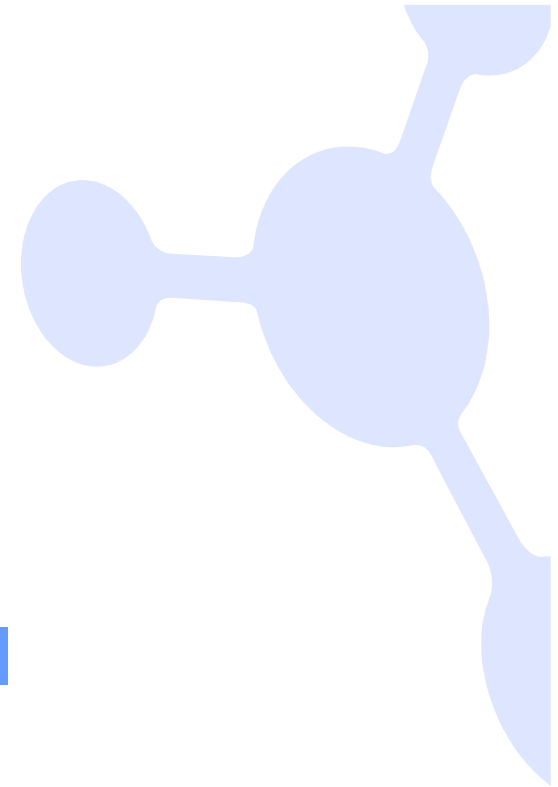




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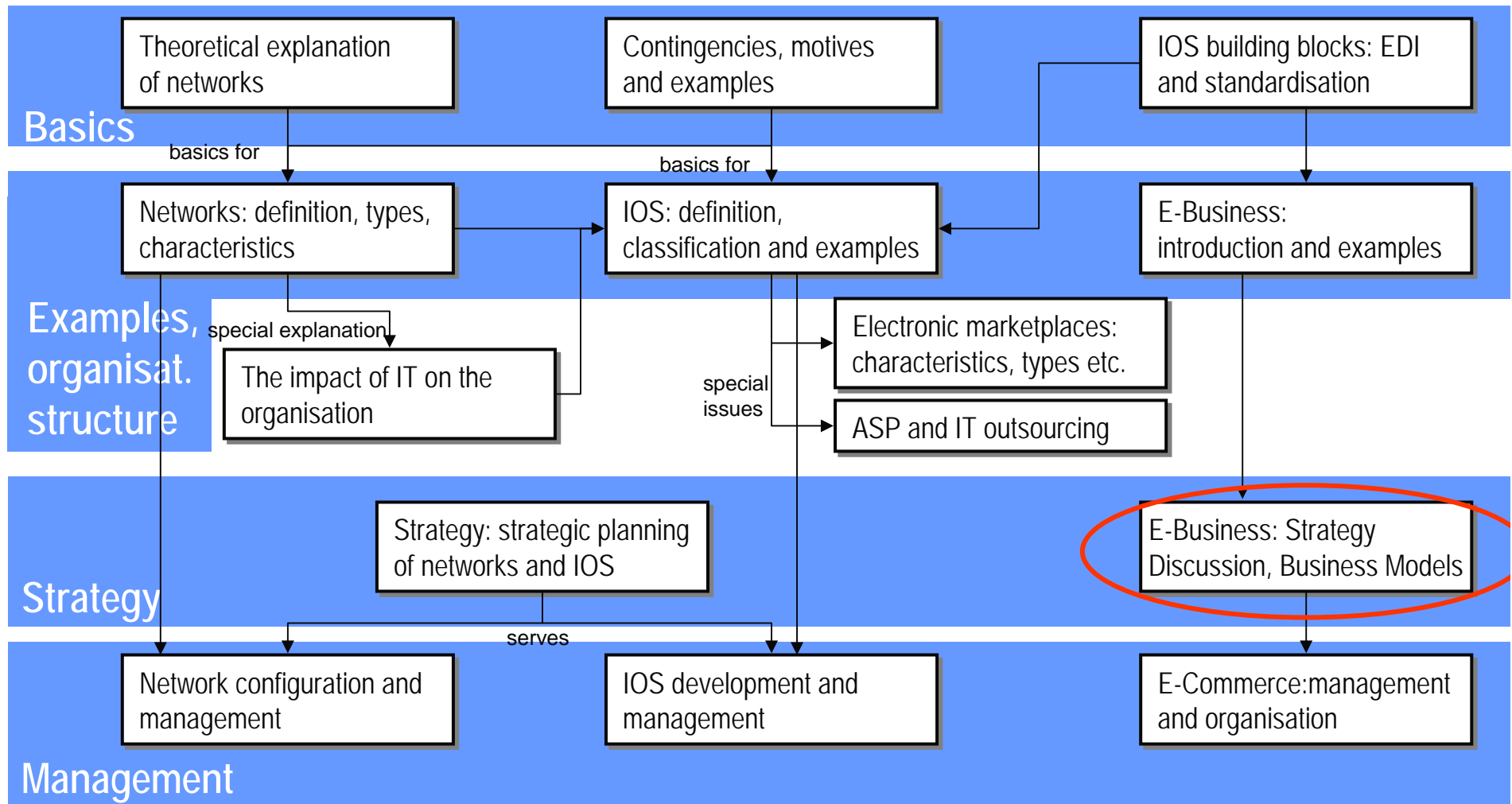


The Business Model Perspective

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Universität Münster



Course Outline



Agenda

1. Introduction

2. Definitions and Taxonomies

3. Business Models Elements

4. Business Model Design

5. Business Model Adoption

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1. Introduction

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Not too serious ...

"Models from Mars

Welcome, class of 2020. Today our virtual MBA lesson is on what we now refer to as the annus horribilis of the E-commerce Age. True, the year 2000 was marked by many notable headlines, among them the revelation that the cast of Survivor really stayed at the Fiji Hilton and not on that island. But today we will talk about the year that marked the nadir of the dot-com demise.

...

Today, we don't even use the term "Internet business model" unless it's meant as slang, referring to something that is inherently faulty or quickly outmoded (Modulus Outmodedus)."

Source and ©:The Business Week, Sept. 4, 2000, pp. 58-60

Business Model: Buzzword or meaningful Artifact?

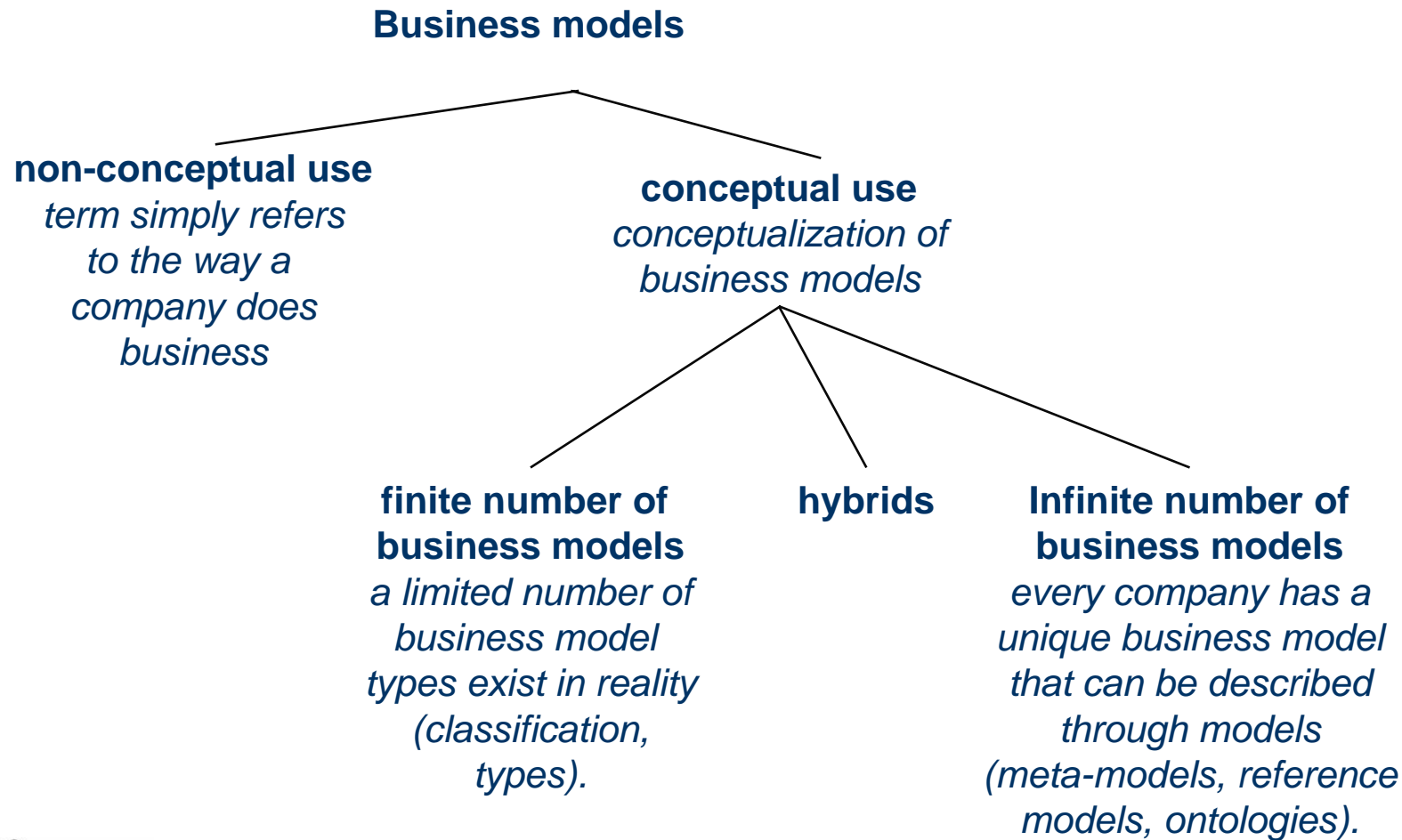
- A buzzword with no precise definition?
 - “Executives, reporters and analysts who use the term don't have a clear idea of what it means. They use it to describe everything from how a company earns revenue to how it structures its organization.”
 - “Business models are perhaps the most discussed and least understood aspect of the web. There is so much talk about how the web changes traditional business models. But there is little clear-cut evidence of exactly what this means.“ [Rappa 2005]
- ... or an artifact aggregating ...
 - the **value** a company offers to one or several segments of customers,
 - the **architecture** of the firm and its **network of partners**
 - for creating, marketing and delivering this value and relationship capital,
 - in order to generate profitable and sustainable revenue streams.

Business Model Research Contributions

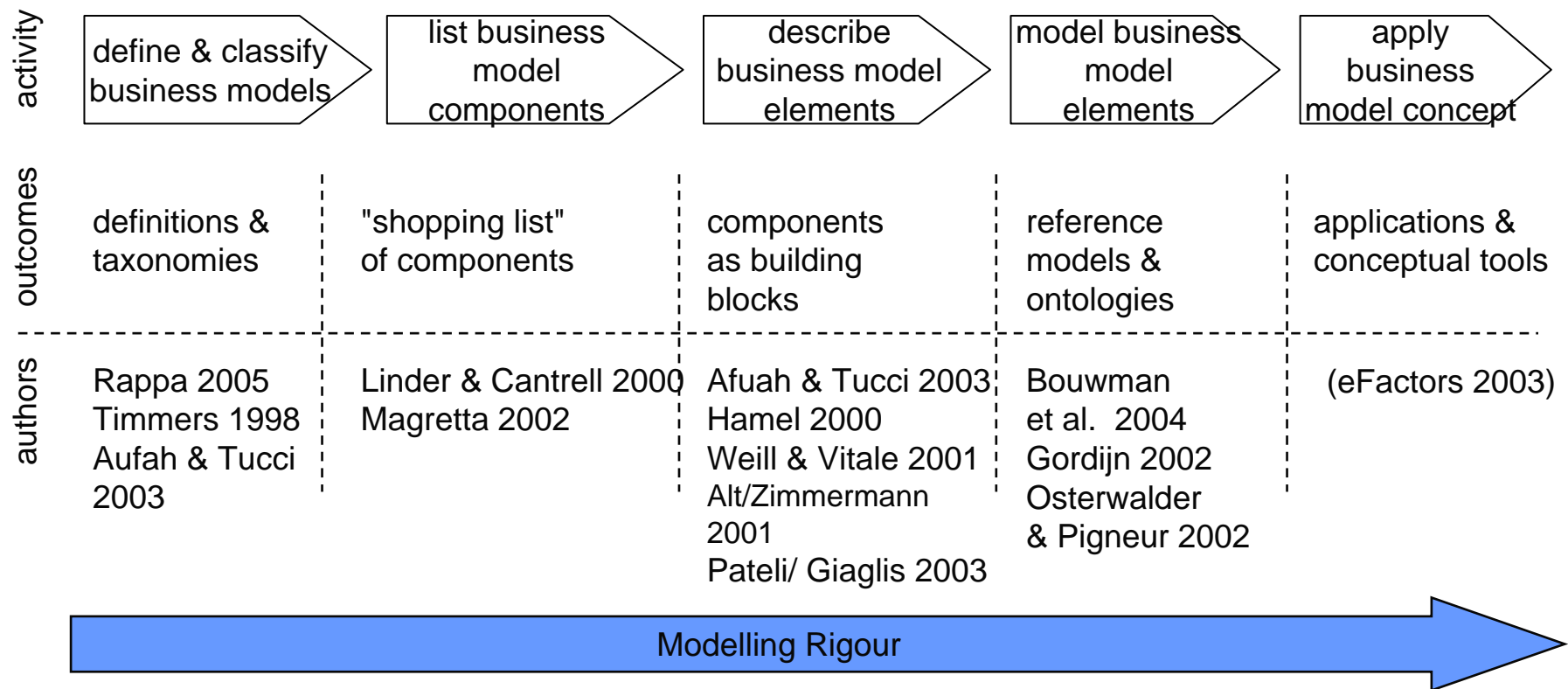
No.	Contributions	Definitions	Components	Taxonomies	Representations	Change Methodologies	Evaluation Models
1.	Timmers (1998)	✓		✓			
2.	Mahadevan (2000)		✓	✓		✓	
3.	Kraemer et al. (2000)		✓				
4.	Tapscott et al. (1998, 2000)	✓		✓	✓	✓	
5.	Hamel (2000)		✓				✓
6.	Linder & Cantrell (2000)	✓	✓	✓		✓	
7.	Kaplan & Sawhney (2000)			✓			
8.	Chesbrough & Rosebloom (2001)		✓				
9.	Methlie (2001)		✓				
10.	Afuah & Tucci (2001)		✓				✓
11.	Alt & Zimmermann (2001)		✓	✓			
12.	Gordijn & Akkermans (2001a,b,c)	✓			✓	✓	✓
13.	Weill & Vitale (2001)	✓	✓	✓	✓		✓
14.	Rappa (2001)	✓		✓			
15.	Hawkins (2001)	✓					
16.	Amit & Zott (2001)	✓					
17.	Applegate (2001)	✓		✓			
18.	Petrovic et al. (2001) Auer & Follack (2002)	✓	✓			✓	
19.	Papakiriakopoulos et al. (2001)					✓	
20.	Osterwalder & Pigneur (2002)	✓	✓		✓		
21.	Magretta (2002)	✓	✓				
22.	Elliot (2002)	✓					

[Pateli & Giaglis 2003]

Business Models in Literature: A Place of Confusion

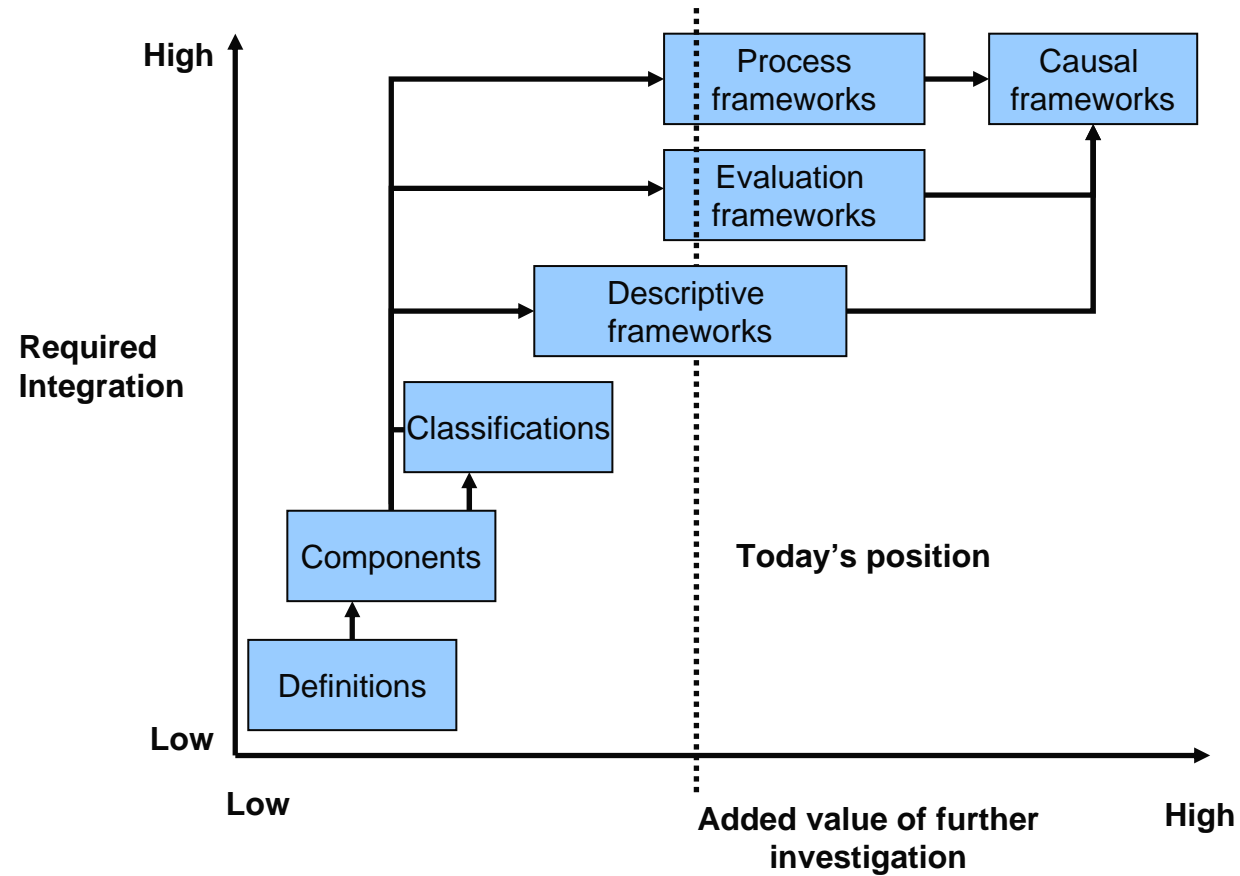


Business Model Research



adapted from [Osterwalder 2004]

Business Model Research



Adapted from Pateli & Giaglis, 2003

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What is a Business Model?

- “In the most basic sense, a business model is the method of doing business by which a company can sustain itself -- that is, generate revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.” (Rappa 2005)
- “This [the Internet business model] is a set of Internet-related activities - planned or evolving - that allows a firm to make money using the Internet and to keep the money coming”. (Afuah/Tucci 2001)
- “A good business model begins with an insight into human motivations and ends in a rich stream of profits.”
- “They are ... stories - stories that explain how enterprises work”
- “A business model describes, as a system, how the pieces of a business fit together”

(Magretta 2002)

Business Model Definition

(Timmers 1998)

- Business Model:
 - An **architecture** for the **product**, **service** and **information flows**, including a description of various **business actors** and their **roles**; and
 - a description of the **potential benefits** for the various business actors; and
 - a description of the **sources of revenues**.

E-Business Model Defined

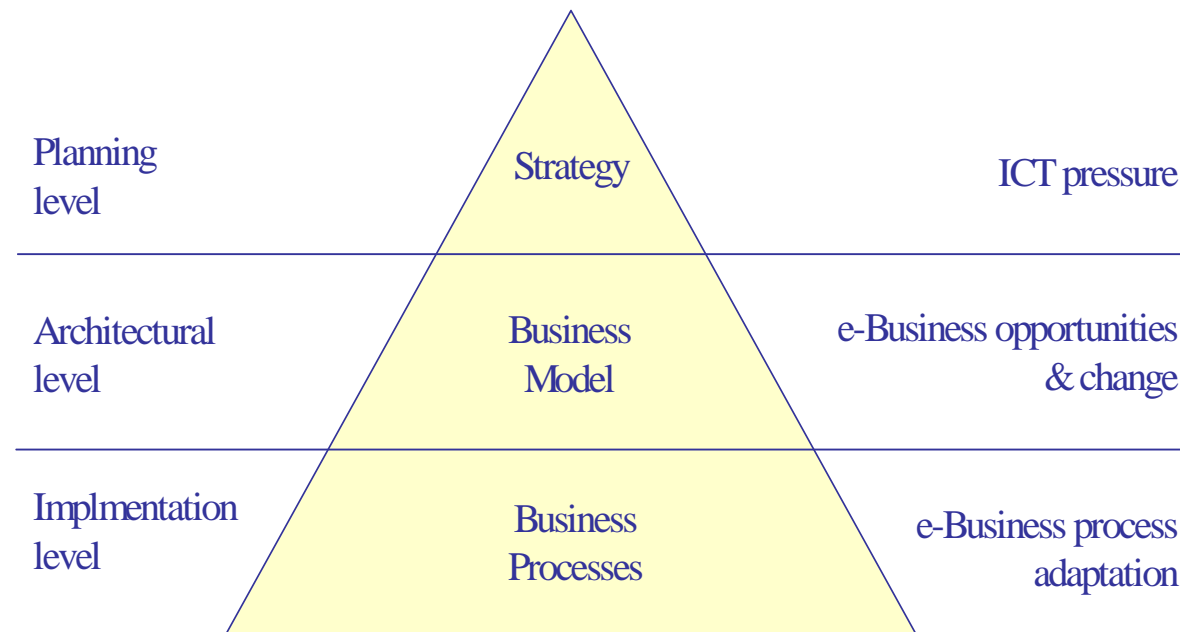
- “A model is an abstraction of a complex ‘reality’.
- It defines a **set of entities, their roles and their relationships**. It can even define some qualitative or quantitative values of those entities.
- More specifically, a business model implies a set of entities in a commercial venture and portrays them in the context of two distinct set of factors,
 - **endogenous**, that embrace factors that lie in the control of individual enterprises such as organizational, technical and individual factors and
 - **exogenous**, that include factors beyond the control of individual enterprises, such as industrial and societal factors that in some cases are defined by policy makers.
- An e-business model is, thus, defined as an Internet-enabled business model.”

Business Model vs. Business Strategy

- **Business models** specify the relationships between different participants in a commercial venture, the benefits and costs to each and the flows of revenue.
- **Business strategies** specify how a business model can be applied to the market to differentiate the firm from its competitors (Elliot, 2002)
- Magretta: “...a good business model remains essential to every successful organization, whether it’s a new venture or an established player.”
- Osterwalder & Pigneur: ”business models can be seen as the missing link between strategy and business processes or in other words the linkage between the planning and the implementation level of a business environment ”

From Strategy to Processes

- Business models can be seen as the missing link between *strategy* and *business processes* or
- the linkage between the planning and the implementation level of a business environment

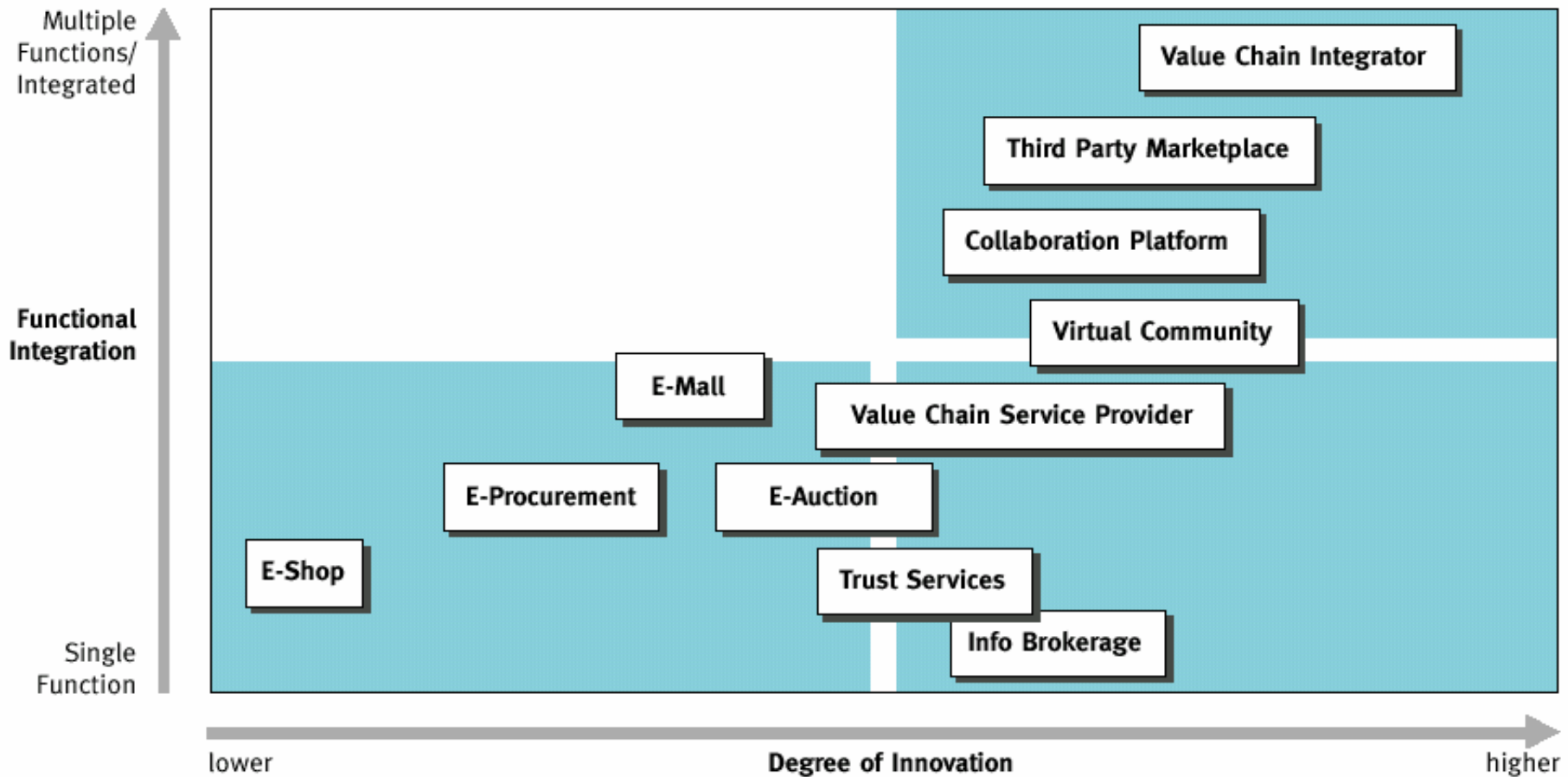


[Osterwalder 2004]

e-Business Models: Typologies and Taxonomies

- Typology or taxonomy is a way of classifying different types of business models
 - Timmers:
Dimensions: Degree of innovation & functional integration
 - Tapscott et al: Agoras, Aggregations, Value-Chains, Alliances and Distributive Networks
 - Weill & Vitale: Atomic business models
 - Rappa: Generic web business models

Business Model Classification (Timmers 1998)



[Timmers 1998]

Taxonomy of 'Web Business Models'

(Rappa 2005)

“A business model is the method of doing business by which a company can sustain itself -- that is, generate revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.”

- Brokerage
- Advertising
- Infomediary
- Merchant
- Manufacturer (Direct)
- Affiliate
- Community
- Subscription
- Utility



Taxonomy of 'Web Business Models'

(Rappa 2005)

- Brokerage
 - Brokers are market-makers: they bring buyers and sellers together and facilitate transactions. Brokers play a frequent role in business-to-business (B2B), business-to-consumer (B2C), or consumer-to-consumer (C2C) markets. Usually a broker charges a fee or commission for each transaction it enables.
 - Buy/Sell Fulfillment, Marketplace Exchange, Demand Collection System, Auction Broker, Transaction Broker, Distributor, Search Agents, Virtual Marketplace

Taxonomy of ‚Web Business Models‘ (Rappa 2005)

- Advertising
 - The web advertising model is an **extension of the traditional media broadcasting model**. The broadcaster, in this case, a web site, provides content (usually, but not necessarily, for free) and services (like e-mail, chat, forums) mixed with advertising messages in the form of banner ads. The banner ads may be the major or sole source of revenue for the broadcaster. The broadcaster may be a content creator or a distributor of content created elsewhere. The advertising model only works when the volume of viewer traffic is large or highly specialized.
 - Portals, Classifieds, User Registration, Query-based Paid Placement, Contextual Advertising, Content-Targeted Advertising, *Intromercials*, *Ultramercials*

Taxonomy of ‚Web Business Models‘ (Rappa 2005)

- Infomediary
 - Data about consumers and their consumption habits are valuable, especially when that information is carefully analyzed and used to target marketing campaigns. Independently collected data about producers and their products are useful to consumers when considering a purchase. Some firms function as infomediaries (information intermediaries) assisting buyers and/ or sellers understand a given market.
 - Advertising Networks, Audience Measurement Services, Incentive Marketing, Metamediary
- Merchant
 - Wholesalers and retailers of goods and services. Sales may be made based on list prices or through auction.
 - Virtual Merchant, Catalog Merchant, Click and Mortar, Bit Vendor

Taxonomy of 'Web Business Models'

(Rappa 2005)

- Manufacturer (Direct) Model
 - The manufacturer or "direct model", it is predicated on the power of the web to allow a manufacturer (i.e., a company that creates a product or service) **to reach buyers directly** and thereby compress the distribution channel. The manufacturer model can be based on efficiency, improved customer service, and a better understanding of customer preferences.
- Purchase, Lease, License, Brand Integrated Content

Taxonomy of ‚Web Business Models‘

(Rappa 2005)

- Affiliate

- In contrast to the generalized portal, which seeks to drive a high volume of traffic to one site, the affiliate model, provides purchase opportunities wherever people may be surfing. It does this by offering financial incentives (in the form of a percentage of revenue) to affiliated partner sites. The affiliates provide purchase-point click-through to the merchant. It is a **pay-for-performance model** - if an affiliate does not generate sales, it represents no cost to the merchant. The affiliate model is inherently well-suited to the web, which explains its popularity. Variations include, banner exchange, pay-per-click, and revenue sharing programs.
- Banner Exchange, Pay-per-Click, Revenue Sharing

Taxonomy of ‚Web Business Models‘

(Rappa 2005)

- Community
 - The viability of the community model is based on **user loyalty**. Users have a high investment in both time and emotion. Revenue can be based on the sale of ancillary products and services or voluntary contributions
 - Open Source, Public Broadcasting, Knowledge Networks

Taxonomy of ‚Web Business Models‘ (Rappa 2005)

- Subscription
 - Users are charged a **periodic** - daily, monthly or annual - **fee** to subscribe to a service. It is not uncommon for sites to combine free content with "premium" (i.e., subscriber- or member-only) content. Subscription fees are incurred irrespective of actual usage rates. Subscription and advertising models are frequently combined
 - Content Services, Person-to-Person Networking Services, Trust Services, Internet Service Providers

Taxonomy of 'Web Business Models'

(Rappa 2005)

- Utility
 - The utility or "on-demand" model is based on **metering usage**, or a "pay as you go" approach. Unlike subscriber services, metered services are based on actual usage rates. Traditionally, metering has been used for essential services (e.g., electricity water, long-distance telephone services). Internet service providers (ISPs) in some parts of the world operate as utilities, charging customers for connection minutes, as opposed to the subscriber model common in the U.S.

- Metered Usage, Metered Subscriptions

Atomic - eBusiness Models

(Vitale/Weill 2001)

- Content Provider
- Direct to Consumer
- Full Service provider
- Intermediary
- Shared Infrastructure
- Value Net Integrator
- Virtual Community
- Whole of Enterprise / Government

Agenda

1. Introduction

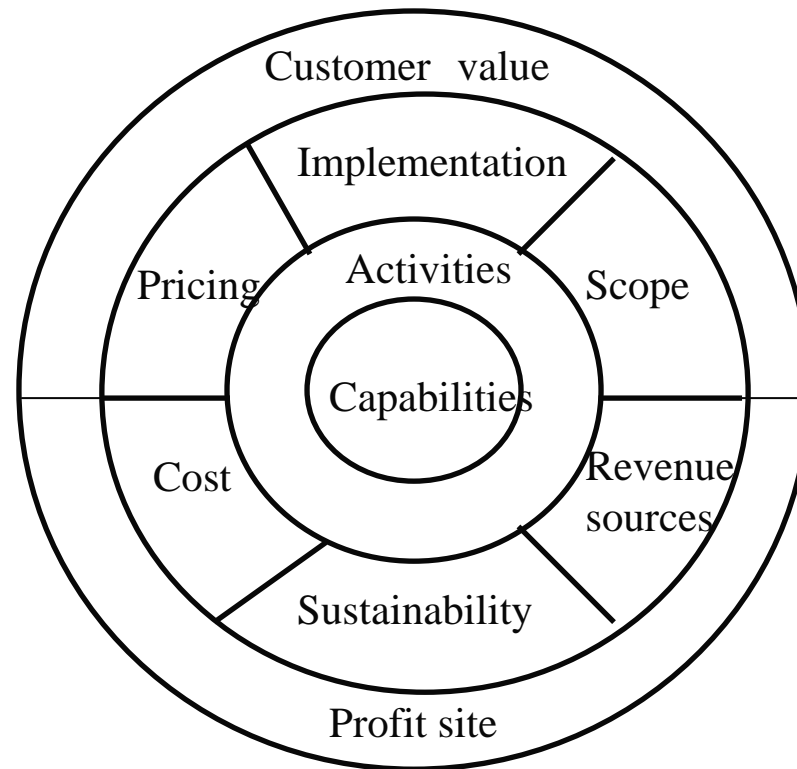
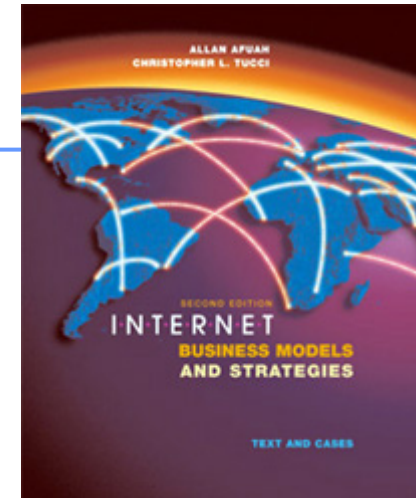
2. Definitions and Taxonomies

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Business Model Components (Afuah/Tucci)



[Afuah/Tucci 2003]

Business Model Components (Afuah/Tucci)

- Customer Value (WHAT)
 - Differentiation
 - Product features, timing, location, service, product mix, linkage between functions, linkage with other firms, reputation
 - Low Cost
- Scope (to WHOM, WHERE)
 - Market segments
 - Geographic areas
 - Number of product versions
- Pricing
 - Types of pricing:
Menue, one-to-one, auction, reverse auction, barter

Business Model Components (Afuah/Tucci)

- Revenue Source
 - e.g., in mobile commerce: Airtime, volume, content, subscription
- Connected activities
 - value chain / ~ web perspective:
necessary additional activities to create customer value
- Implementation
 - Structure
 - Systems
 - People

Business Model Components (Afuah/Tucci)

- Capabilities
 - Resources
 - tangible, intangible, human
 - Competencies
- Competitive advantage

Business Model Components (Afuah/Tucci)

- Sustainability
 - Block Strategy
 - erecting barriers around product market space:
e.g.: limit access to unique and distinctive capabilities
 - Run Strategy
 - reinventing the business model,
being ahead of the competition
 - Team-Up Strategy
 - strategic alliance, joint venture, acquisition, etc.

Business Model Components (Afuah/Tucci)

- Cost Structure
 - Understanding the determinants of costs
 - Cost drivers:
economies of scale, input-to-output transformation technology,
capacity utilization, transaction costs

Business Model Components (Afuah/Tucci)

Successful Business Model

- High Customer Value
- Complementary Scope
- Control over Pricing
- Defensible Sources of Revenue
- Consistent Connected Activities
- Unique, Inimitable Capabilities
- Excellent Implementation
- Sustainability for the Future
- Low cost
- Correct profit site

Critical Business Model Questions

Component of business model	Question for all business models	Questions specific to Internet business models
1. Customer value	Is the firm offering its customers something distinctive or lower cost than its competitors?	What is it about the Internet that allows your firm to offer its customers something distinctive? Can it allow you to solve a new set of problems for customers?
2. Scope	To which customers (demographic and geographic) is the firm offering this value? What is the range of products/services offered that embody this value?	What is the scope of customers that the Internet allows your firm to reach? Does the Internet alter the product or service mix that embodies the firm's products?
3. Pricing	<i>How</i> does the firm price the value?	What is it about the Internet that makes pricing different?
4. Revenue source	<i>Where</i> do the dollars come from? <i>Who</i> pays for <i>what</i> value and <i>when</i> ? <i>What</i> are the margins in each market and <i>what</i> drives them? <i>What</i> drives value in each source?	Are revenue sources different with the Internet? What is new?

[Afuah/Tucci 2003]

Critical Business Model Questions

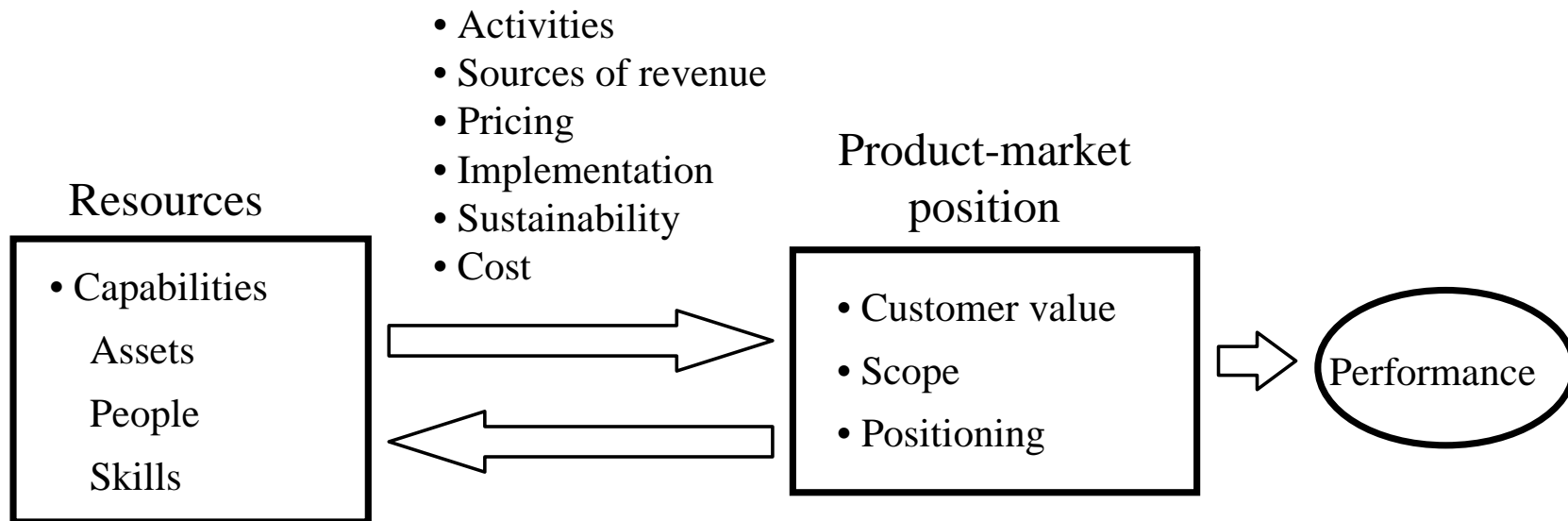
5. Connected activities	<i>Which</i> set of activities does the firm have to perform to offer this value and <i>when</i> ? How <i>connected</i> (in cross section and time) are these activities?	How many new activities must be performed as a result of the Internet? How much better can the Internet help you in performing existing activities?
6. Implementation	What organizational <i>structure</i> , <i>systems</i> , <i>people</i> and environment does the firm need to carry out these activities? What is the fit between them?	What does the Internet do to the strategy, structure, systems, people and environment of your firm?
7. Capabilities	What are the firm's capabilities and <i>capabilities gaps</i> that need to be filled? How does a firm fill these capabilities gaps? Is there something distinctive about these capabilities that allows the firm to offer the value better than other firms and that makes them difficult to imitate? What are the <i>sources</i> of these capabilities?	What new capabilities do you need? What is the impact of the Internet on existing capabilities?
8. Sustainability	<i>What</i> is it about the firm that makes it difficult for other firms to imitate it? How does the firm sustain its competitive advantage?	Does the Internet make sustainability easier or more difficult? How can your firm take advantage of it?

Critical Business Model Questions

9. Profit site	What is the relative (dis)advantage of a firm vis-à-vis its suppliers, customers, rivals, complementors, potential new entrants, and substitutes?	What is the impact of the Internet on the firm's relative (dis)advantage over its suppliers, customers, rivals, complementors, potential new entrants, and substitutes?
10. Cost structure	<i>What</i> drives costs in each component of the business model?	What is the impact of the Internet on those cost drivers that underpin the components of a business model?

[Afuah/Tucci 2003]

Mapping of Capabilities into product-market positions



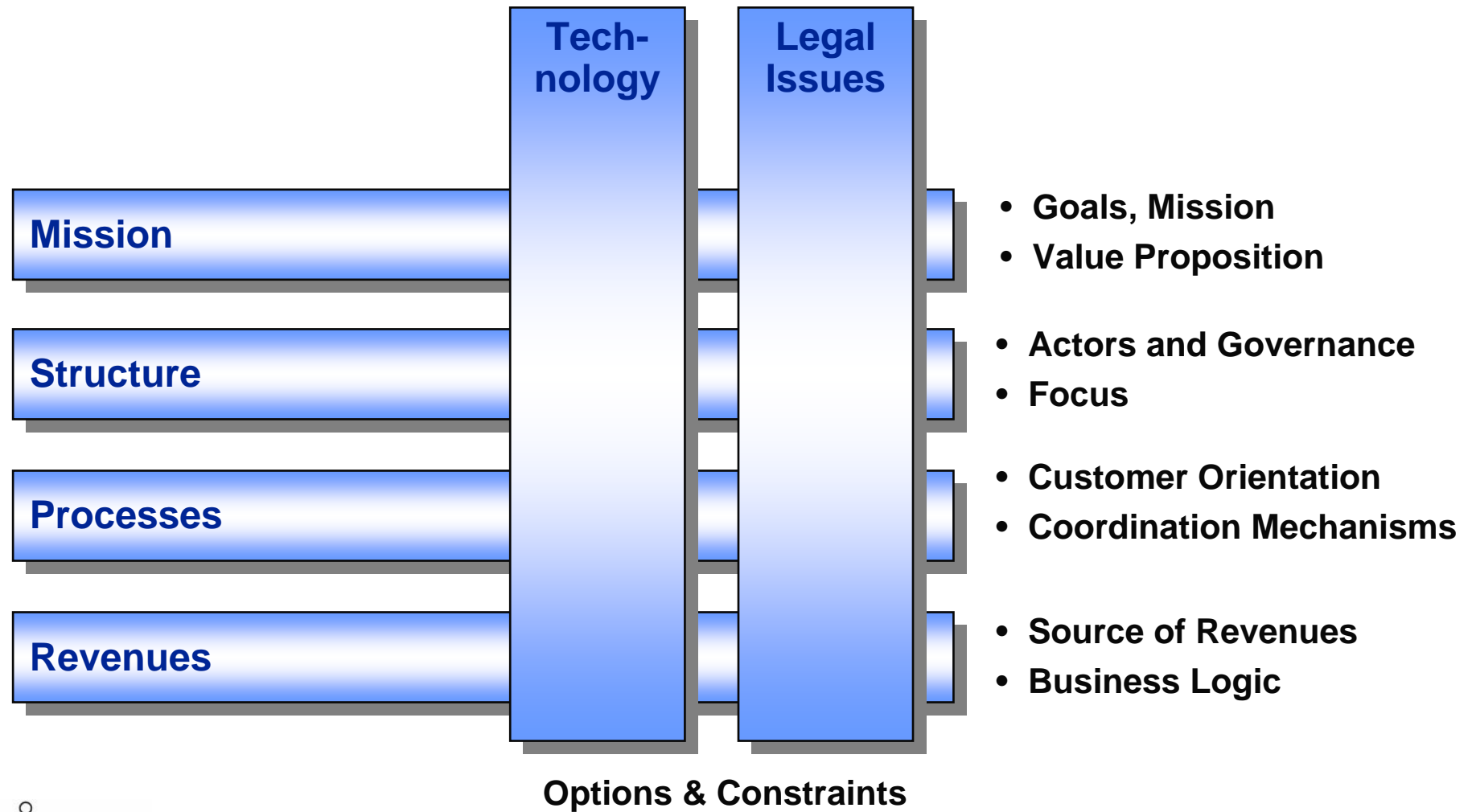
[Afuah/Tucci 2003]

Dynamics of Internet Business Models (Afuah/Tucci)

- Change has a direct impact on business models to continue to give a firm a competitive advantage
 - Technological change
 - Change of other environmental factors
 - regulation/ deregulation
 - strategies
 - demand/ supply
 - user behavior
 - demographics
 - ...

Business Models Building Blocks

(Alt/Zimmermann 2001)



[Electronic Markets: No 1/Vol. 11 (2001)]

Business Models Building Blocks (Alt/Zimmermann 2001)

Mission

- Developing a high-level understanding of the overall vision, strategic goals and the value proposition including the basic product or service features.

Structure

- The structure determines which roles and agents constitute and comprise a specific business community as well as the focus on industry, customers and products.

Business Models Building Blocks (Alt/Zimmermann 2001)

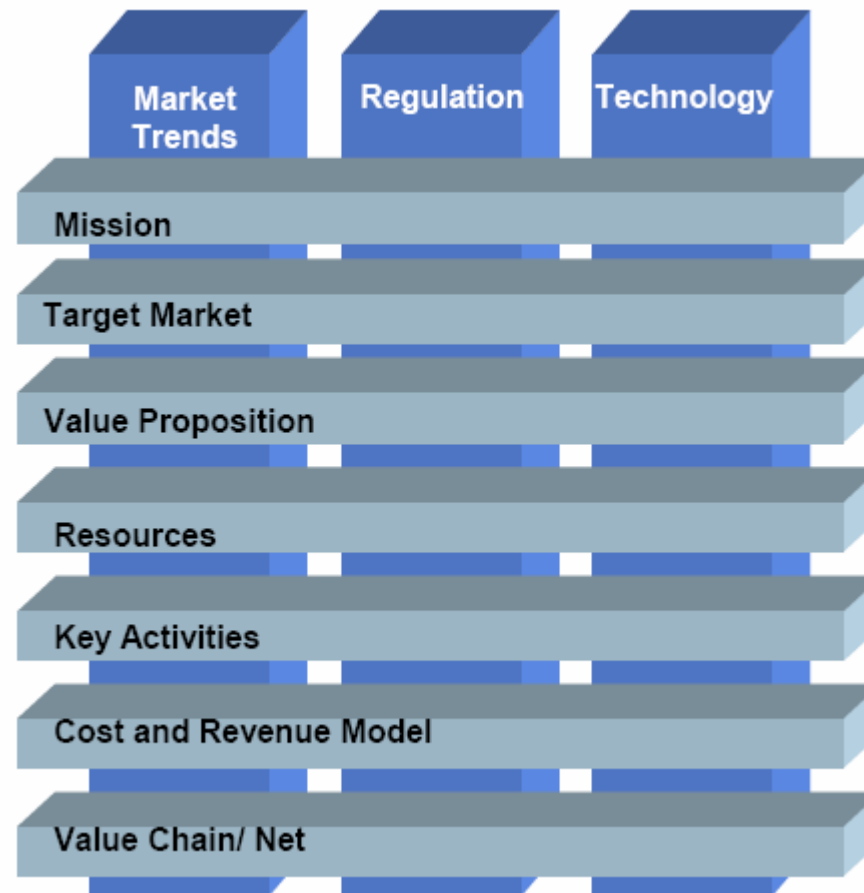
Processes

- Processes provide a more detailed view on the mission and the structure of the business model. They show the elements of the value creation process, i.e. the activities of the eMarket, and portals, etc. and which requirements they address in the customer process. Processes also include the eBusiness or eMarket processes, i.e. coordination mechanisms.

Revenues

- Sources of revenue and necessary investments need to be carefully analyzed from a short and mid-term perspective as well.

Business Model Components Framework (Pateli & Giaglis 2003)



Components of Business Models

Afuah & Tucci	<ul style="list-style-type: none"> ▪ <i>Customer value</i> ▪ <i>Scope</i> ▪ <i>Pricing/Price</i> 	<ul style="list-style-type: none"> ▪ <i>Revenue sources</i> ▪ <i>Connected activities</i> 	<ul style="list-style-type: none"> ▪ <i>Implementation</i> ▪ <i>Capabilities</i>
Viscio & Pasternack	<ul style="list-style-type: none"> ▪ <i>Global core</i> ▪ <i>Business units</i> 	<ul style="list-style-type: none"> ▪ <i>Services</i> ▪ <i>Governance</i> 	<ul style="list-style-type: none"> ▪ <i>Linkages</i>
KRAEMER et al.	<ul style="list-style-type: none"> ▪ <i>Direct Sales</i> ▪ <i>Direct Customer Relationships</i> 	<ul style="list-style-type: none"> ▪ <i>Customer Segmentation for sales and service</i> ▪ <i>Build to order production</i> 	
MAHADEVAN	<ul style="list-style-type: none"> ▪ <i>Value stream - for the business partners and buyers</i> 	<ul style="list-style-type: none"> ▪ <i>Revenue stream</i> ▪ <i>Logistical stream</i> 	
Alt & Zimmerman	<ul style="list-style-type: none"> ▪ <i>Mission</i> ▪ <i>Structure</i> 	<ul style="list-style-type: none"> ▪ <i>Processes</i> ▪ <i>Revenues</i> 	<ul style="list-style-type: none"> ▪ <i>Legal Issues</i> ▪ <i>Technology</i>
Methlie	<ul style="list-style-type: none"> ▪ <i>Market maker</i> ▪ <i>Direction of integration</i> 	<ul style="list-style-type: none"> ▪ <i>Strategy</i> ▪ <i>Control model</i> 	<ul style="list-style-type: none"> ▪ <i>Service integration</i> ▪ <i>Forms of co-operation</i>

[eFactors 2003 (www.e-factors.net)]

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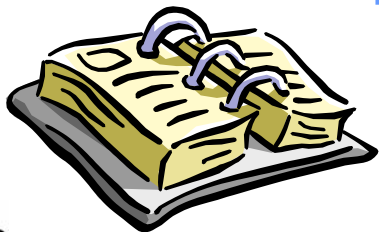
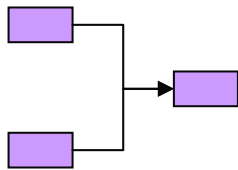
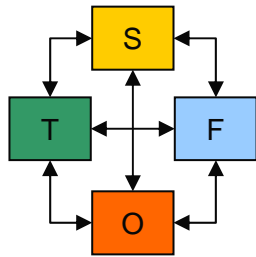
5. Business Model Adoption

Business Model Design

(Bouwman et al. 2004)

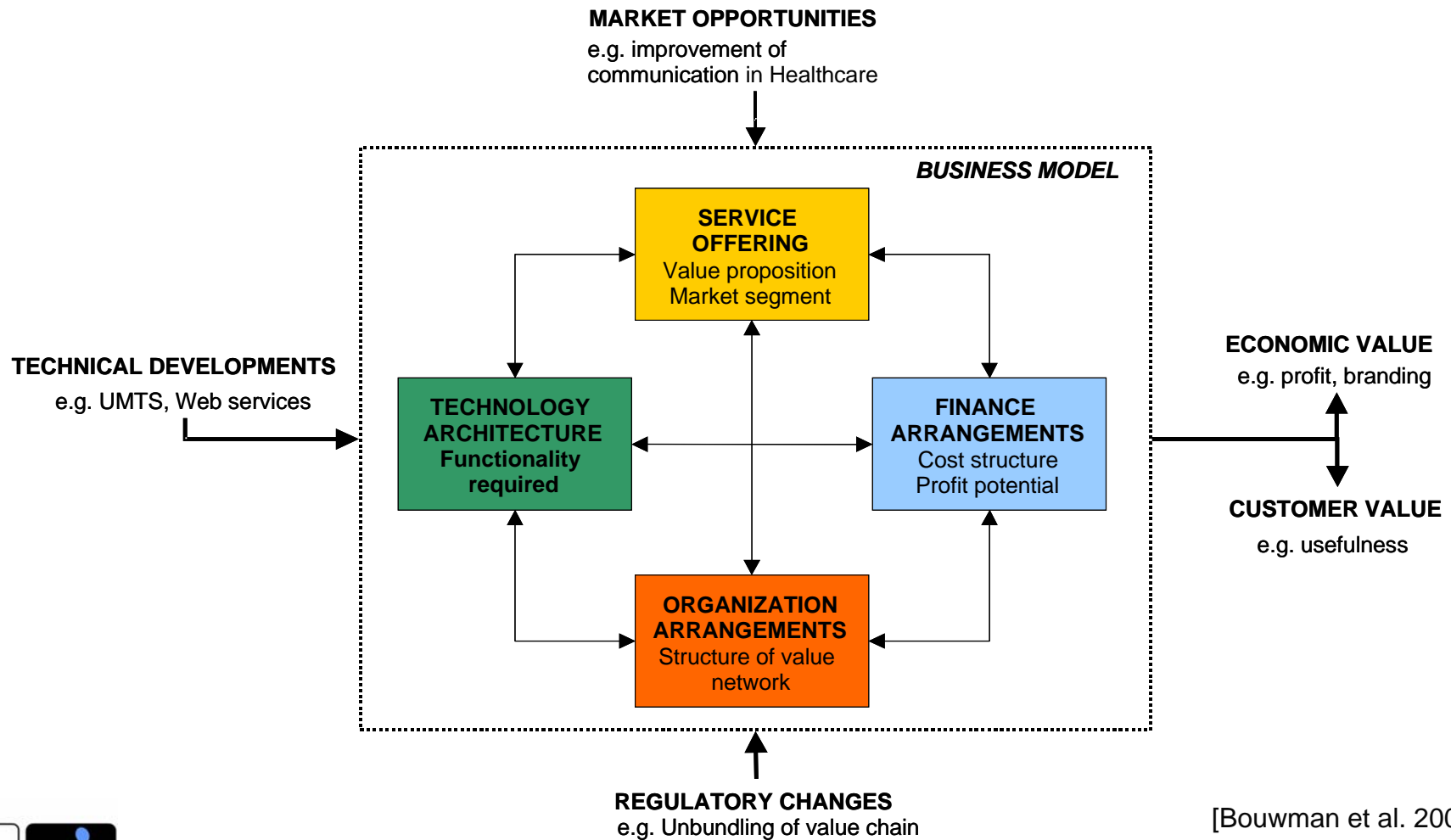
- “A business model is a **blueprint** that describes how a **network** of cooperating organisations intends to **create** and **capture value**”
- ⇒ business models for the networked enterprise
- Four main domains:
 - **Service domain**: a description of the service offering, its added value, and the market segment at which the offering is targeted
 - **Technology domain**: a description of the technical functionality required to realize the service offering
 - **Organization domain**: a description of the structure of the multi-actor value network required to create and distribute the service offering (organizational arrangements)
 - **Finance domain**: a description of how risks, investments and revenues are divided over the different actors of a value network (financial arrangements).

Research approach

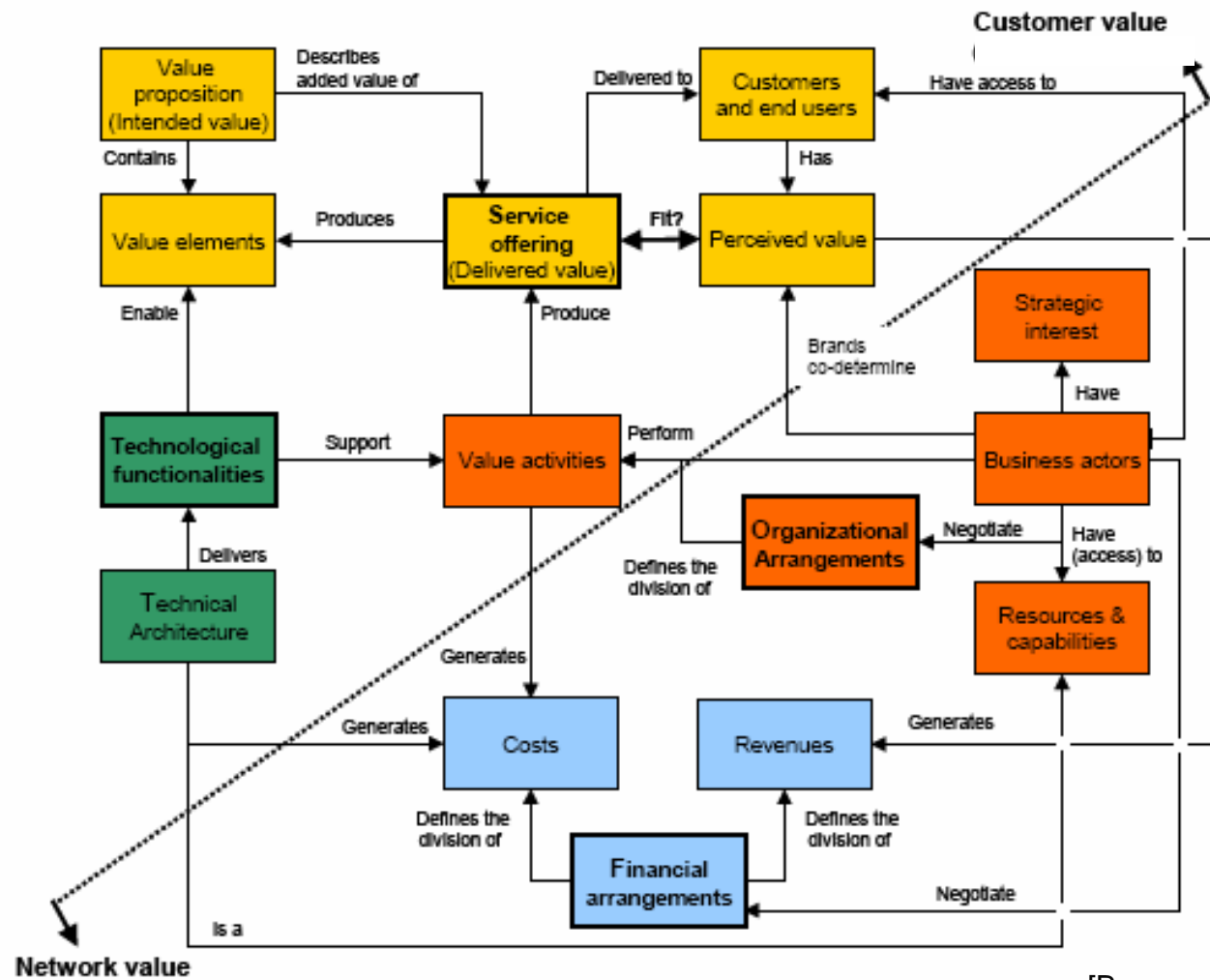


1. Build a *descriptive framework* of design variables and their mutual relations
2. Build a *case base* of critical design factors in business models
3. Build a *causal framework* explaining the viability of business models
4. Elaborate a *design method* for creating 'balanced' business models

Descriptive Business Model Framework

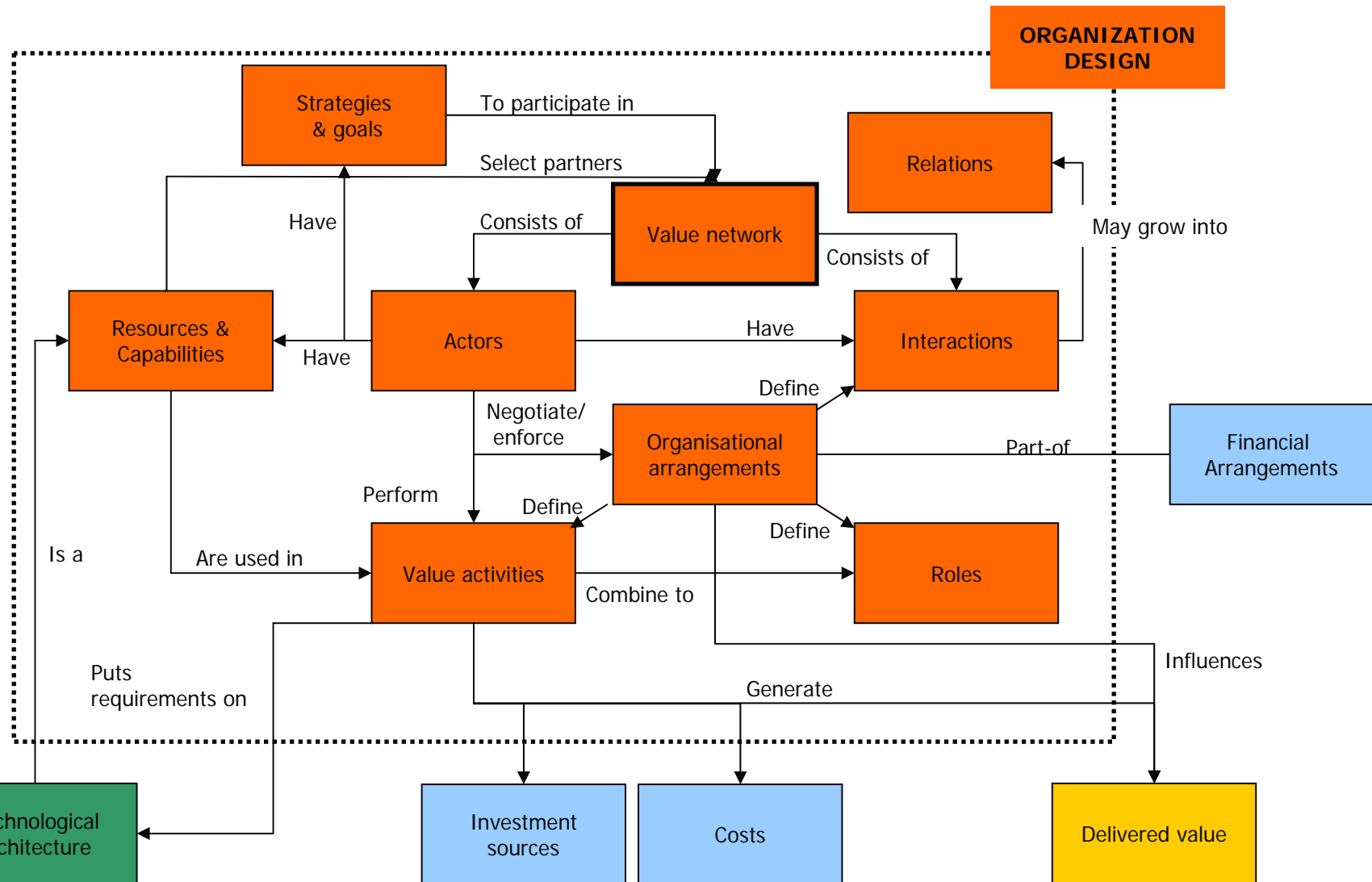


Elaborated Descriptive Business Model Framework



[Bouwman et al. 2004]

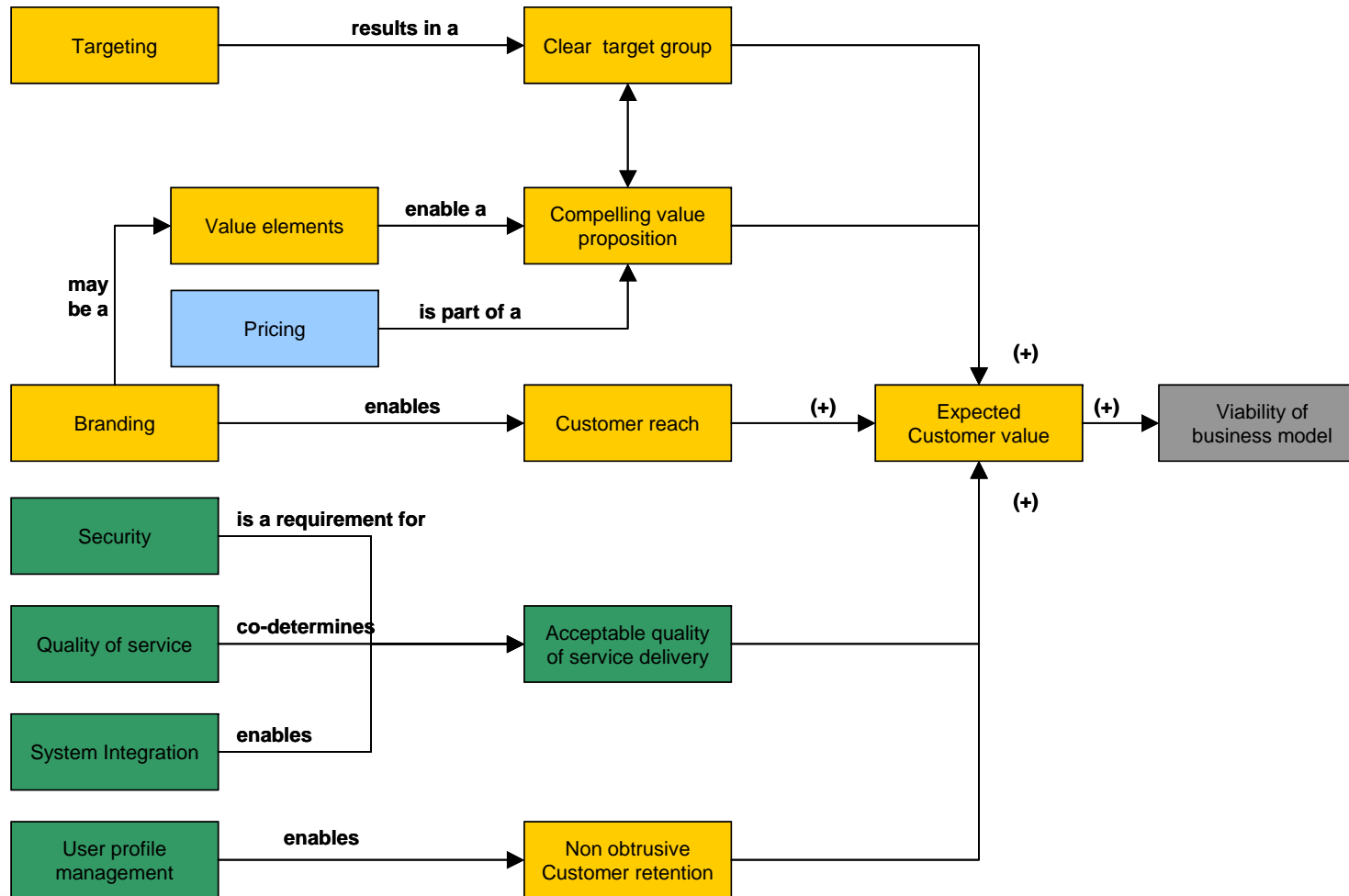
Descriptive framework for organization domain



Causal Framework

Critical design issues

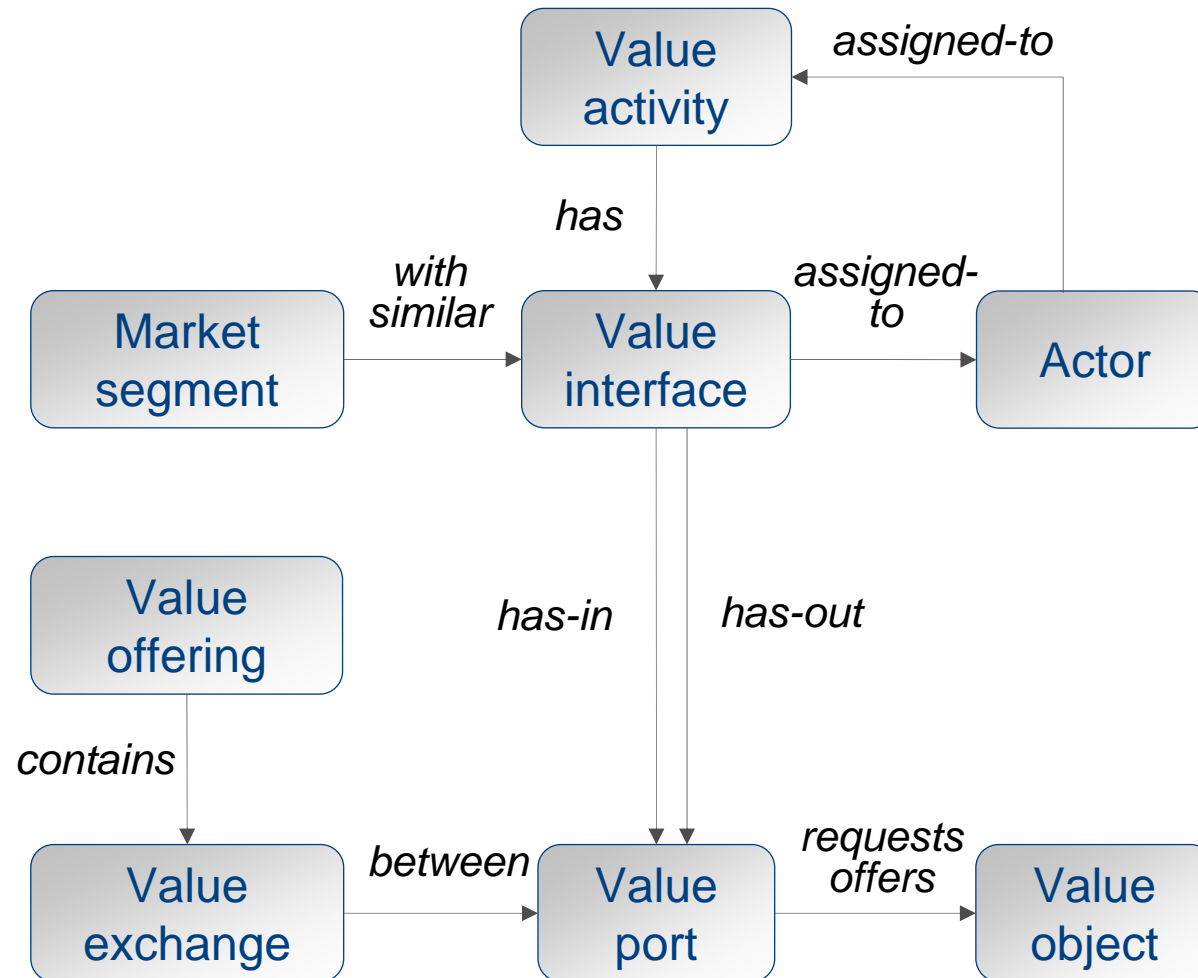
Critical success factors



Business Model Ontologies

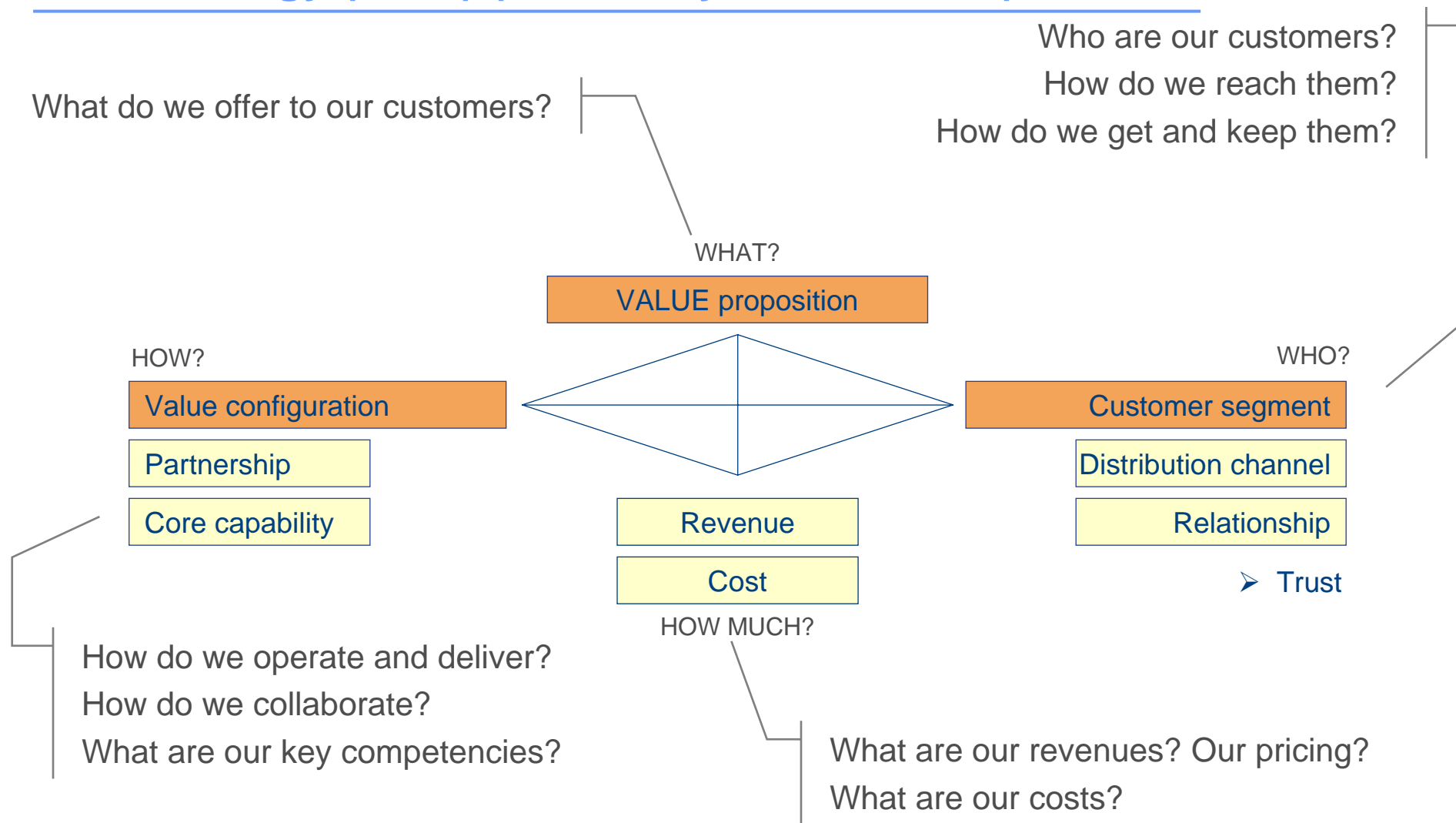
- “A conceptualization of a constellation of enterprises and final customers that jointly create, distribute and consume things of economic value”
- Focus on
 - Creation of common understanding of innovative e-business cases
 - Evaluation of e-business case from a profit/ consumer value perspective
- Based on
 - business sciences: value chain and constellation (*Porter, Tapscott*)
 - Information sciences: conceptual modelling (goal oriented requirement engineering and scenario theory)

Business Model Ontology: E³value Concept (University of Amsterdam)

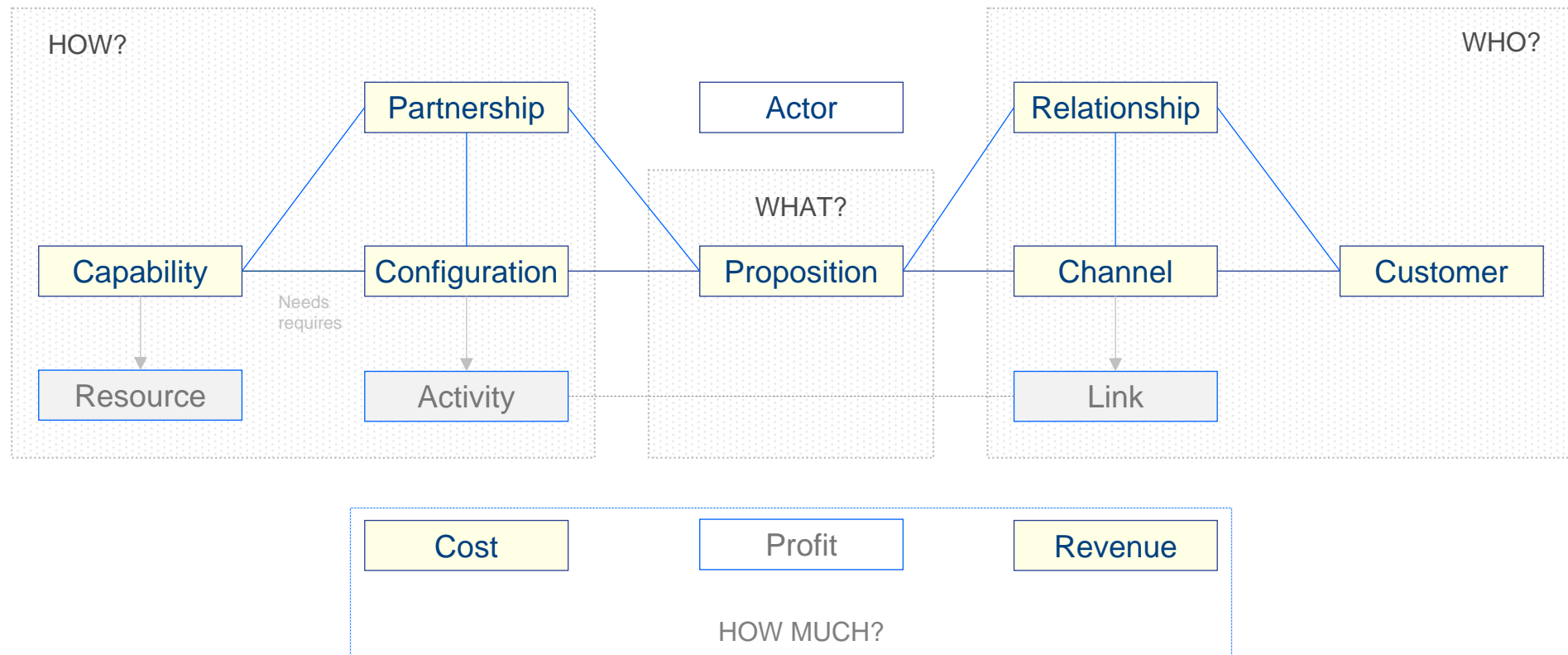


[Source: Pigneur 2005, Gordijn et al 2005]

Business Model Ontology: e-Business Model Ontology (BMO) (University of Lausanne)



e-Business Model Ontology (BMO): Concepts



[Source: Pigneur 2005, Gordijn et al 2005]

Business Model Ontology: Comparison

- Purpose of the ontology
 - improving communication, inter-company interoperability, intra-company interoperability, achieving reliability, enhance business model maintenance, knowledge acquisition, basis for scientific research on business models, fundament for enabling support tools
- Business model definition
 - BMO: conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm.
 - e³value: a conceptualization of a constellation of enterprises and final customers that jointly create, distribute and consume things of economic value.
- Focus of the ontology
 - BMO: single
 - e³value: multiple enterprise perspective

Business Model Ontology: Comparison

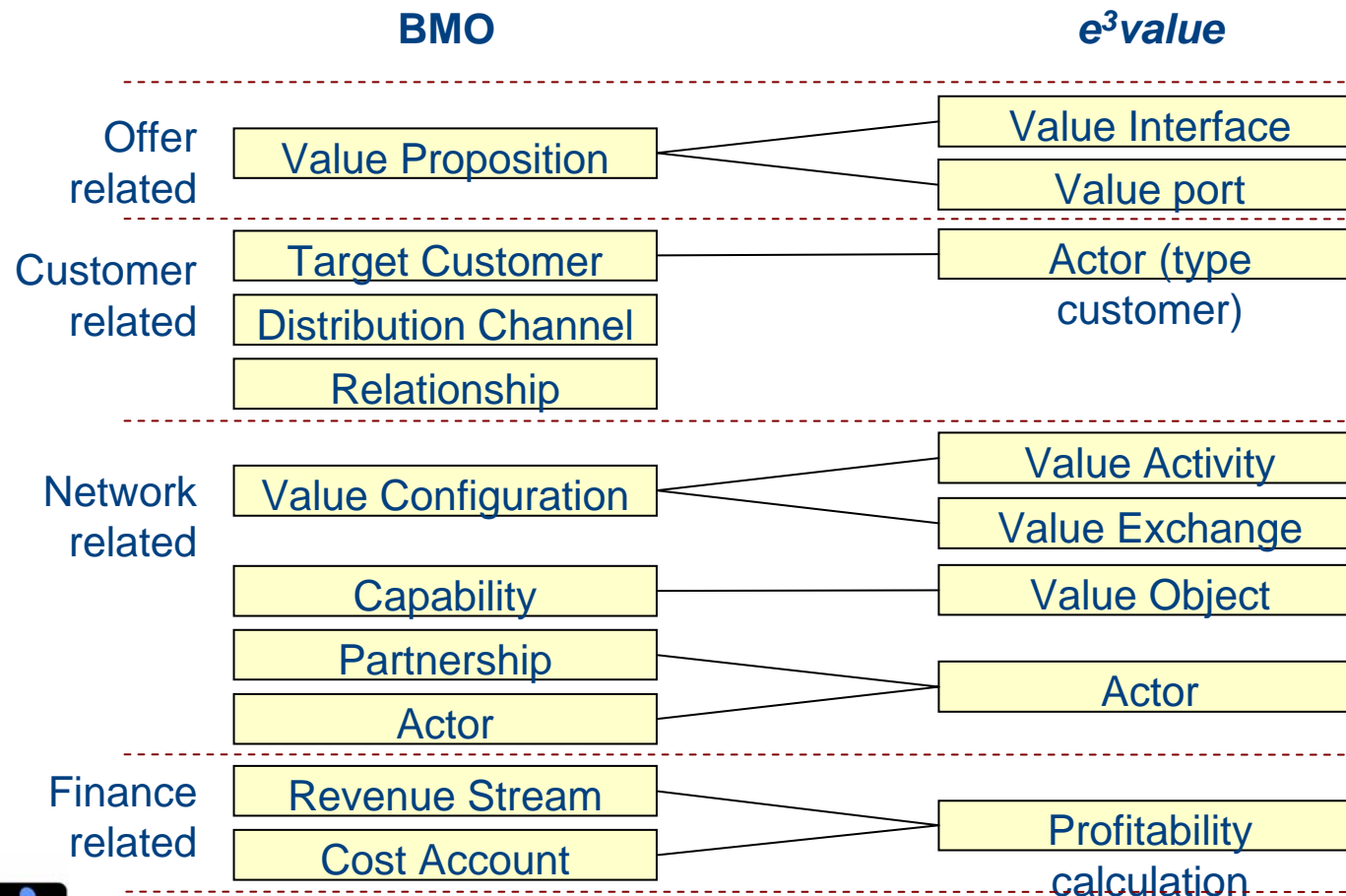
- Origins
 - BMO: management (marketing, resource-based view, entrepreneurship ...), then conceptual modelling
 - e3value: computer science (CM, RE, IA) then management (value chain)
- Ontology contents
 - Concepts, relationships, axioms
- Ontological role
 - containing the concepts, relations and axioms to express a business model.
- Actors using the ontology
 - business developer, managers, marketers, IT responsible, process managers, scientists
- Supporting technologies
 - BMO uses OWL
 - e3value uses RDF/S and Prolog

Business Model Ontology: Comparison (ctd.)

- Ontological representation
 - lightweight, semi-formal
- Tool support
 - BMO: XML storage + visualizer
 - e3value: Java/RDF/Prolog toolset – graphical editor, rule-based checker, and automated financial analysis
- Visualization:
 - BMO: ER-type visualization of instance space
 - e3value: Specific visualization constructs for ontology instances and relations
- Evaluation of model:
 - e3value: checker plus financial – cash flow – evaluation
- Change methodology:
 - e3value: de- & reconstruction of models and evolutionary scenarios

Business Model Ontology: Comparison

- Mapping of similar (but not identical) elements in the respective ontology



[Source: Gordijn et al 2005]

Business Model Ontology

- Complementary aspects and mutual contributions

area	BMO		<i>e³value</i>
Network constellation related concepts	The notion of resources and core capabilities present in BMO and important to business management theory could contribute to <i>e³value</i> . Similarly, the reasoning behind partnership agreements in BMO could be integrated into <i>e³value</i> .	↔	The <i>e³value</i> ontology embraces all the actors of the value constellation of a business case and additionally assesses their interest to participate in a particular configuration. This complementary aspect could be merged with BMO's more company-centric view.
Offer-related concepts	The descriptive nature of BMO and the subsequent structured description of a company's value proposition could be integrate into <i>e³value</i> .	⇒	
Customer-related area	The explicitly modelled distribution channels and relationship mechanisms in BMO are complementary to <i>e³value</i> and could be integrated.	⇒	
Value exchange related area		⇐	The modelling of value exchanges in <i>e³value</i> is very detailed and complementary to BMO. Additionally they can serve as a basis to introduce profitability calculation to BMO, which is absent.
Tool support & usages	Business model navigation and its decomposition in different levels of detail are aspects where BMO is complementary to <i>e³value</i> .	↔	The <i>e³value</i> design tools are already quite advanced and could serve as a basis for a BMO design tool. Similarly, the <i>e³value</i> change methodology is complementary to BMO.

[Source: Gordijn et al 2005]

Business Model Ontology: Next Steps

- Understanding the similarities and differences between the two ontologies
 - thus enhancing the understanding of what e-business models actually are
- Comparing other ontologies
- Integrating ontologies
 - Merging their modelling capabilities and strengths
- Combining ontologies
 - for comparing business models and detecting business innovation

Agenda

1. Introduction

2. Definitions and Taxonomies

3. Business Models Elements

4. Business Model Design

5. Business Model Adoption

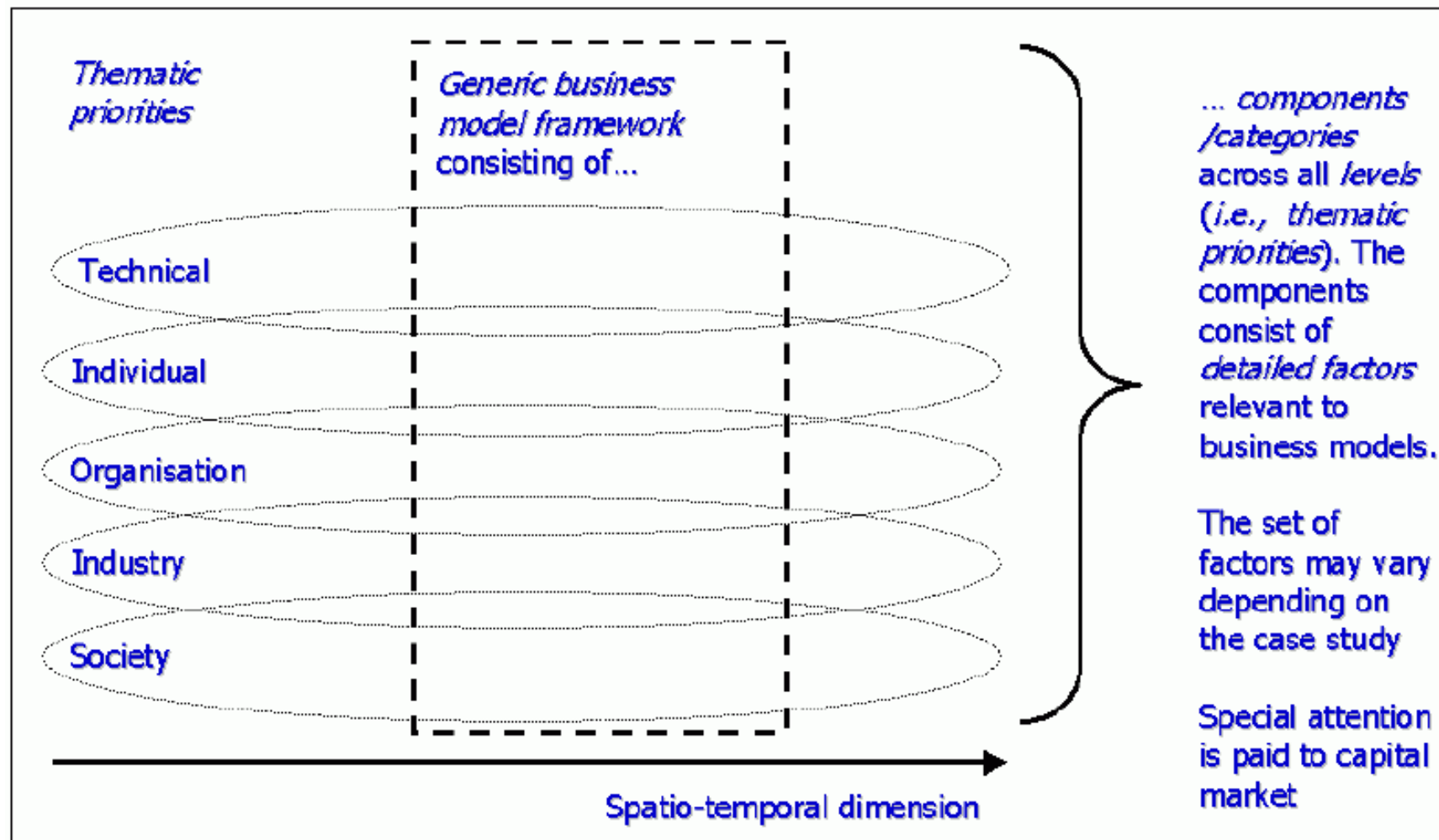
'eFactors'

- “E-factors are those factors or phenomena that promote or inhibit the **successful performance** of a business model.”
- Factors influencing e-business model adoption can be grouped by five ‘thematic priority areas’
- Theoretical perspectives for to the Identification of e-Factors
 - Value chain analysis (VCA)
 - Schumpeterian innovation theory (SIT)
 - Resource-based theory (RBT)
 - Strategic network theory (SNT)
 - Transaction cost economics



[eFactors 2003]

eFactors: Spatio-temporal framework of the thematic priority areas



Thematic priority Areas (1)

- Technology
 - externally indicated, overall functionality of web services, key factors (ex. Interoperability and interconnectivity, ERP- and CRM systems, etc.), “ideas”.
- Individual
 - integrates or links all of the thematic priorities
- Organization
 - both intra- and interorganizational
 - 7 factor categories: Products & services, markets & customers, efficiency management & structure, organizational culture, resources & capabilities, partnerships

Thematic priority Areas (2)

- Industry
 - industry structure and vice versa influence the adoption of e-business models, procurement via the Internet empower buying organisations, digital markets growth leads to less differentiation, globalization of competition, new actors and reintermediation
- Society
 - developing models for conducting e-business concerns changes in work and marketing practices, in customer/ supplier relationships, in the way products are delivered to consumers, changes in staff skills (effect in peoples' everyday life)
 - factors related to region/geography, culture, legal/ regulatory/ policy, economic, ethical & professional factors, as well as factors related to social capital/ social networks and social structure

Technology (1)



- Technological factors are externally indicated
- Most vital technological problem:
 - secure the overall functionality of web services
 - constantly evaluate performance
- Key factors in the management of technological infrastructure
 - Reliability
 - Security
 - Scalability
 - Flexibility

Technology (2)

- In connection with:
 - chosen business model
 - scale of business (e.g. local vs. global)
 - customer expectations
 - competitive environment
- Interoperability and interconnectivity issues:
 - techniques for access
 - capabilities of terminal devices
 - data/information exchange formats
 - web services

Technology (3)

- Generic Business Services:
 - disaster recovery systems
 - payment systems
 - digital rights management
 - security management (security + electronic identification).
- Internal IS-platforms:
 - ERP system
 - supply chain management (SCM) system
 - customer relationship management (CRM) system

Technology (4)

- Integration issues:
 - B-to-B Integration
 - B-to-C Integration
 - enterprise/company application integration (EAI)
- The aspect of commitments:
 - effective management of commitments with numerous partners
- Service performance issues:
 - the availability and scalability of services.

Individual (1)



- Ineffective research on the individual factors
- individual factors must be identified and a comprehensive list be produced and investigated
- taking advantage of a new technology to the fullest extent possible not enough
- Integration and consideration of all changes that have to be made to the organisation

Individual (2)

- Geographic
 - Language
 - The general and technological infrastructure of certain regions
- Culture
 - at work
 - at home
 - on the move
 - in a family group
 - in a social or business community

Individual (3)

- Education and Experience
 - users' knowledge, skills and expertise on digital technology
 - users' own perception of the level their skills or self efficacy
- Transactional
 - product, brand, design/ambience, payment methods, platform, promotion, price, process and distribution
- Psychological
 - beliefs, attitudes, motivations, intentions, propensity to trust and lifestyles/values

Individual (4)

- Behavioural
 - frequency purchasing
 - loyalty
- Individual Differences
 - cognitive level
 - physical level
- Demographic
 - Gender
 - age
 - spending power

Organization (1)



- An enterprise would have to consider or reconsider what kind of business they are in, what products and services to sell, how they should serve the market, how they should organise their business processes, and how they could exploit new and promising virtual partnerships
- An e-business model should be established on the grounds of a thorough analysis

Organization (2)

- Products & Services
 - Product scope
 - information access,
 - complementarities
 - branding,
 - Customization
 - product innovation
- Markets & Customers.
 - market scope
 - customer base
 - customer service and support
 - personalization and customization
 - customer retention
 - virtual communities, loyalty programs, or network externalities
 - customer dialogue, marketing efforts, and information access

Organization (3)

- Efficiency
 - scalability transaction mechanisms
 - logistical procedures
 - value chain integration
 - efficient workflows.
- Management & Structure
 - flexible management (including change management , limited span of control, flexible power and authority, and distribution of responsibilities)
 - Teamwork prevails
 - New forms of networked organizations

Organization(4)

- Organization Culture
 - Shared values and attitudes
 - Social norms, behaviors and habits
 - Symbols and language
- Resources & Capabilities
 - Licenses
 - Equipment
 - Human resources
 - Leadership
 - Incentives
 - Motivation
 - Management involvement and dedication
- Partnerships
 - The number of partnerships
 - Governance mechanisms
 - Resource sharing; co-branding
 - Conflict resolution mechanisms.

Industry (1)

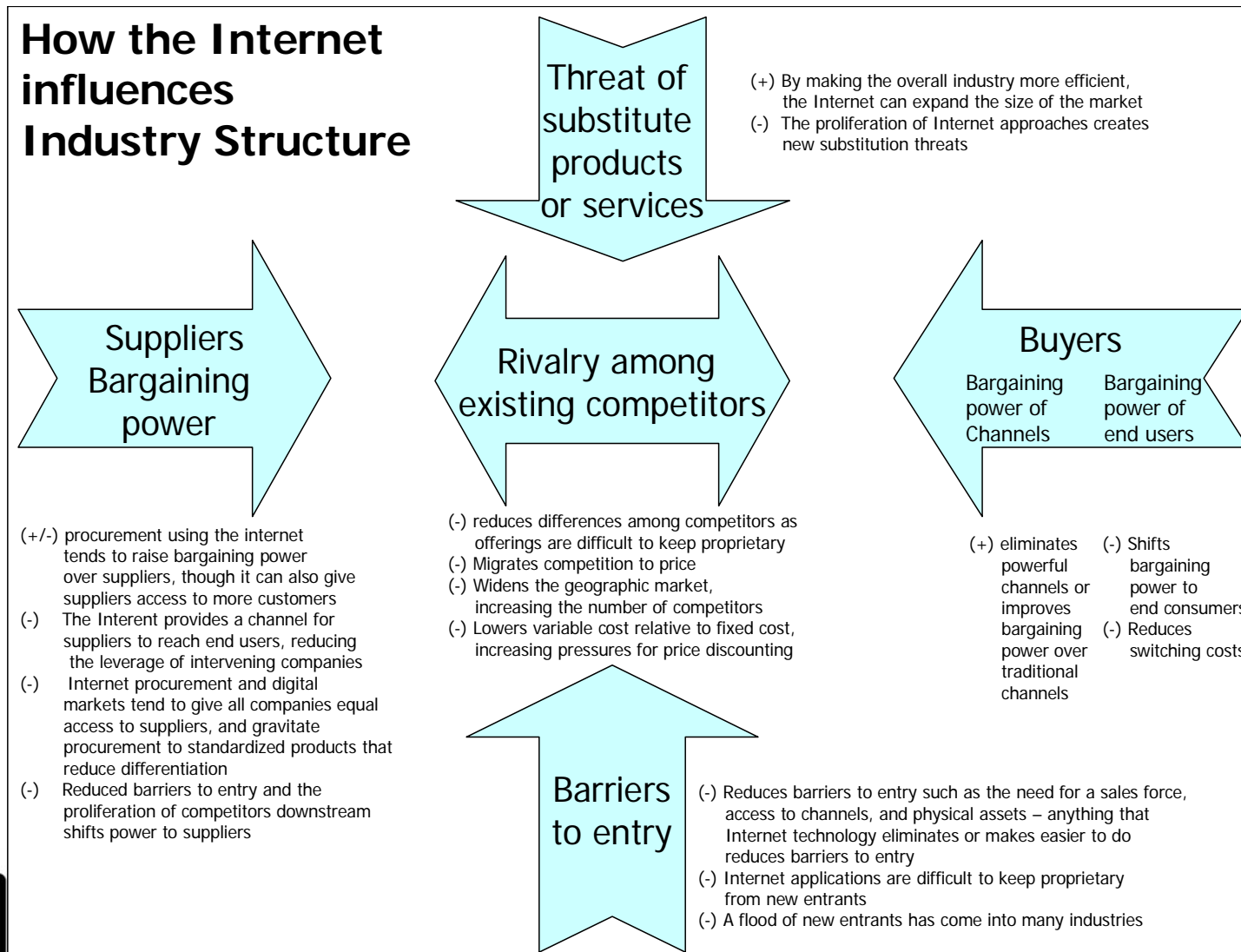


- The various industry (sub) factors are summarised in the five-forces model of Porter
- “ultimately, strategies that integrate the Internet and traditional competitive advantages and ways of competing should win in many industries It will be easier for established companies to adopt and integrate Internet methods than for dot-COM’s to adopt and integrate traditional ones”

Industry (2)

- The boundaries of industries as we know them are blurring and networks of organisations (value webs) are replacing individual business units.
- Firms differ considerably in their use of information technology and the Internet depending on the industry.
- In industries with many SME's e-business models are less adopted given the lack of expertise, time and money at SME's.
- Factors affecting growth in business-to-consumer transactions differ significantly from those affecting business-to-business electronic transactions.

Five-force industry e-factors model by Porter



Industry (3)

- Procurement via the Internet provides
 - more power to buying organisations
 - suppliers access to more customers
- The rise of digital markets stimulates standard products and less differentiation
- E-business models can lead to disintermediation from the supply side as well as the demand side
- Competition is
 - often leading to lower prices
 - becoming global
- Key success factors in the deployment of e-business models are
 - Focusing on core competencies
 - Partnerships with other actors
 - Combining the physical and digital channels
 - Matching the right B2C and B2B models

Society (1)



- adoption of new technologies
- changes in work practices, in customer/supplier relationships, in the way products are delivered to consumers, in marketing practices and changes in staff skills
- e-business models signify new opportunities for re-organizing the way businesses are currently practiced
- in this highly evolving business environment societal factors need to be considered

Society (2)

- This priority area is concerned with the impact of societal factors on the emergence of a business model
 - Through the identification of these factors it can be derived that they influence, directly or indirectly, the way in which e-business models are perceived, implemented and evaluated
 - These factors are related to both
 - the social environment and to
 - the business environment
 - The social aspects of e-business are closely related to the four other key themes in e-business adoption: individual, organizational, industrial and technical factors
 - overlaps in the theories examined with the individual thematic priority are manifested and hence similar factors are derived

Societal e-factors (1)

- Region / Geography
 - Language
 - country – specific issues
 - environmental issues
- Cultural
 - Values/ Beliefs
 - Acceptance
 - Awareness
 - Communities
 - Social Support
 - Social Norms
 - Religionn
 - Adoption
 - Attitudes
 - Change
 - Behaviour
 - Word of Mouth / “Word of Mouse”
 - Communication Channel

Societal e-factors (2)

- Legal/ Regulation /Policy
 - Security
 - Privacy
 - Freedom of Information
 - Reliability
 - Confidentiality
 - Regulation
 - Policy makers / “Policy intermediaries”
 - Regulation framework - Jurisdictions
 - Taxation
 - Infrastructure
 - e-Democracy

Societal e-factors (3)

- Economic.
 - market structure and access
- Ethical & Professional.
 - identity crisis
 - responsibility and roles issues
 - computer crime and abuse
 - Anonymity
 - free speech
 - trust

Societal e-factors (4)

- Social Capital / Social Networks.
 - social networks structure
- Social structure.
 - income level
 - education
 - wealth
 - ethnic background
 - Social capital and structures

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