

Strategic analysis using value modeling – the c3-value approach

Hans Weigand, Paul Johannesson, Birger Andersson, Maria Bergholtz, Ananda Edirisuriya, Tharaka Ilayperuma

Infolab, Tilburg University, The Netherlands

Royal Institute of Technology. Department of Computer and Systems Sciences, Stockholm, Sweden

Presented by: Pieter Ribbers (Tilburg University)

C3 value

Research objective

- support strategic analysis using e^3 value

Main research questions:

- What is essential in strategic analysis?
- What is possible *within* e^3 -value, rather than by using complementing models?

Overview e³value

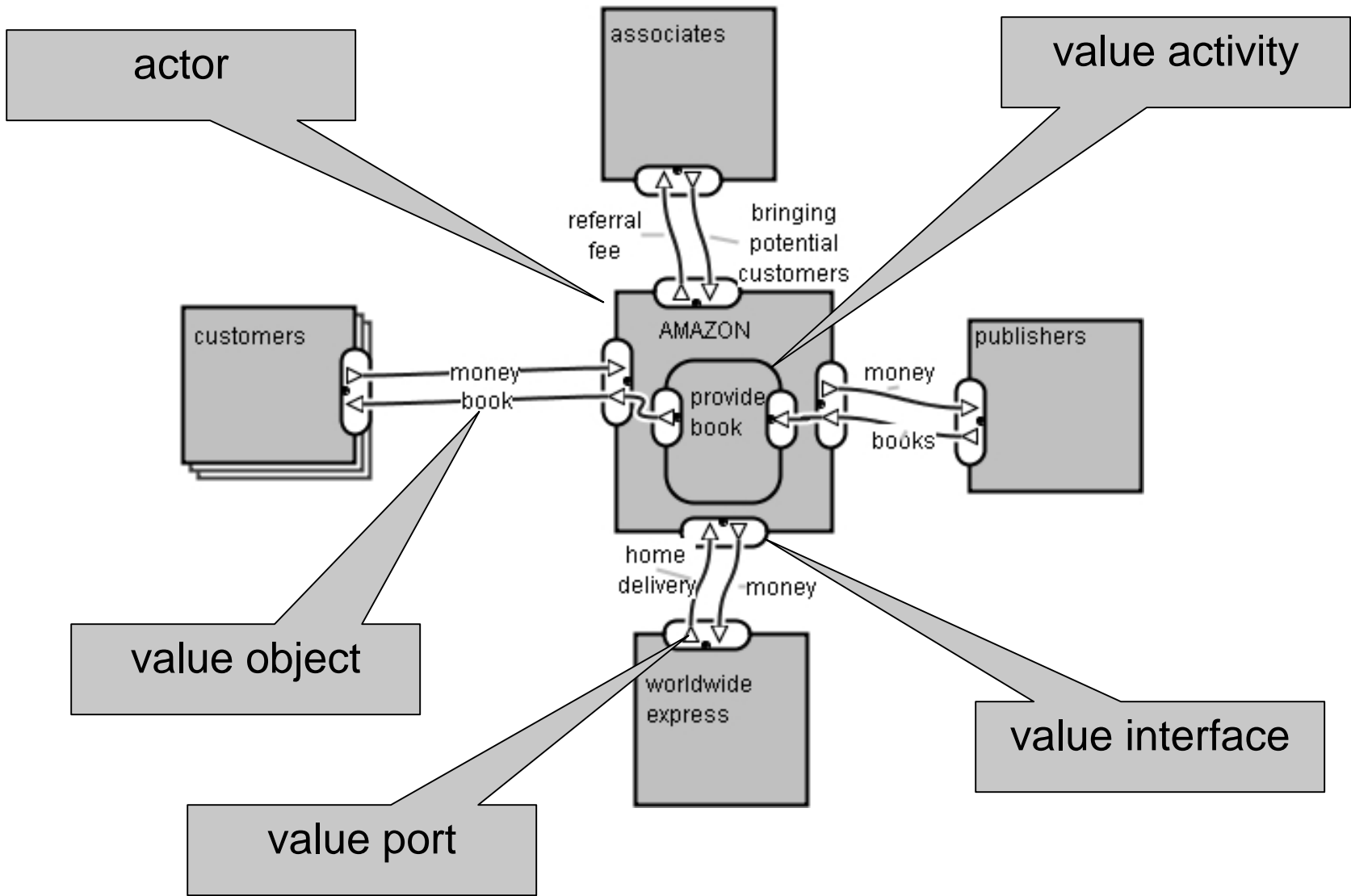
- Developed originally by Jaap Gordijn (VU Amsterdam)
- Focus: The *exchange of objects of value* between *actors performing activities*
- Foundation in:
 - Management Information Systems (e.g. Porter, Normann)
 - Marketing (Kotler, Holbrook)
 - Micro Economics (Varian, Whinston)
 - E-commerce business cases (Whinston, Choi, Shapiro, Varian)

Advantages e³value

- Abstracts from process details, thereby helping decision makers to focus on economic viability
- Originally used in (group) explorations of e-commerce business models
- Some important elements:

Construct	Concern
value object	value proposition
– value transaction	economic reciprocity
– value interface	service bundling
– value constellation	collaborations, networks)
– value activity	profitable operations

- Supported by a well-defined graphical notation



Simplified model Amazon

Limitations e³value

- Focus on business model (in the e-business sense of the word), leaving out many other concerns, e.g. market analysis
- Describes the *what* of the business model, but not the *why* (strategic rationale)
- e³-value seems to be particularly suitable for analyzing business set-ups. When companies grow, concerns like competitiveness, need more attention

How to cope with the limitations?

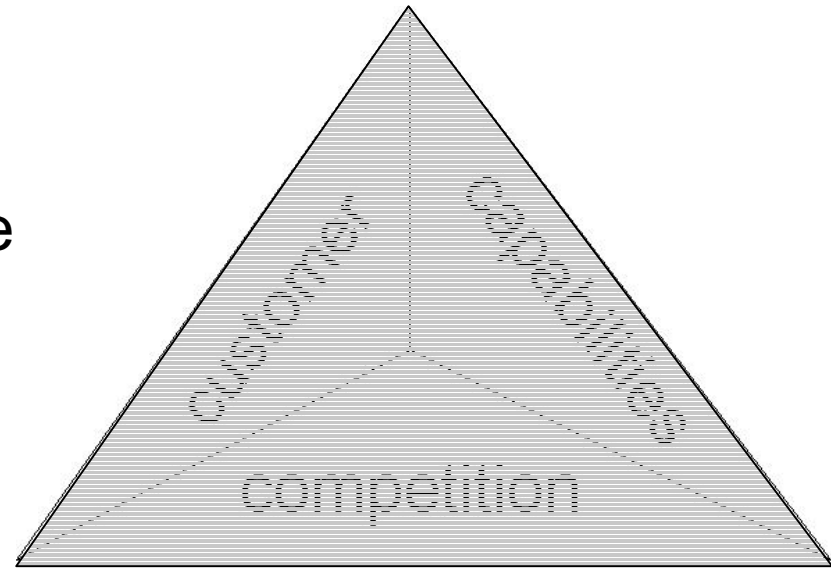
several alternatives

- Include e^3 -value within a broader framework
 - Such as BMO (Osterwalder, Pigneur, 2002)
- Combine e^3 -value with goal modeling
 - Such as i^* /Tropos: (e.g. Gordijn, Yu, vdRaadt, 2006)
- Extend e^3 -value, e.g. with Porter's environmental forces ontology (Pijpers, Gordijn, 2007)

Our approach:

- minimal adjustments of e^3 -value (maintain consistency)
- strategic analysis based on deep analysis of the value proposition

Why would a firm choose for one business model rather than another?

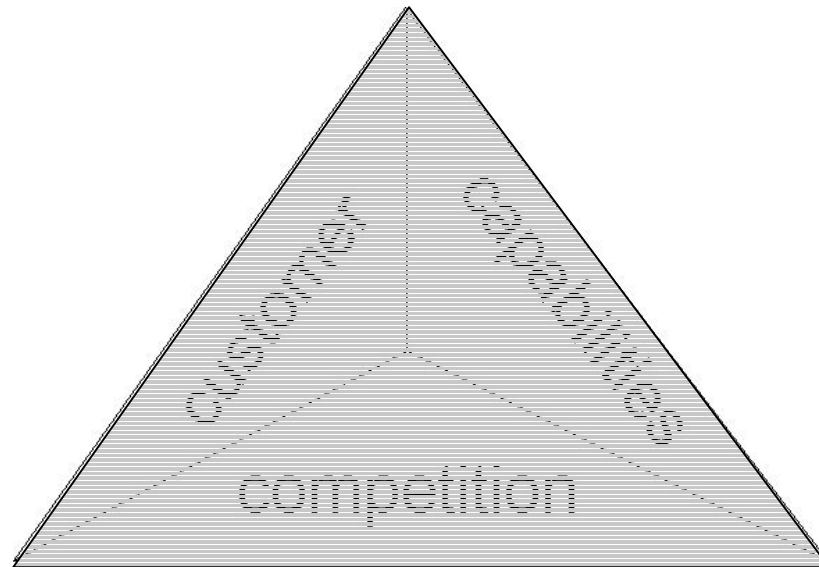


C3-value:

1. to distinguish itself from *competition*
2. to (better) fulfil *customer* needs or future needs
3. to explore its resources, *capabilities* and partnerships that make up its competitive advantage

“Light-weight (suitable for graphical modelling) integration of Resource-Based View and Porter-style environmental forces analysis”

Competition analysis



*What distinguishes your value proposition
from competitors?*

How did Jeff Bezos characterize his firm?

“Bill Gates laid it out in a magazine interview. He said ‘I buy all my books at Amazon because I’m busy and it is convenient. They have a big selection and they have been reliable’. Those are three of our four core value propositions: convenience, selection, service. The only one he left out is price: we are the broadest discounters in the world in any product category...But maybe price isn’t so important to Bill Gates.”

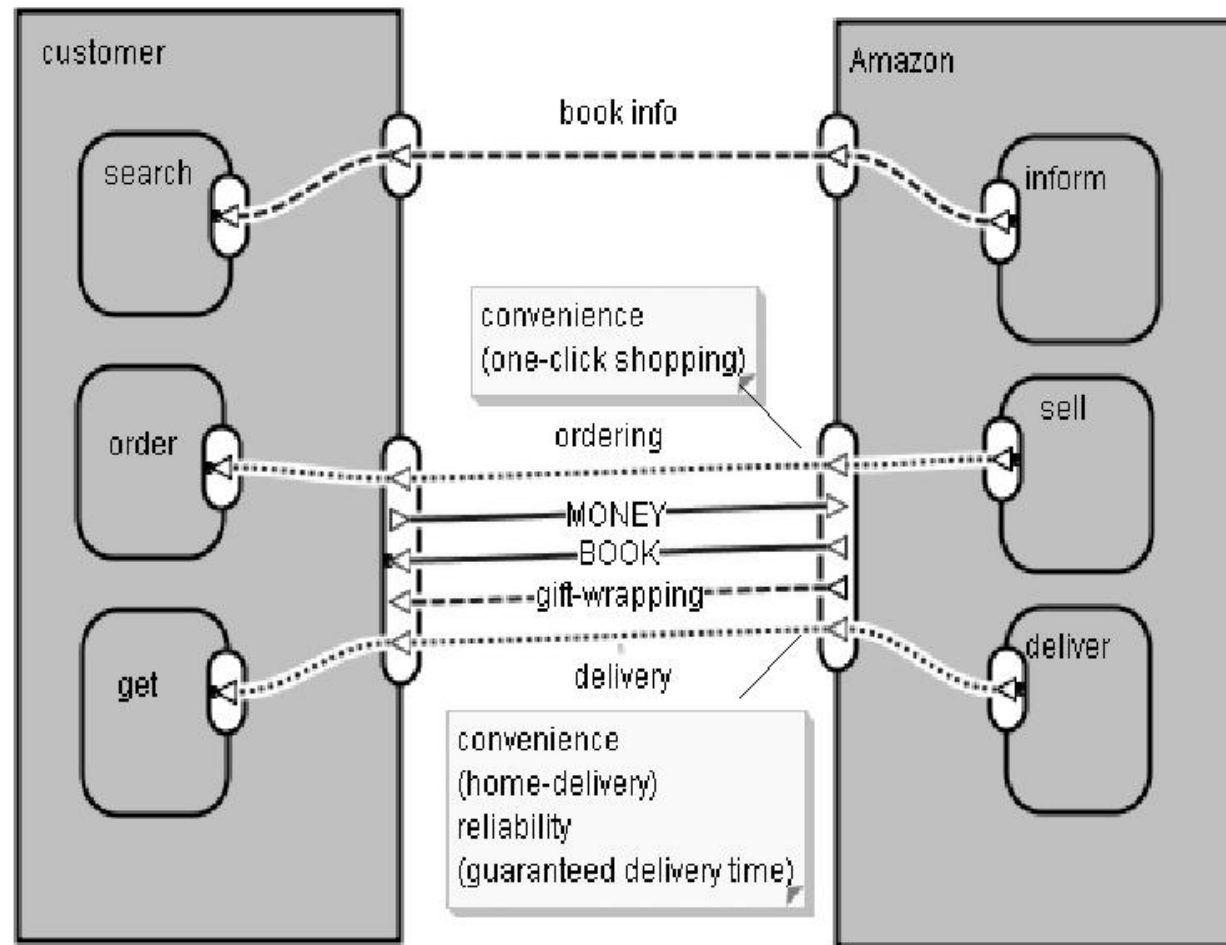
Note that the value proposition does not emphasize the core product (books etc), but how Amazon delivers this product. We coin the term “second-order value” for these properties.

Second-order values

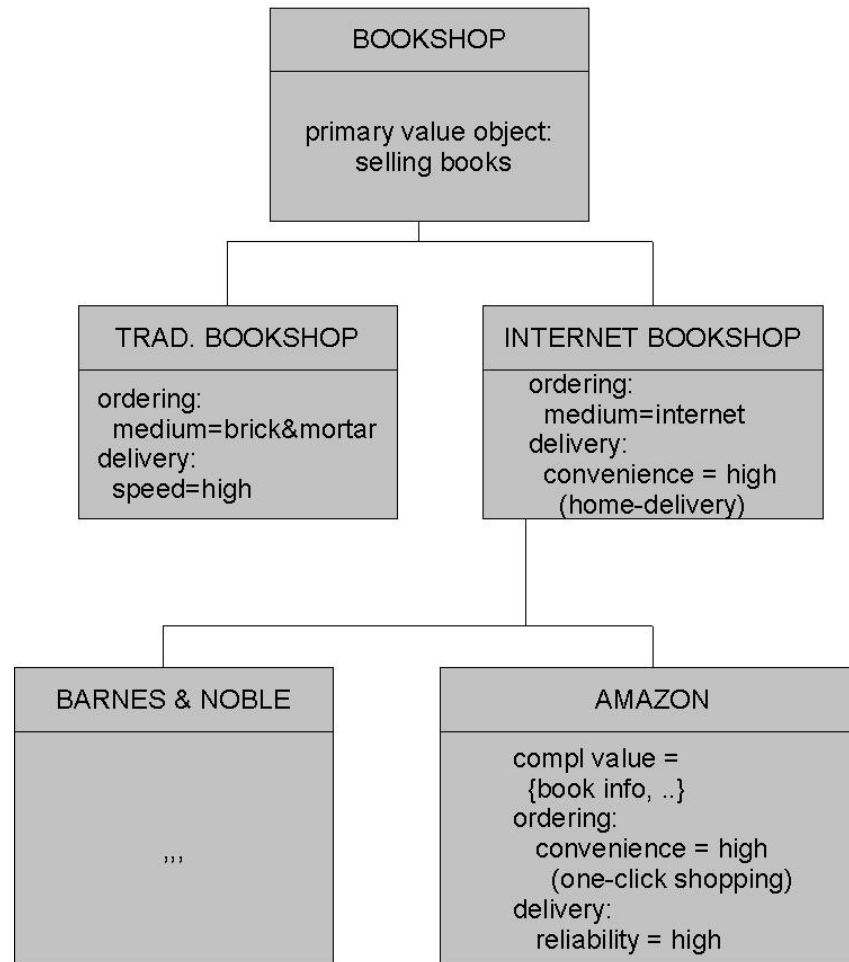
Second-order value: A second-order value is a particular way of providing a value object. Examples are: reliably, friendly, and conveniently

Complementary value objects: value objects that are offered together with the primary value object (e.g. a user manual with a technical product; a reprint with an article published; a toy with a Mac Happy Meal). Also called “supplementary services” . May also have second-order values attached to them.

Both second-order values and complementary objects are together called *competitive values* as they are used to distinguish the actor from its competitors offering the same primary object



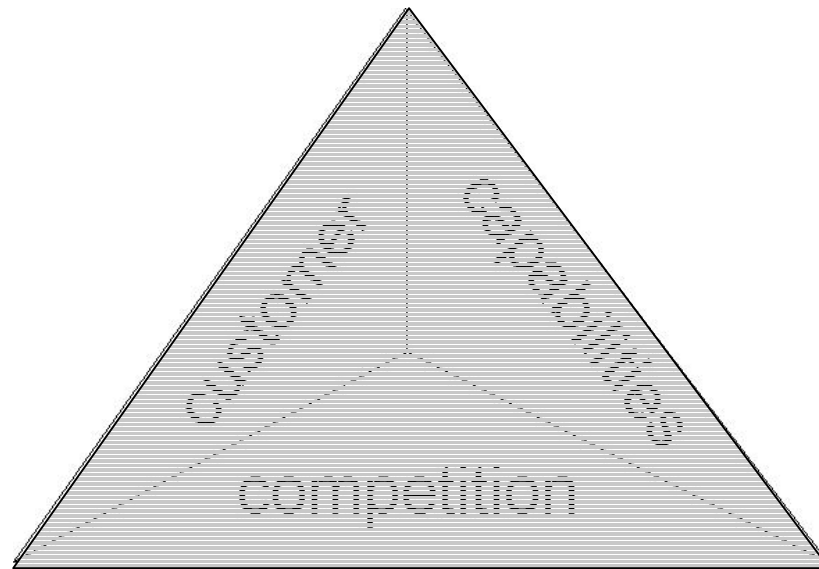
Competitive Value Model with second-order values



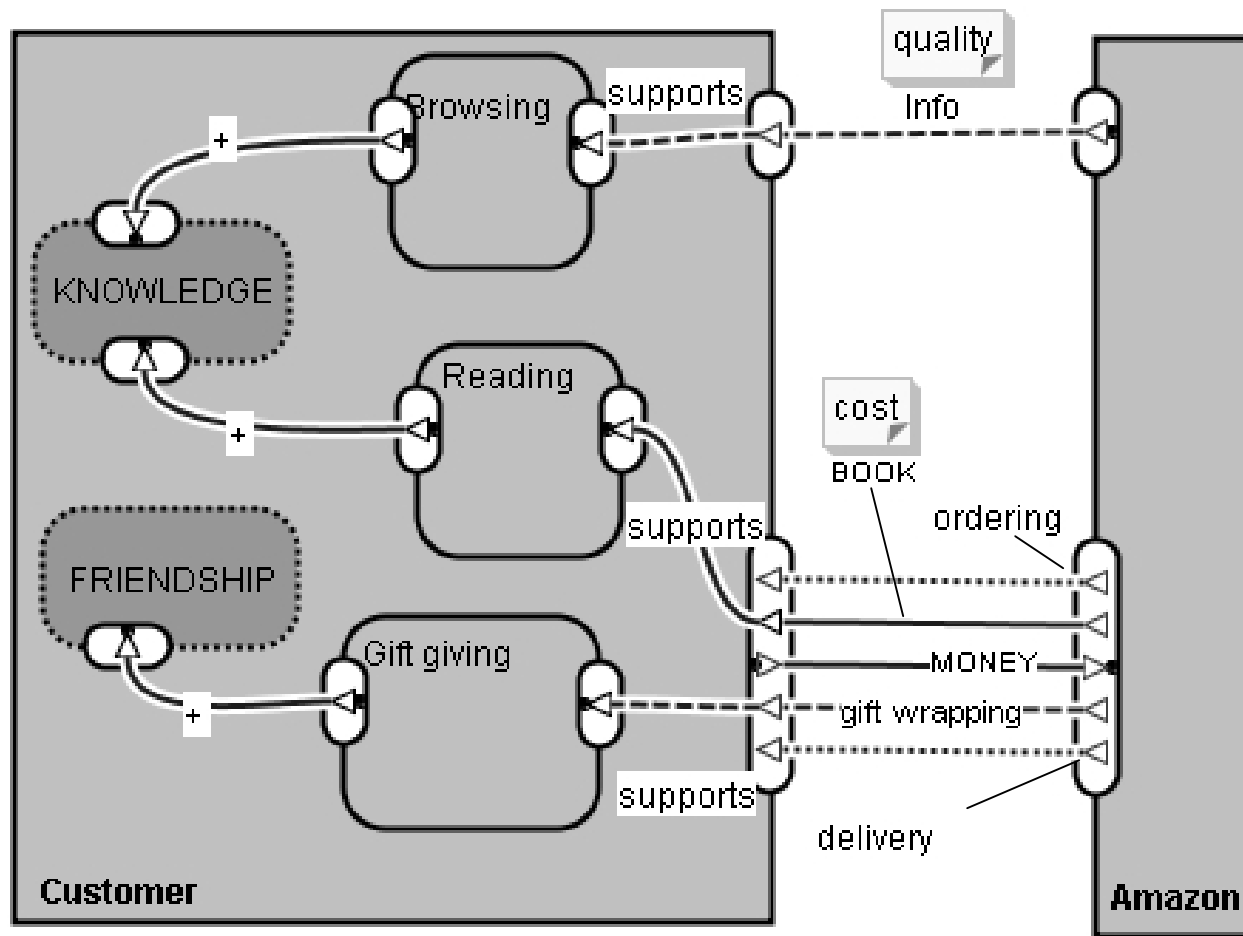
The differences and commonalities of the value proposition with respect to others are summarized in a

Competition Analysis Tree

Customer analysis

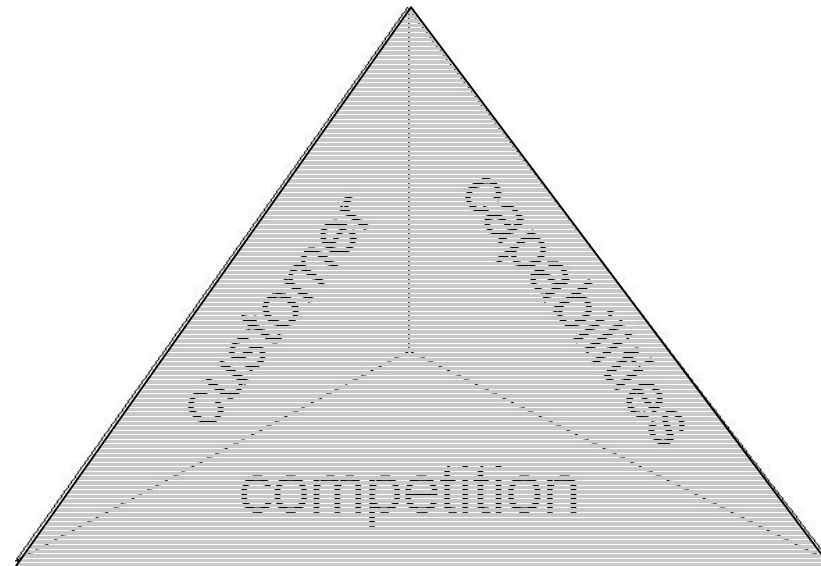


What is the value of your value object to the customer with respect to his key resources?

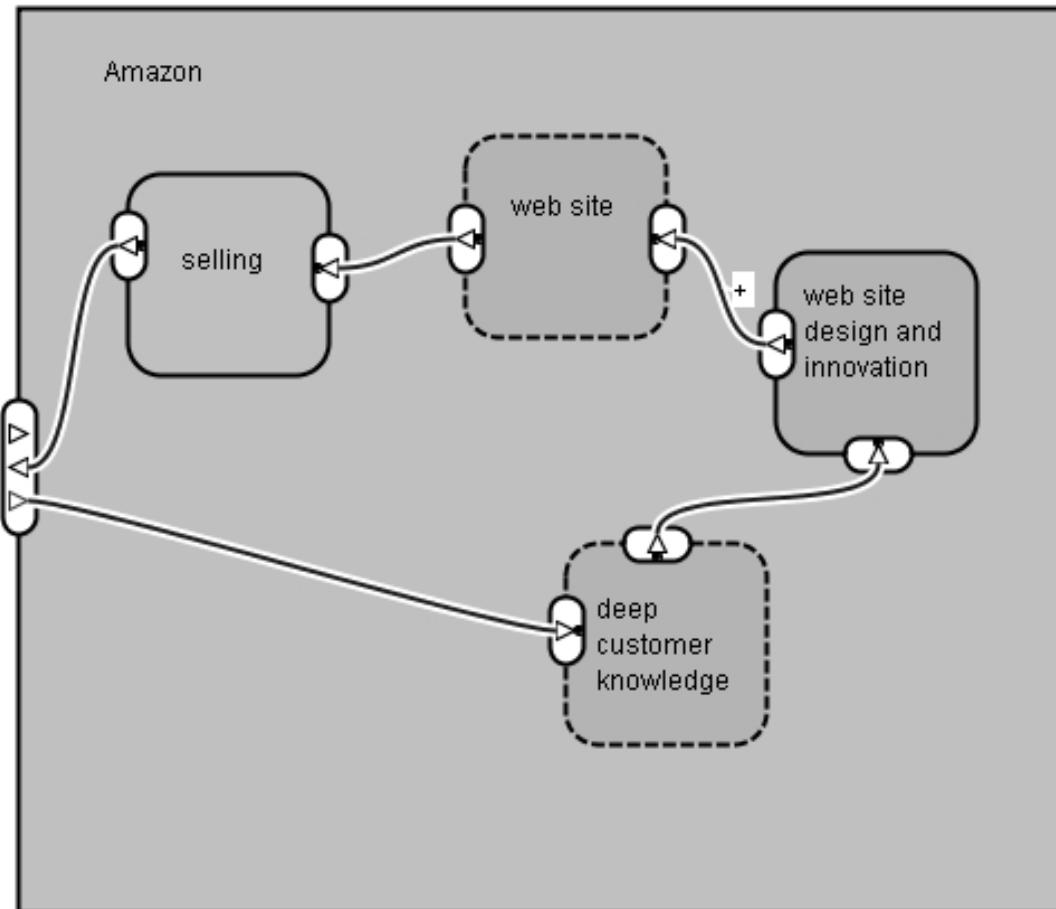


Customer Value Model

Capability analysis

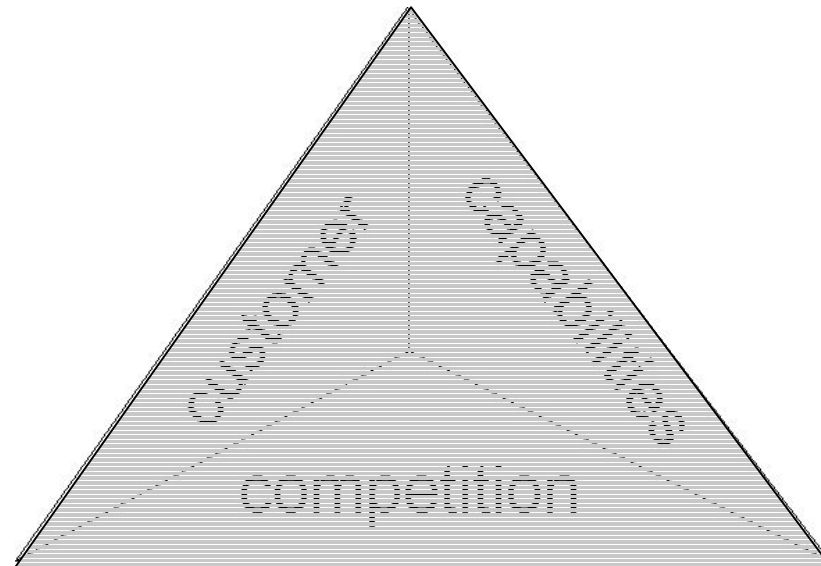


What are the resources and capabilities that offer a sustainable competitive advantage and how are they maintained ?



Capability Resource Model

C3 analysis



*All three aspects have their own dynamics
Strategic design= aligning the three*

Strategic analysis using value modeling

- *As-is analysis*: develop and analyze e3/c3-value models for the focal firm
- *Competitor analysis*: apply c3-analysis to main competitors
- *Will-be analysis*: explore alternative future e3/c3-value models
 - Identify threats and opportunities
 - Consider competitors, capabilities and customers
 - Include future value constellations (partnerships)
- *Decision making, implementation*

Conclusions

- From a strategy analysis perspective, e^3 -value is typically aimed at business set-ups.
- C3-value extends the original scope of e^3 -value to evolving firms that have to survive in a competitive market
- C3-value offers a minimal extension to e^3 -value
- C3-value does not focus on the strategic actions or choices to be made as such (e.g. “diversification”), but on the reasons for making such choices and their consequences

Contributions of this paper

- We have asked ourselves to what extent the rationale (the *why*) of a value model can be found within the value model itself. Our preliminary answer: to a very high extent.
- We have argued that within e³-value attention must be given to competitive values, which are typically second-order values and complementary objects.
- We have introduced a couple of e³- value “views” (Customer Value Model, Capability Resource Model, Competitive Value Model) and a new e³-value “super-model” (Competition Analysis Tree), that enrich the current e³- value toolbox

Future research

- Evaluation of c3-value approach in case studies
 - m-commerce in the supermarket
 - online game industry
 - evolution of open-source software communities
 - IT standards, e.g. diffusion of XBRL
- Exploration of the relevance of second-order values to the problem of value model/process model alignment
- Application of c3-value approach to the field of business/IT alignment