

## ICT and e-Business in the Shipbuilding and Repair Industry

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# Scope of the sector study

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- **Shipbuilding and repair industry**
  - **emphasis on building**
- **Adoption of ICT and e-Business in 2006**
- **Current e-business trends**
  - **Progress in e-business usage**
  - **The use of B2B Internet trading platforms**
  - **e-Business and SMEs**
- **Business impacts and policy implications**

# Challenges in the shipbuilding industry

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## Asian Challenger

- China, Korea

## Development of the worldwide demand

## Rising resource prices

è **ICT and e-business are possible strategies for business process efficiency and innovation**



# E-Business usage

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- **CAD/CAM, EDI, Internet are common**
- **ERP and SCM systems are adopted, but are still in an infant stage**
- **B2B Internet trading platforms are introduced, especially for e-procurement**
- **Large shipyards are the forerunners, smaller companies lag behind**

# ICT infrastructure

	Companies with internet access		Companies with broadband internet access		Share of employees with internet access		LAN	
	% of empl.	% of firms	% of empl.	% of firms	% of empl.	% of firms	% of empl.	% of firms
<b>Shipbuilding &amp; repair (EU-10)</b>	100	100	87	86	29	30	82	74
<b>Small (1-49 empl.)</b>		100		85		32		69
<b>Medium/Large (50+ empl.)</b>		100		89		25		87
<b>All 10 sectors (EU-10)</b>	95	93	76	69	40	43	65	46
Base (100%)	firms using computers 98		firms using computers 98		firms with internet access 96		firms using computers 98	
N (for sector, EU-10)								
Questionnaire reference	A1		A3		A2		A4a	

Source: *e-Business Watch* (Survey 2006)

# Online co-operation and collaboration

	Share documents in collaborative work space		Manage capacity/ inventory online		Collaborative design processes	
	% of empl.	% of firms	% of empl.	% of firms	% of empl.	% of firms
<b>Shipbuilding &amp; repair (EU-10)</b>	<b>27</b>	<b>19</b>	<b>19</b>	<b>15</b>	<b>20</b>	<b>7</b>
<b>Small (1-49 empl.)</b>		<b>23</b>		<b>18</b>		<b>8</b>
<b>Medium/Large (50+ empl.)</b>		<b>6</b>		<b>9</b>		<b>5</b>
<b>All 10 sectors (EU-10)</b>	<b>27</b>	<b>14</b>	<b>22</b>	<b>10</b>	<b>15</b>	<b>7</b>
Base (100%)	firms with internet access		firms with internet access		firms with internet access	
	98		98		98	
N (for sector, EU-10)						
Questionnaire reference	D5a		D5e		D5d	

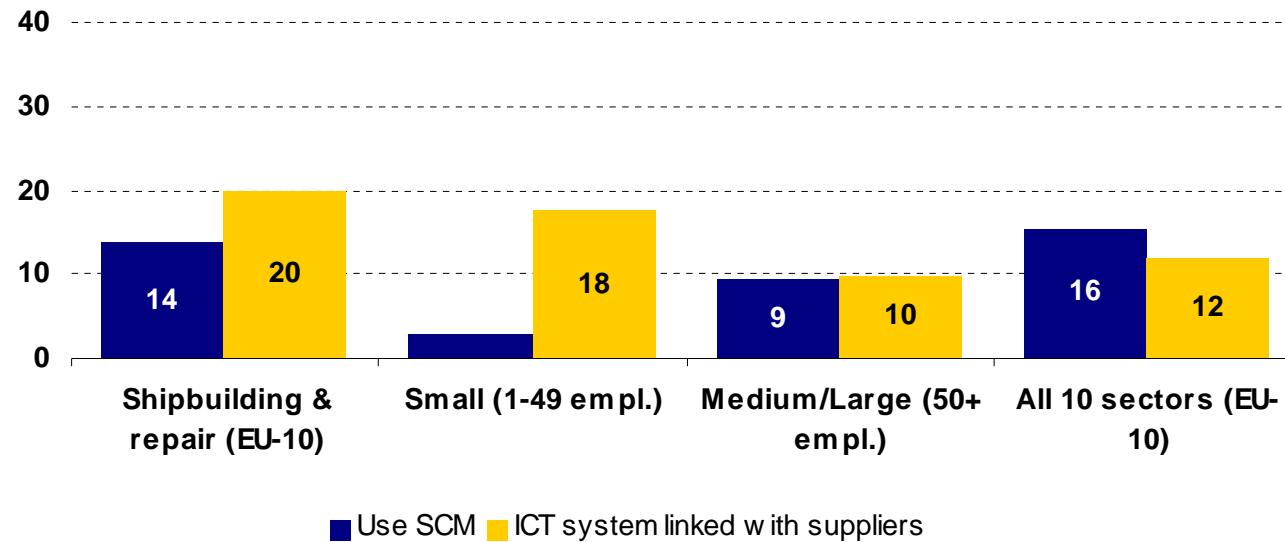
Source: *e-Business W@tch* (Survey 2006)

# e-Commerce

	Place orders online		Use specific ICT solutions for e-sourcing		Accept orders from customers online		Use specific ICT solutions for e-selling	
	% of empl.	% of firms	% of empl.	% of firms	% of empl.	% of firms	% of empl.	% of firms
<b>Shipbuilding &amp; repair (EU-10)</b>	<b>62</b>	<b>53</b>	<b>18</b>	<b>12</b>	<b>18</b>	<b>14</b>	<b>12</b>	<b>8</b>
<b>Small (1-49 empl.)</b>		<b>47</b>		<b>8</b>		<b>18</b>		<b>10</b>
<b>Medium/Large (50+ empl.)</b>		<b>72</b>		<b>24</b>		<b>5</b>		<b>3</b>
<b>All 10 sectors (EU-10)</b>	<b>57</b>	<b>48</b>	<b>16</b>	<b>9</b>	<b>35</b>	<b>25</b>	<b>18</b>	<b>9</b>
Base (100%)	firms using computers		firms using computers		firms using computers		firms using computers	
	98		98		98		98	
N (for sector, EU-10)								
Questionnaire reference	E1		E7		F4		F10	

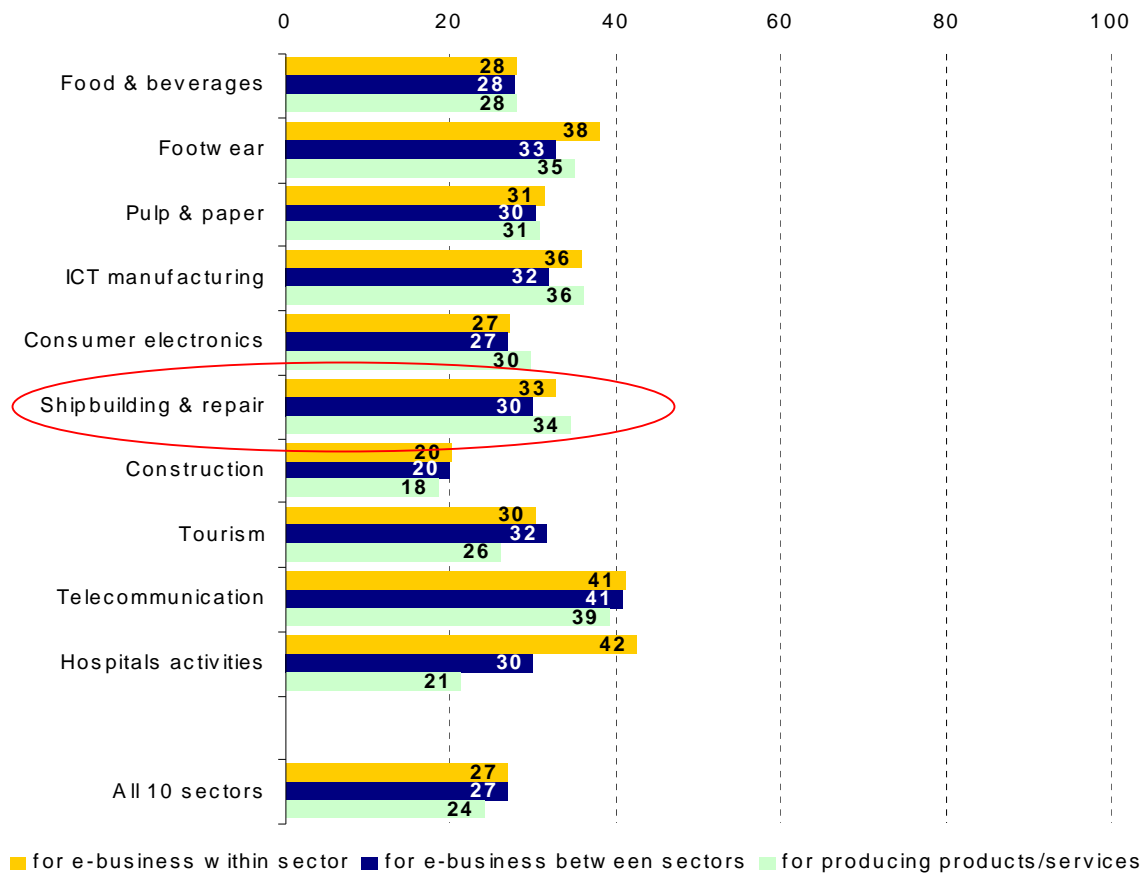
Source: *e-Business W@tch* (Survey 2006)

# Supply chain integration



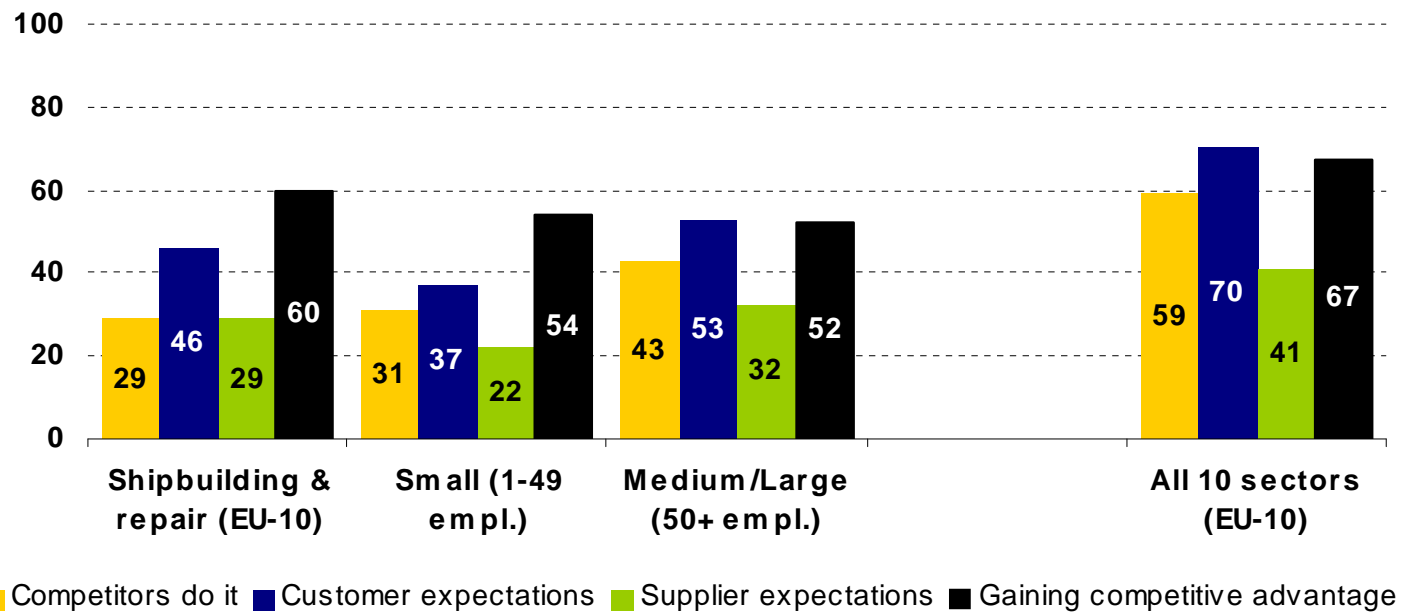
Source: *e-Business W@tch* (Survey 2006)

# Interoperability problems



Source: *e-Business W@tch* (Survey 2006)

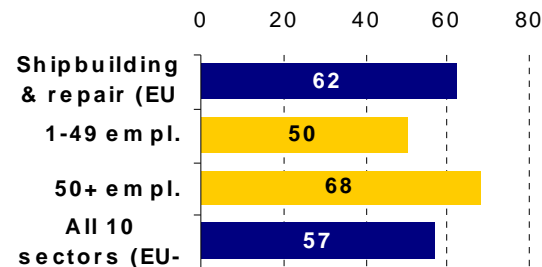
# Drivers of e-business



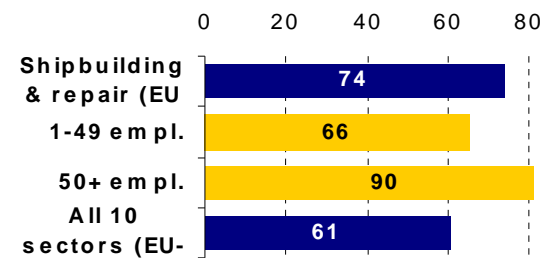
Source: *e-Business W@tch* (Survey 2006)

# Business impact

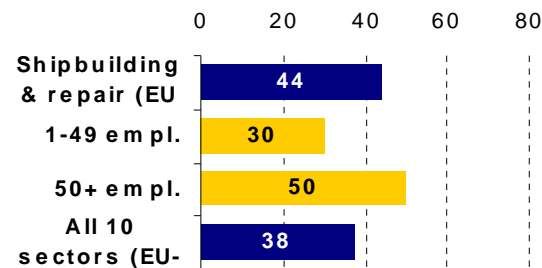
Positive influence of ICT on business process efficiency



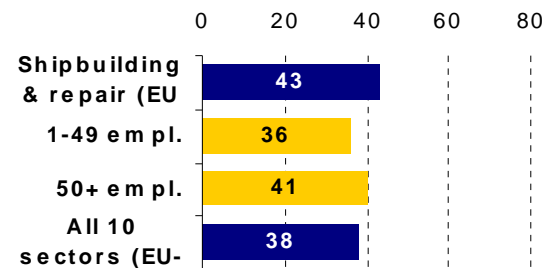
Positive influence of ICT on internal work processes



Positive influence of ICT on product/service quality



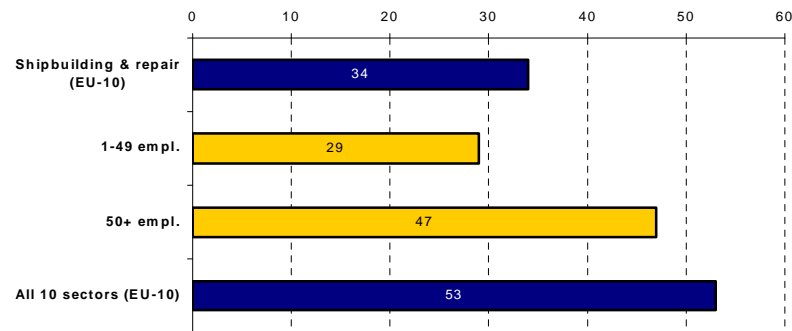
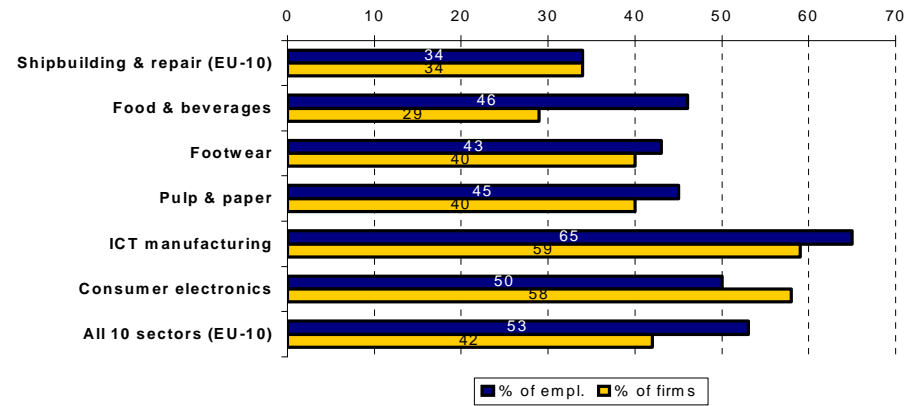
Positive influence of ICT on procurement costs



■ % of empl.    ■ % of firms

Source: e-Business W@tch (Survey 2006)

# Impact on competition



Source: *e-Business W@tch* (Survey 2006)

# Conclusions

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- **ICT and e-business are adopted in the shipbuilding and repair industry.**
- **Positive influences on process efficiency and internal work processes**
- **ICT has an impact on competition in the industry and getting a competitive advantage is the main driver of e-business adoption.**
- **There are interoperability problems and security issues which hamper the e-business adoption in the industry.**