



The European e-Business
Market Watch

ICT Manufacturing Industry

First findings from the
European *e-Business W@tch*
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Presentation overview

■ Characteristics of the sector

■ Key issues:

- Convergence
- Extended enterprise
- ICT and industry transformation
- Who benefits from e-business?

■ Preliminary conclusions and potential policy implications

Characteristics of the sector*

- **PC and peripherals (DL 30)**
 - 30.01 Manufacture of office machinery
 - 30.02 Manufacture of computers and other information processing equipment
- **Telecommunications equipment (DL 32)**
 - 32.1 Manufacture of electronic valves and tubes and other electronic equipment
 - 32.2 Manufacture of TV and radio transmitters and apparatus for line telephony and line telegraphy

* NACE Rev. 1.1

Characteristics of the sector

- **Mostly delivers to B2B markets**
- **Sector supplies technology for the “backbone” of the information society**
- **~ 6% of total production volume in Europe, large trade deficit**
- **Volatile, highly dynamic and innovative industry**
- **Short product life cycles & strong price competition**
- **Highly standardized components**
- **International value chain and production clusters**

Convergence

- **Convergence blurs the lines between markets**
 - Many telecommunications equipment firms were late to adapt to changing conditions and lost market shares
- **A lock-in threat**
 - A dominant position in one market limits the ability to follow new market trends if a technological shift occurs
- **Complementarities between technology and content**
 - The diffusion of new technologies depends on user's skills and the provision of complementary products
- **Regulatory framework**
 - Are there areas where the regulatory framework might hamper investments in new technologies (e.g. VoIP, IPR)?

Extended enterprise



Networking stimulates innovativeness

- Access to competitive resources and information
- Risk and R&D projects diversification



Who accrues benefits?

- Large companies might overlook the interests of SMEs in the process of supply chain integration

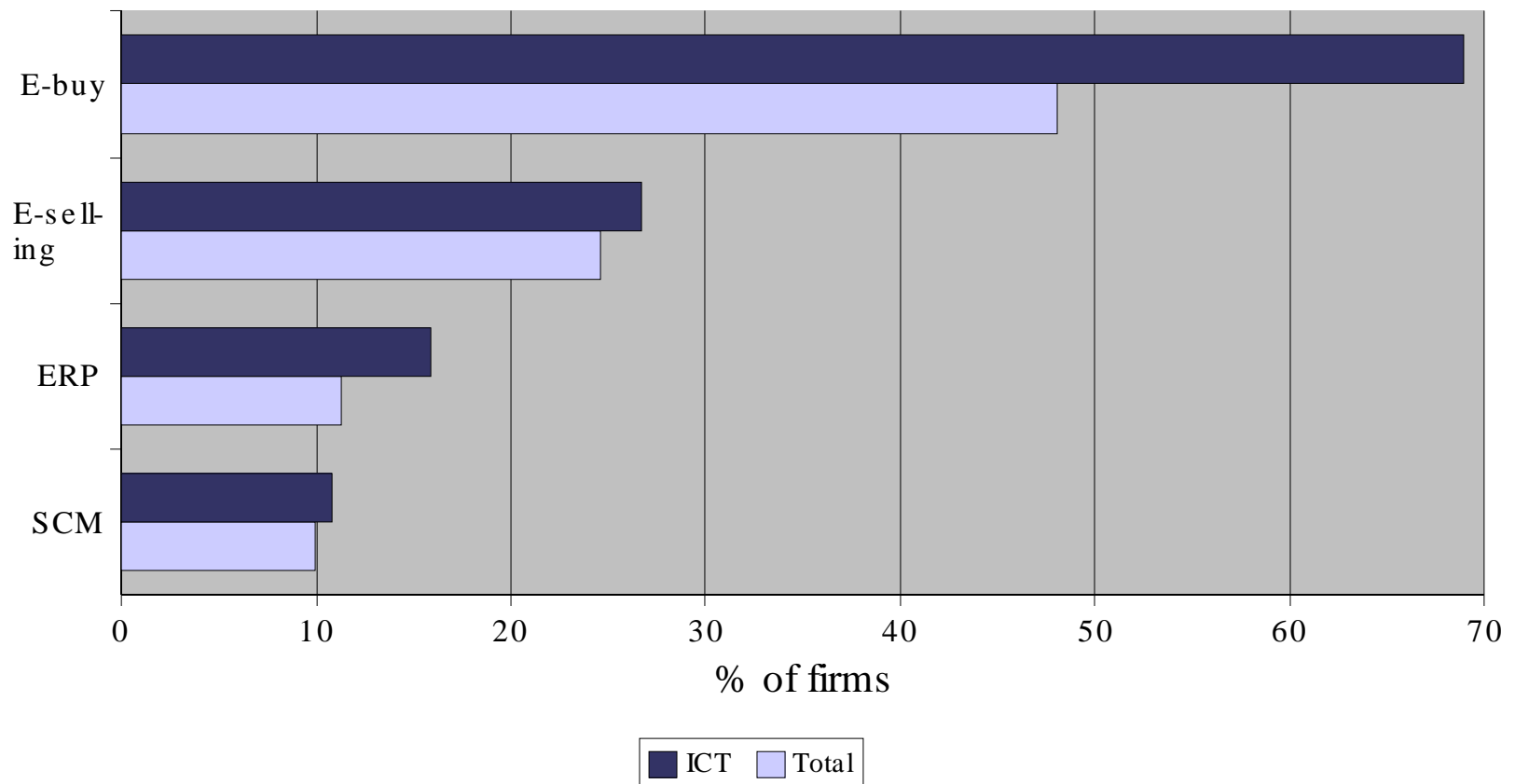


SMEs participation in standard setting

- SMEs' active role needed

Extended enterprise

Inter-firm e-business



ICT and industry transformation

Standardized processes follow standardized products

- Standardized components
 - **Standardized processes**
 - **Standardized organizations**
- Lower inter-action (transaction) costs

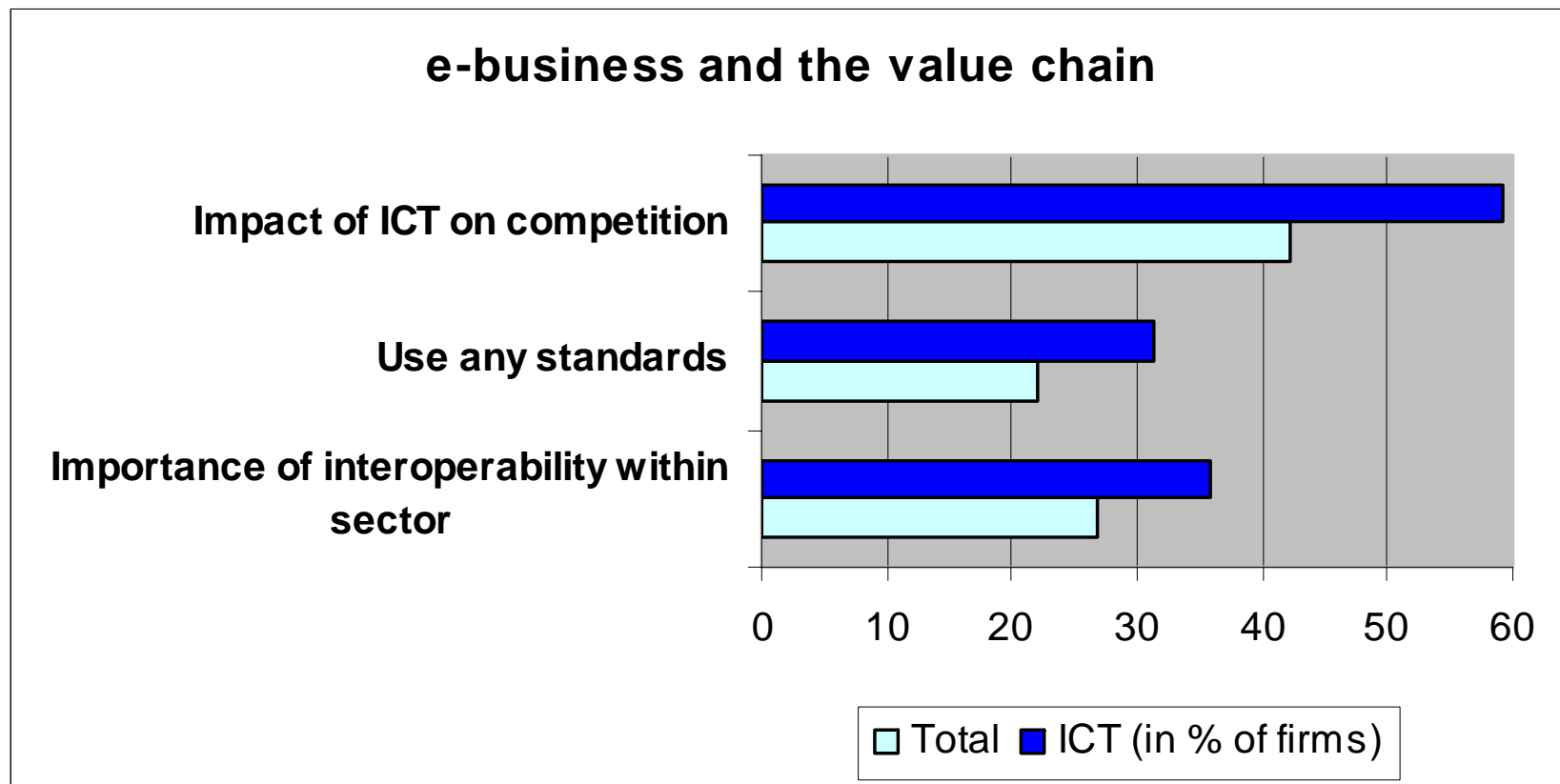
Information replaces inventory

- The main benefit comes from the elimination of inventories and physical activities by information

Standards required

- A lack of standards hampers the process of supply chain integration

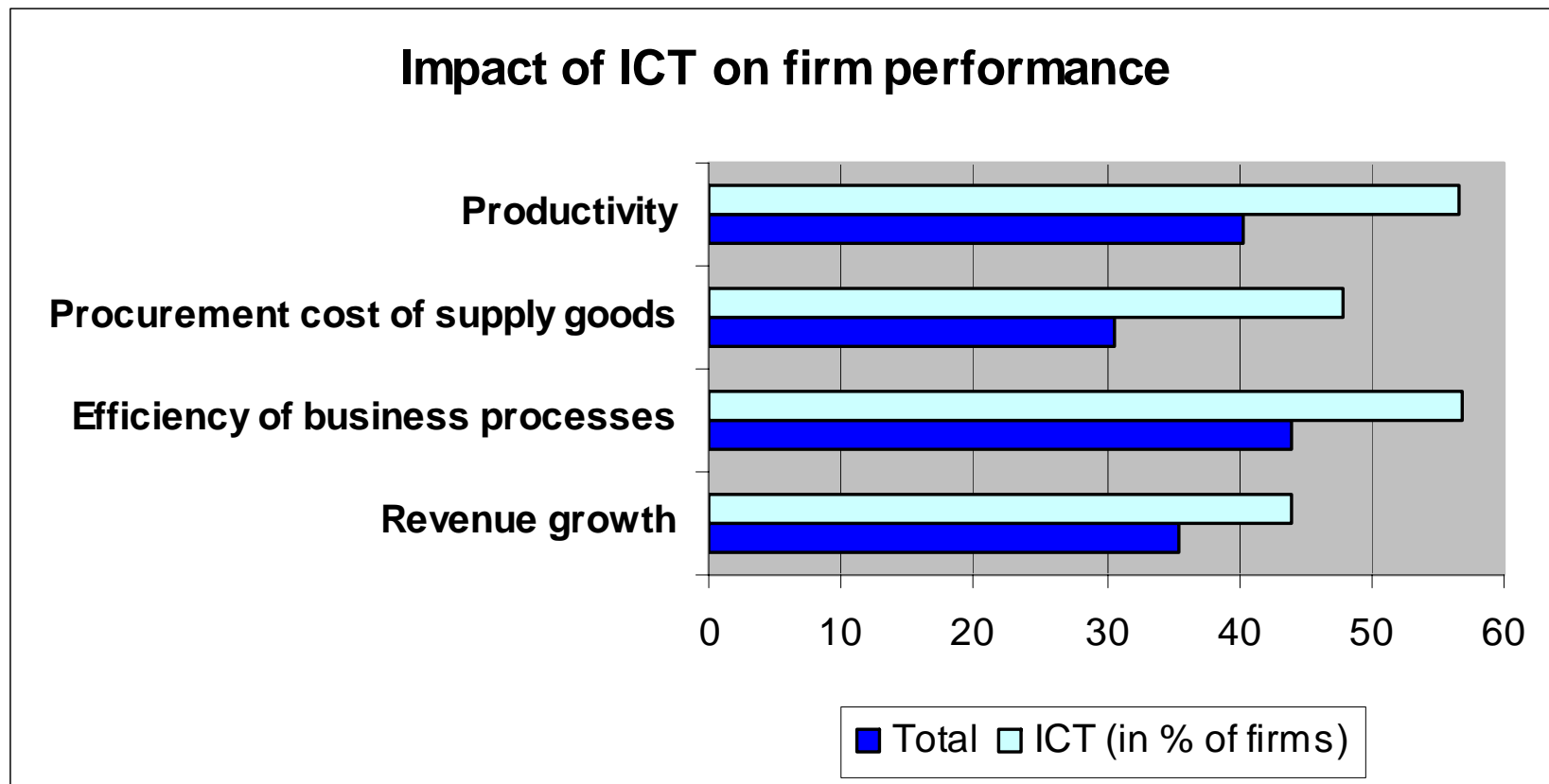
ICT and industry transformation



Who benefits from e-business?

- **ICT enables innovation and market success**
 - But one size does not fit all
 - And ICT-driven growth tapers over time
- **Network technologies are particularly attractive**
- **Online procurement guarantees the largest benefits**
 - Electronic markets make companies selling online worse off
- **Start-ups enjoy higher returns on ICT**
 - Flexible organizational structures
 - Younger (better IT-skilled?) workforce
- **Service sectors exhibit higher ICT productivity gains**
 - Dell's phenomenon explained

Who benefits from e-business?



Preliminary conclusions and implications

- **Customized innovation policies**
 - Address specific company groups
- **Networking for innovation**
 - Knowledge exchange over technology endowment
- **Comprehensive regulation policies**
 - Infrastructure (telecommunication networks)
 - Services (telecommunication services)
 - Content (IPR, P2P)
- **Emphasise the necessity of co-inventions**
 - Organizational adaptations
 - Changes of the strategy

Thank you for your attention!

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