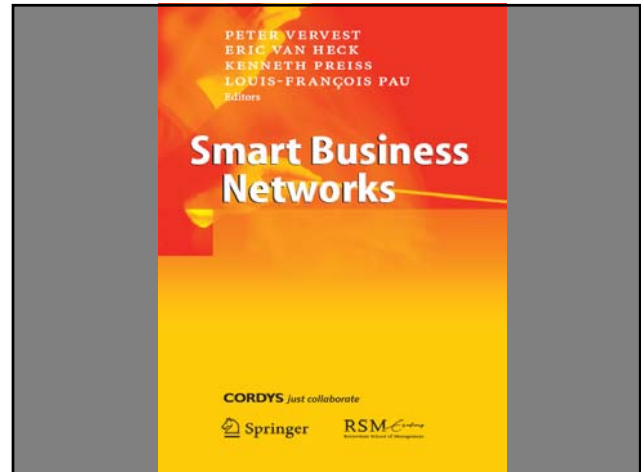## What Are Smart Business Networks?
Examples and Research Questions

Prof. Dr Ir Eric van Heck
RSM Erasmus University
Email: evanheck@rsm.nl

SBNi – Science Meets Business, Putten, June 28, 2005

sbni *smart business network initiative*

RSM ERASMUS UNIVERSITY

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Editors

Smart Business Networks

CORDYS *just collaborate*

Springer   RSM

Menu

- Vision

- Business Cases:
    - Kenny's Bookshop in Ireland
    - Thebigword – Translation Services
    - Dutch Flower Auctions – Auctioning at High Speed

- What Smart Business Networks Should Be Able to Do?

- Research Examples and Research Questions

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Vision

- Smart Business Networks as New Competitive Business Model

- Smart Business Networks will cooperate and compete to fulfil customer needs

- What is different?

    – Competitive advantage created by the network not the individual organization
    – Acceleration of network's ability to combine and act
    – Intelligence embedded in the smart business network captured in the business operating system
    – Real business opportunity with a thorough understanding of the science

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Three examples:

- Kenny's Bookshop: Using a Book Router
- TheBigWord: Translations at fast speed
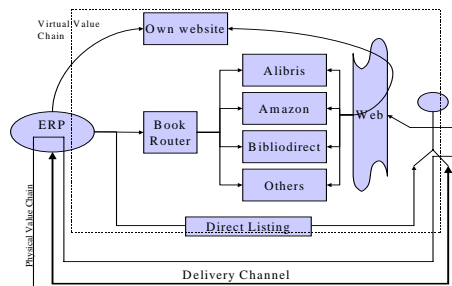- Dutch Flower Auctions: Auctioning at high speed

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Kennys Bookshop, Galway, Ireland
(Golden et al., 2005)

Bookrouter settings:
Active, Inactive, Not used (Golden et al., 2005)

Virtual & Physical Value Chain
**(Golden et al., 2005)**

What is different?

- Network
  - Kenny's bookshop linked to online bookshops and customers worldwide
- Acceleration
  - Fast uploading process with inventory pricing for different services
- Intelligence embedded
  - ERP system – bookrouter.com connection
- Business – Science
  - Datamining – dynamic pricing

## Thebigword: Translation Services in the UK (Holland et al, 2005)
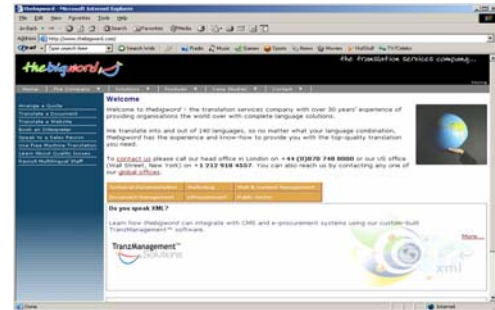
Thebigword: Translation Services in the UK (Holland et al, 2005)

- Global Scale to international customers

- In wide variety of industries including financial services, technology, manufacturing, travel, and retailing

- Adaptation to local markets (customers' preferred language)

- Employs approx. 4,500 "mother tongue" linguists

- Innovative use of IT to support every aspect of its operations

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Web Services in the Translation Market: Translations available within 48 minutes (Holland et al, 2005)
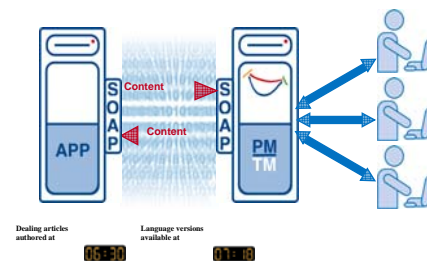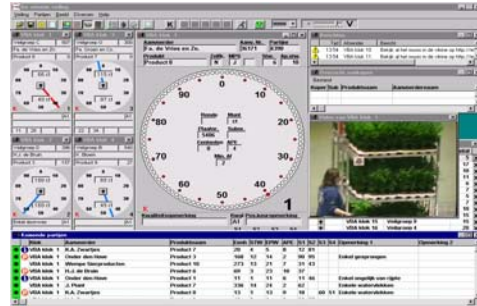
What is different?

- Network
  - TheBigWord links 4,500 "mother tongue" linguists to clients worldwide
- Acceleration
  - Fast translation process – from hours to minutes
- Intelligence embedded
  - Standardized linkages and processes
- Business – Science
  - Business architecture and web services

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Dutch Flower Auctions
(Koppius & van Heck, 2005)

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What is different?

- Network
  - Link 6,000 growers to 2,000 buyers with 6,000 flower varieties
- Acceleration
  - Fast auction process – every 3 seconds a transaction; 60,000 clock transactions a morning
- Intelligence embedded
  - Information aggregation in the market, standardized Dutch auction model
- Business – Science
  - Information architecture and impact online auctions **RSM** *Erasmus*
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What Smart Business Networks Should Be Able to Do?

- For companies Smart Business Networks will add value to their current and new customers:
  - Shorter time to market
  - Customized / modularized products and services
  - Innovative products and services
  - Customer intimacy AND product leadership AND Operational Excellence
- But companies have to think about
  - their core competences in the business network
  - activities that can be out-sourced or in-sourced
  - and how to remain in the driver seat

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PhD Research Project Diederik van Liere

- Research focuses on:
  - Network Position
    - How is a firm connected in the overall structure of the network and how can a firm improve its position?
  - Network Composition
    - What are the characteristics of the member firms of the network to make the network competitive?
  - Network Strategy
    - How does information about the network (network horizon) impact the decisions for a favorable network position and network composition?

- Support by Delta Lloyd

PhD Research Project Ting Li

- Research focuses on:
  - Railway Network Structure
    - What are network structural properties of the Dutch railway network and what are consequences?
  - Yield Management
    - How is dynamic pricing influencing travel behavior?
  - Smart Card Technology
    - How information from customer smart cards can be used to improve customer satisfaction and yield management?

- Support by NS and Incontrol

Research Questions

- Outcome
  - How do smart business networks outperform traditional networked business? Why?

- Execution
  - How are smart business networks design and execute their critical processes? Why?

- Governance
  - How is the governance of smart business networks set up? Why?

- Design
  - What rules are embedded in the business operating system and how are they embedded? What can be standardized and how? Why?

Universities participating in SBN research