



eBSN Workshop  
Paris, 13 October 2008

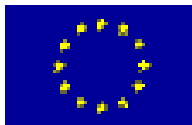


Only the usual suspects?

Findings from the  
e-Business Watch  
2007/8

Stefan Lilischkis  
empirica  
Bonn, Germany

A programme of the

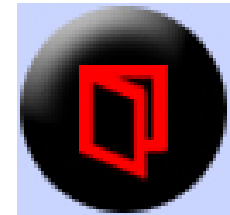


European  
Commission

# Presentation contents

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- **Introduction to e-Business Watch 2007/8**
- **Key findings**
- **Policy implications**
- **Outlook to 2008/9**



## e-Business Watch objectives

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- **Service to European Commission**
- **Assess the impact of ICT on ...**
  - § enterprises
  - § industries
  - § economy in general
- **Identify public policy challenges**
- **Provide forum for debate**



## Studies in 2007/8

### ■ Six sector studies

- § Chemicals, rubber and plastics
- § Steel
- § Furniture
- § Retail
- § Transport and logistics services
- § Banking



### ■ Four cross-sector studies

- § RFID
- § IPRs in ICT-producing SMEs
- § ICT and energy consumption
- § Impacts of ICT adoption

### ■ Special study: e-health standards

# Data sources and methods

- **Enterprise surveys 2007 (CATI method):**

- § Manufacturing (2,121 interviews)
- § Retail & Logistics (2,248 interviews)
- § RFID (434 interviews)
- § IPR (683 interviews)



- **89 case studies**

- **Expert interviews**

- **Econometric analysis**

## Main trends observed

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- **Improved e-maturity**
  - § ICT infrastructure significantly improved, SMEs in particular
  - => Companies better prepared for more advanced e-business
- **From transactions to service provision**
  - § e-Business goes far beyond transactions
- **New opportunities for outsourcing**
  - § Intermediaries support data exchange (invoicing!)
- **Process efficiency remains important**
- **Emerging theme: ICT and environment**

# Towards "e-Business 3.0"

## 1995 – 2000: "e-Business 1.0"

- § internet based trade emerged
- § enthusiasm about new opportunities

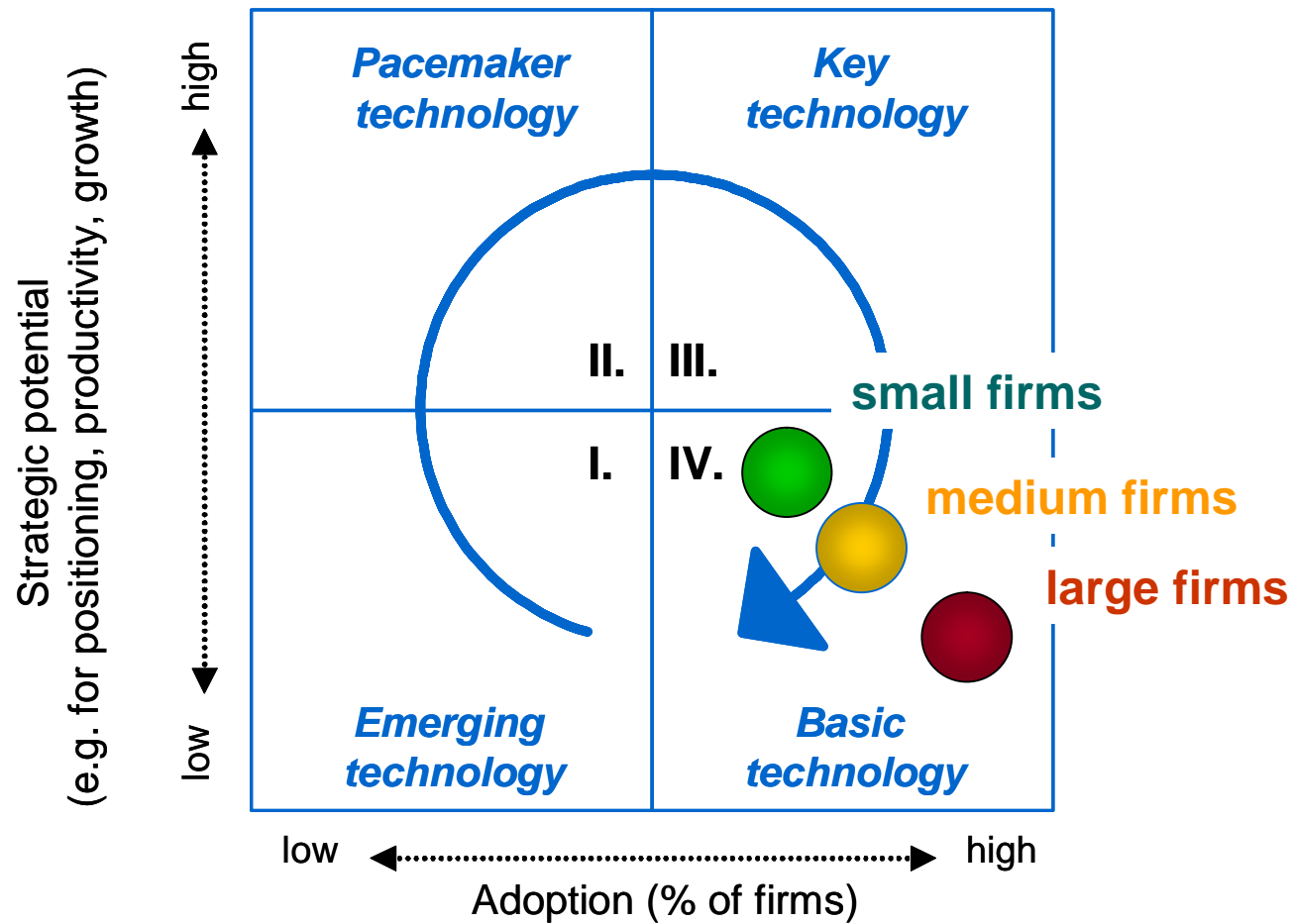
## 2001 – 2005: "e-Business 2.0"

- § shake-out of failed business models
- § focus on cutting costs
- § more conservative attitude towards ICT

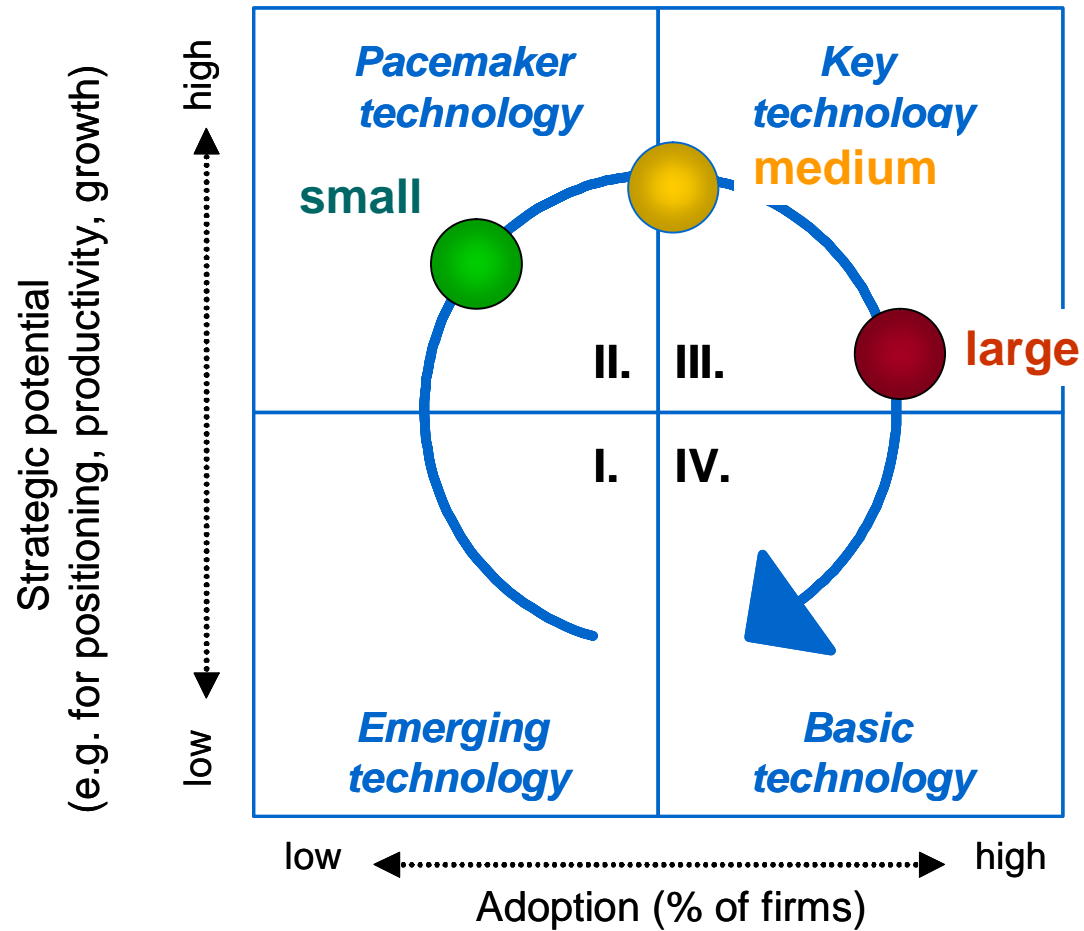
## 2006 – 2???: "e-Business 3.0"

- § companies more "e-friendly" again
- § no doubts about importance of ICT
- § trend towards e-value systems

# Life cycle of basic ICT adoption



# Life cycle of advanced e-business



# Impacts of ICT and e-business

## ■ Mixed evidence

- § Micro data: e-business important for companies
- § Macro data: only moderate effects of ICT capital on productivity and value added growth

## => Productivity paradox still valid

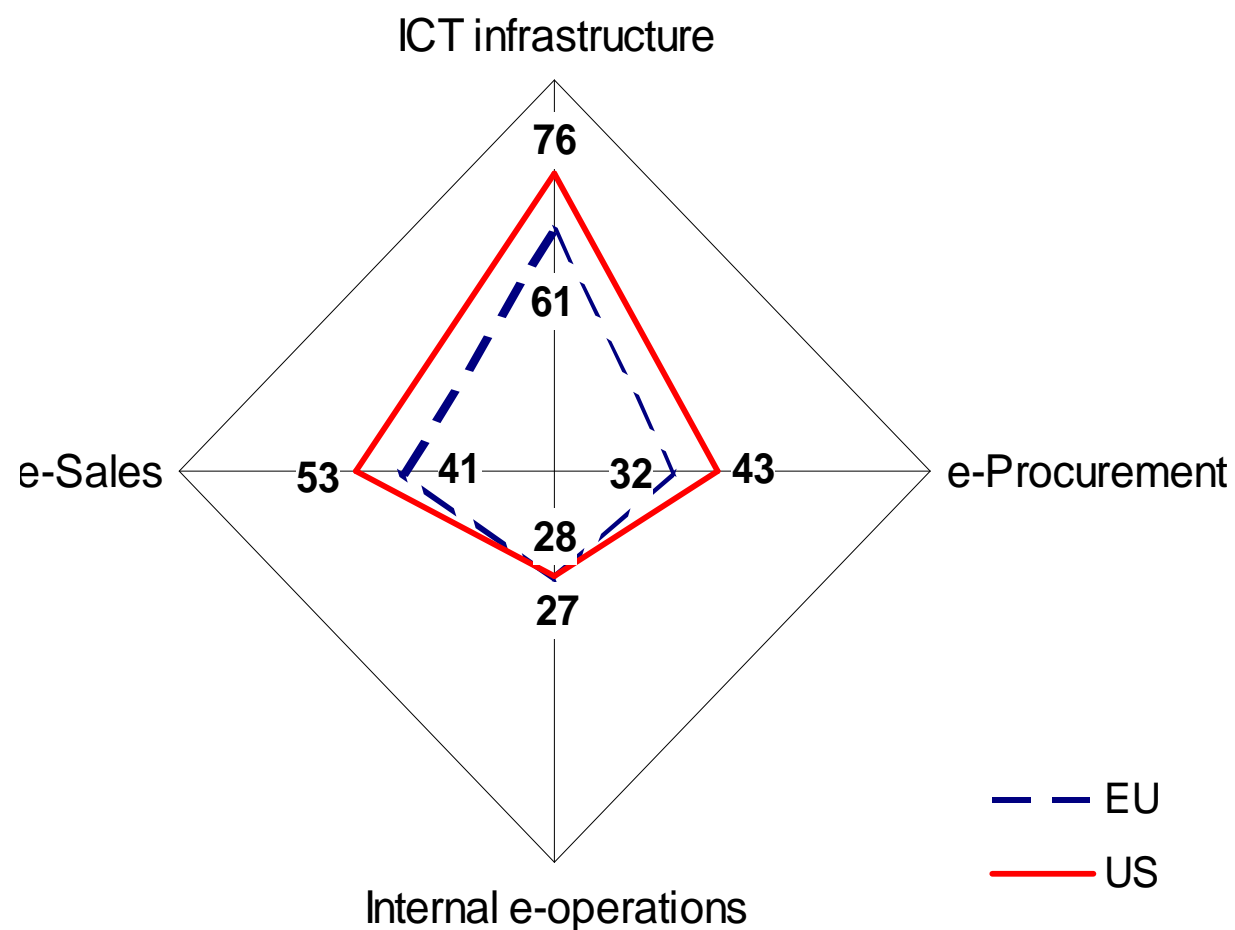
- § “Computers are everywhere  
but in the productivity numbers”  
(Robert Solow, 1987)



## ■ Possible explanations:

- § Really important: investment in ICT training + organisation, not ICT capital (i.e. hard-, software, telecom services)
- § Much ICT embedded in production facilities (“invisible”)
- § Much ICT outsourced

# EU versus US



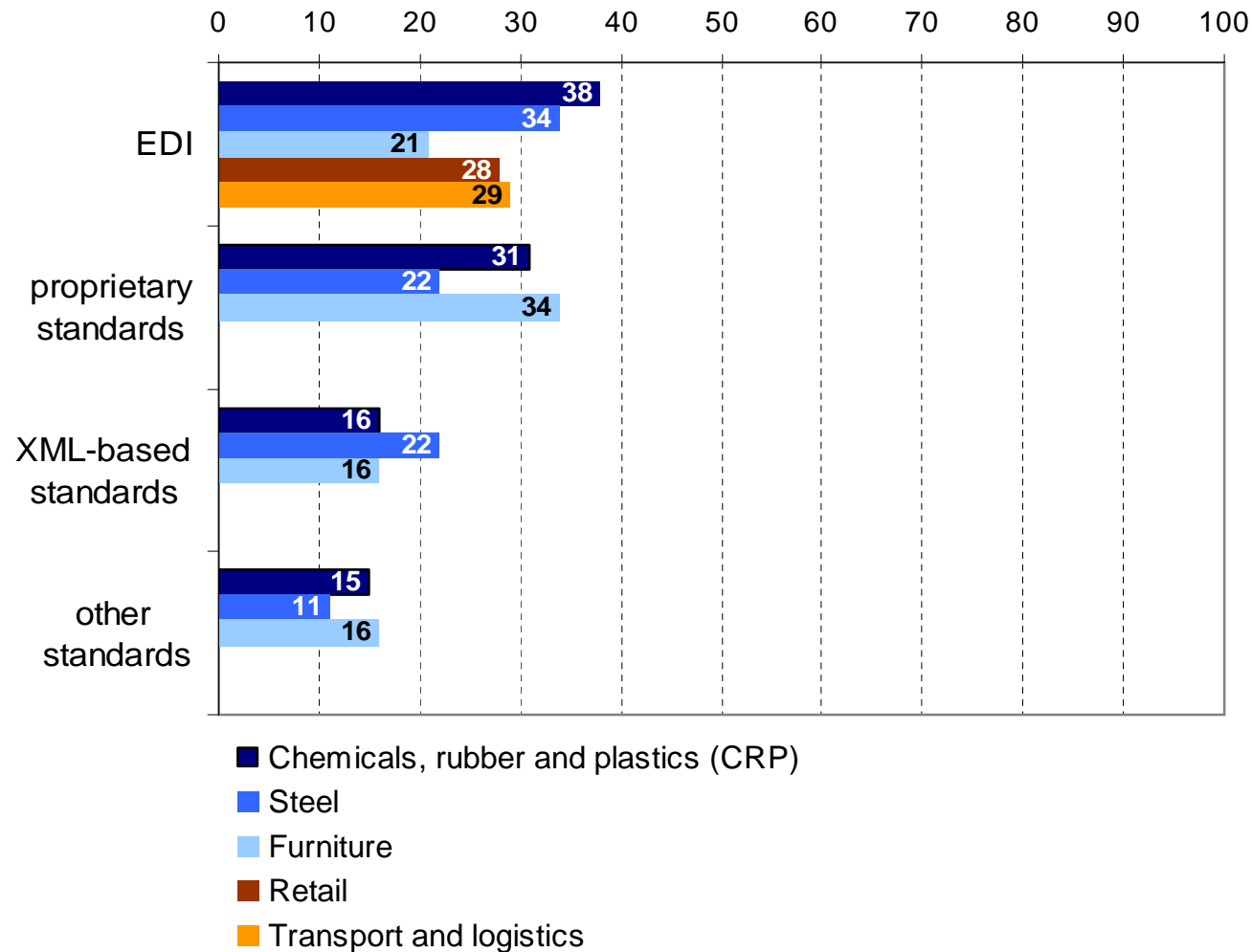
EU-7 companies use ICT and e-business less than US counterparts

Internal operations similar

Similar picture for all industries

Sector studies: no competitive disadvantage

# ICT standards adoption



EDI standards most common

Proprietary standards also popular

Minority reported to use XML-based or other standards

Interoperability problems common

# Recurrent themes

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## ■ Sector differences

- § ICT and e-business focus differs widely by sector
- § Manufacturing: adoption level similar, focus procurement and supply chains
- § Banking: ICT transformed the whole sector

## ■ SMEs lag behind

- § ICT and e-business adoption increases with firm size
- § Many small companies don't need sophisticated ICT

# Policy implications

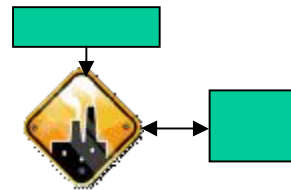
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- **Three items important for all sectors:**
  - § Value systems
  - § e-Standards and interoperability
  - § e-Skills
  
- **Sector-specific approaches may be meaningful to reflect particularities**

# Policy implication I: foster e-value systems

## ■ Rationale

- § Lack of readiness of suppliers and customers most important reason for not applying e-business more intensely
- § Large firms in particular report difficulties in convincing SMEs about e-business benefits



## ■ Objectives

- § Support industry-specific e-business networks, particularly including SMEs

# Policy implication II: promoting adoption of e-standards

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## ■ Rationale

- § Low level of ICT standards adoption, frequent use of proprietary standards => interoperability problems



## ■ Objectives

- § Promoting industry-specific standards if they are not widely used but offer proven benefits

# Policy implication III: promoting e-skills

## ■ Rationale

- § Difficulties in filling vacancies for ICT professionals, lack of development of ICT user skills and e-business skills



## ■ Objectives

- § Develop, promote and implement a European e-competence framework and national e-skills strategies
- § support multi-stakeholder initiatives

# Conclusions

## ■ Usual suspects:

- § e-Business applied for process efficiency
- § Sector differences prevail
- § SMEs continue to lag behind
- § e-Standards and e-skills require support



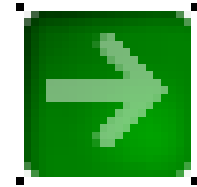
## ■ Attention please:

- § ICT infrastructure mature also in SMEs
- § New wave of outsourcing ahead?
- § ICT impacts on environment
- § Industry-specific initiatives for e-value chains, e-standards, e-skills



# Outlook to 2008/9

- **Study period Oct 08 – Sep 09**
- **Two sector studies**
  - § Energy industry
  - § Glass, cement and ceramics industry
- **Three cross-sector studies**
  - § ICT role for reducing greenhouse gas emissions in energy-intensive industries
  - § e-Skills demand development in lead industries
  - § **Economic assessment of industry-related ICT policy**



## Questions to eBSN

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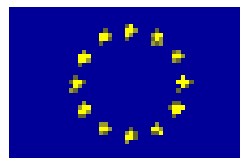
- **Shortcomings of current e-business policy?**
- **New focus meaningful?**
- **Changing rationale of promoting ICT uptake?**



## More information

e-Business  
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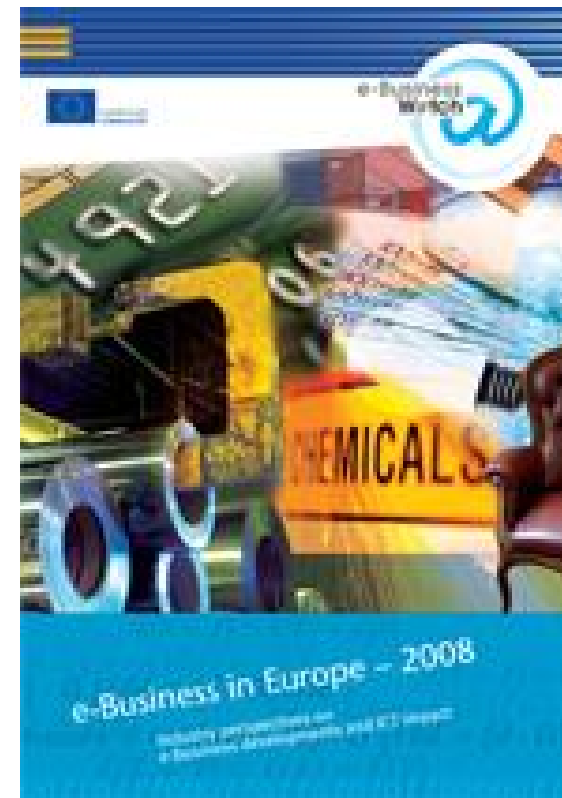


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All sector studies of 2007/8 available at  
<http://www.ebusiness-watch.org>