An Ontology for e-Business
Goal of e3-value

- Exploring and articulating innovative e-commerce and e-business ideas
  - Creating a common understanding of e-business cases
  - Evaluating e-business cases from a profit / consumer value perspective
What does e3-value Answer?

- Typical questions to be answered by e³-value:
  - Which organizations are needed to offer a specific product?
  - What do they offer each other of economic value?
  - Who is doing what, and with whom?
  - What happens if:
    - We value products differently?
    - We shift activities from one actor to another?
    - …
An e³-value model

actor
market segment

value
object
value exchange
value interface
value port

dish
money

meal
money

Dish supplier
Beverage supplier

Catering firm
Consumers
Actor

- An *actor* is an economically independent entity
- Examples: consumers, enterprises
- Graphics: a rectangle with enterprise or role name
Value object

- A *value object* is something that is of value to an actor
- Examples: goods, services, money, experiences
- Graphics: only as annotations for value exchanges
Value port

- A *value port* is used by an actor to provide or request value objects to or from other actors
- A value port abstracts away from internal business processes
- A value port can be an in-port or an out-port
- Examples: beverage out, money in
- Graphics: arrowheads on the border of an actor rectangle
Value Offering

- A value offering groups a number of equally directed value ports
- Can be used for mixed bundling
- Example: meal + laying of table
- Graphics: no special symbol
Value Interface

- A value interface groups one ingoing and one outgoing value offering
- Models economic reciprocity
- A value interface is atomic
- Example: beverage + money
- Graphics: a rounded rectangle at the border of an actor; value ports are drawn within the value interface
Value Exchange

- A *value exchange* connects two value ports with each other
- Models potential trades of value objects between value ports
- Example: beverage + money between caterer and beverage supplier
- Graphics: a line between two value ports annotated with the name of a value object
Market Segment

- A *market segment* is a set of actors that assign values to objects in the same way.
- Examples: business and tourist travellers.
- Graphics: three stacked actor rectangles.
**Basic e³-value Concepts**

- **Market Segment**
  - consists-of
  - has
  - 0..1

- **Value Interface**
  - has
  - 1..* 1..*

- **Actor**
  - has
  - 0..1

- **Value Offering**
  - consists-of
  - 1..2

- **Value Exchange**
  - has-in
  - 0..*

- **Value Port**
  - has-out
  - 0..*

- **Value Object**
  - offers-requests
  - 1
Actor composition

- A composite actor groups value interfaces of other actors
- Examples: airline and taxi companies
- Graphics: actor rectangles within a larger actor rectangle
Value activity

- A value activity is an activity that should be profitable for at least one actor
- Examples: produce meal and deliver meal
- Graphics: rounded rectangle within an actor rectangle
Value activity
Scenario Path

- A value exchange shows the relationship between value interfaces of different actors
- A scenario path shows relationships between value interfaces within the same actor
- Graphics: dotted lines, red circles for start and end stimulus
Scenario Path

Business Models – e³-value ontology
Characteristics of e3-value

- Lightweight approach
- Conceptual approach
- Semi formal approach
- Graphical approach
- Multi viewpoint approach
- Scenario approach
- *Economic value* aware approach
e3-value Ontology – Links

Web Object Placeholder
Address: http://www.cs.vu.nl/~gordijn/index.htm
Displayed in: Articulate Player
Window size: 320 X 240

http://www.cs.vu.nl/~gordijn/index.htm
Introduction to e3-value

Developed by **KTH**
for **INTEROP Project**
[www.interop-noe.org](http://www.interop-noe.org)

**Authors:**

**Paul Johannesson** pajo@dsv.su.se
Stockholm University and Royal Institute of Technology
Sweden

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