influences
- AND/OR
- Equivalence (=)



Strategic business goal elicitation: Porter's generic strategies

		Competitive advantage	
		Low cost	Product uniqueness
Competitive scope	Broad (industry wide)	Cost Leadership Strategy	Differentiation Strategy
	Narrow (market segment)	Focus Strategy (low cost)	Focus Strategy (differentiation)

Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Free Press, 1998.

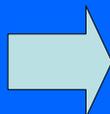


Goals on costs, prices, market coverage, customer need satisfaction, positioning as related to competitor products, ...

Elicitation of customer's goals: Holbrook's consumer value theory

	Extrinsic	Intrinsic	
Self oriented	Utilitarian, efficiency, convenience, ...	Emotional, play, fun, ...	Active
	Excellence, quality, ...	Aesthetics, beauty, ...	Reactive
Other oriented	Social, status, ...	Altruistic, ethics, justice, ...	Active
	Esteem, possession, ...	Spirituality, Sacredness, ...	Reactive

M.B.Holbrook. *Consumer Value: A Framework for Analysis and Research*. Routledge, New York, NY, 1999.

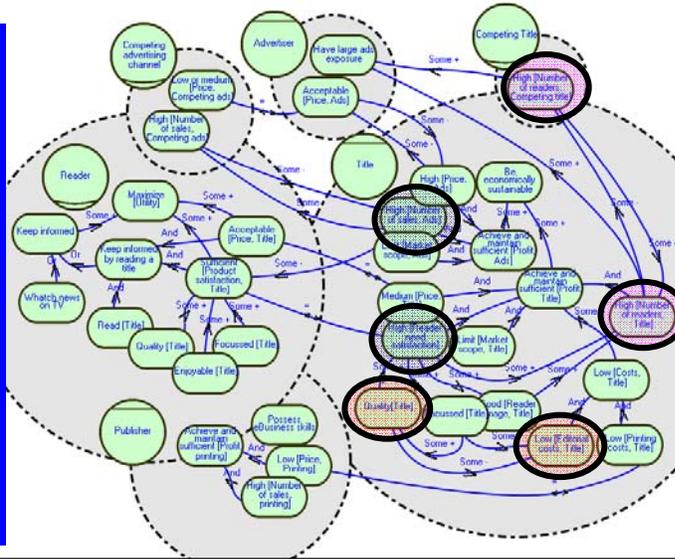


Specific customer goals such as « enjoy product », « possess fashionable product », ...

Problem analysis: Current strategic goal model

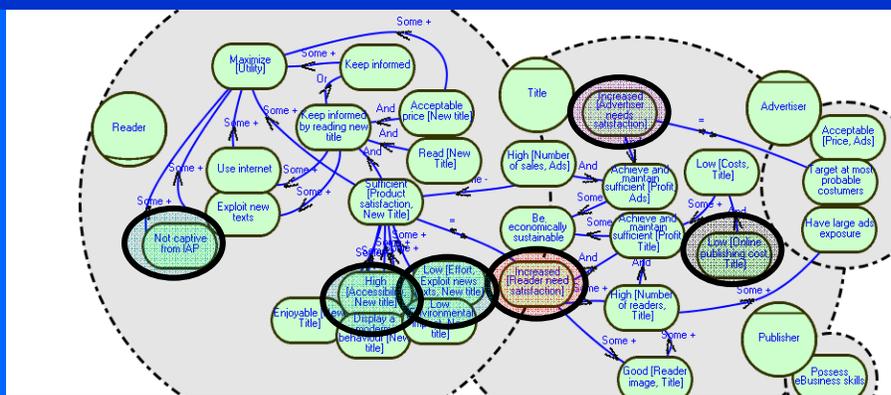
Goal conflicts and synergies:

- **Intra actor (title):**
 - “Stuck in the middle” (High quality & low editorial costs)
 - Proposition conflicts (Large quantity of ads & customer need sat.)
- **Inter actor:**
 - **Competition** (other titles and channels)



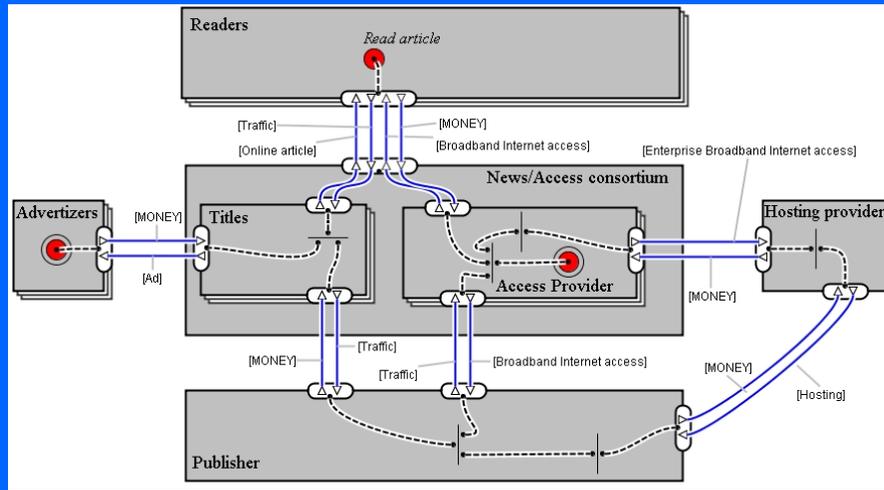
Solution analysis: Provide online news articles

- Differentiate from competitors: ↑ reader need satisfaction
 - For the readers: exploit news texts, low effort, high accessibility
- Online articles with ads ↑
- ↓ costs



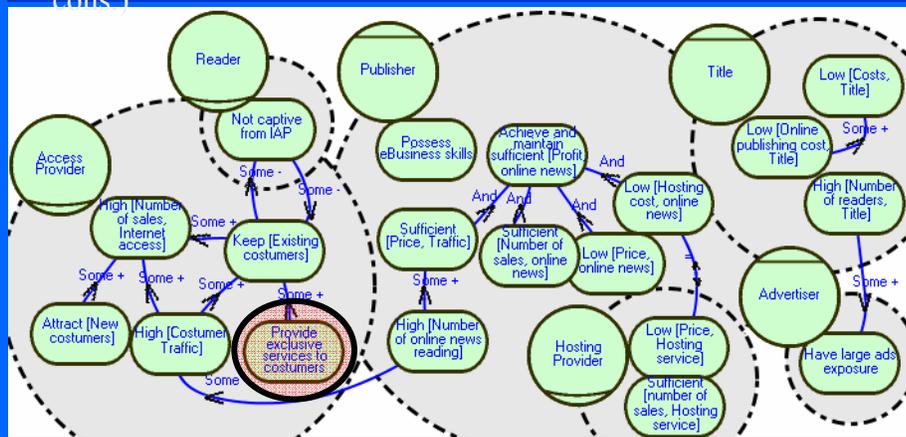
Solution analysis: Analyzing value

- ↑ reader need satisfaction, ↑ ad satisfaction, ↓ costs



Solution analysis: Goals revisited

- Value model introduces **new actors** and **value proposition** to readers and advertisers changes, so **re-assess** goal conflicts and synergies: **Exclusive service** (only via Title/Access provider cons.)



In sum ...

- **Lightweight**, so **simple** goal modeling helps to achieve **strategic fit** (analysis and comparison of various Value models)
- Keeping goal model focused on **strategic objectives**
 - long term
 - competitiveness
- **Reuse** management literature (e.g. Porter and Holbrook) to **elicit** companies strategic goals and consumer goals

Further information on *e³value* and goal modeling

- Jaap Gordijn, Michael Petit, Roel Wieringa, "Understanding business strategies of networked value constellations using goal and value modeling", forthcoming, RE'06.
- Jaap Gordijn, Eric Yu, Bas van der Raadt, "e-Service Design Using i* and *e3value* Modeling", IEEE Software, May/June 2006, pp 26-33.
- Bas van der Raadt, Jaap Gordijn, Eric Yu, "Exploring Web Services Ideas from a Business Value Perspective", Proceedings of the 2005 13th IEEE International Conference on Requirements Engineering (RE'05), Joanne Atlee and Colette Roland (eds.), pp 53-62, IEEE CS, 2005.