



# **Defining and measuring e-commerce**

*Issues for discussion*

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# A wide range of definitions

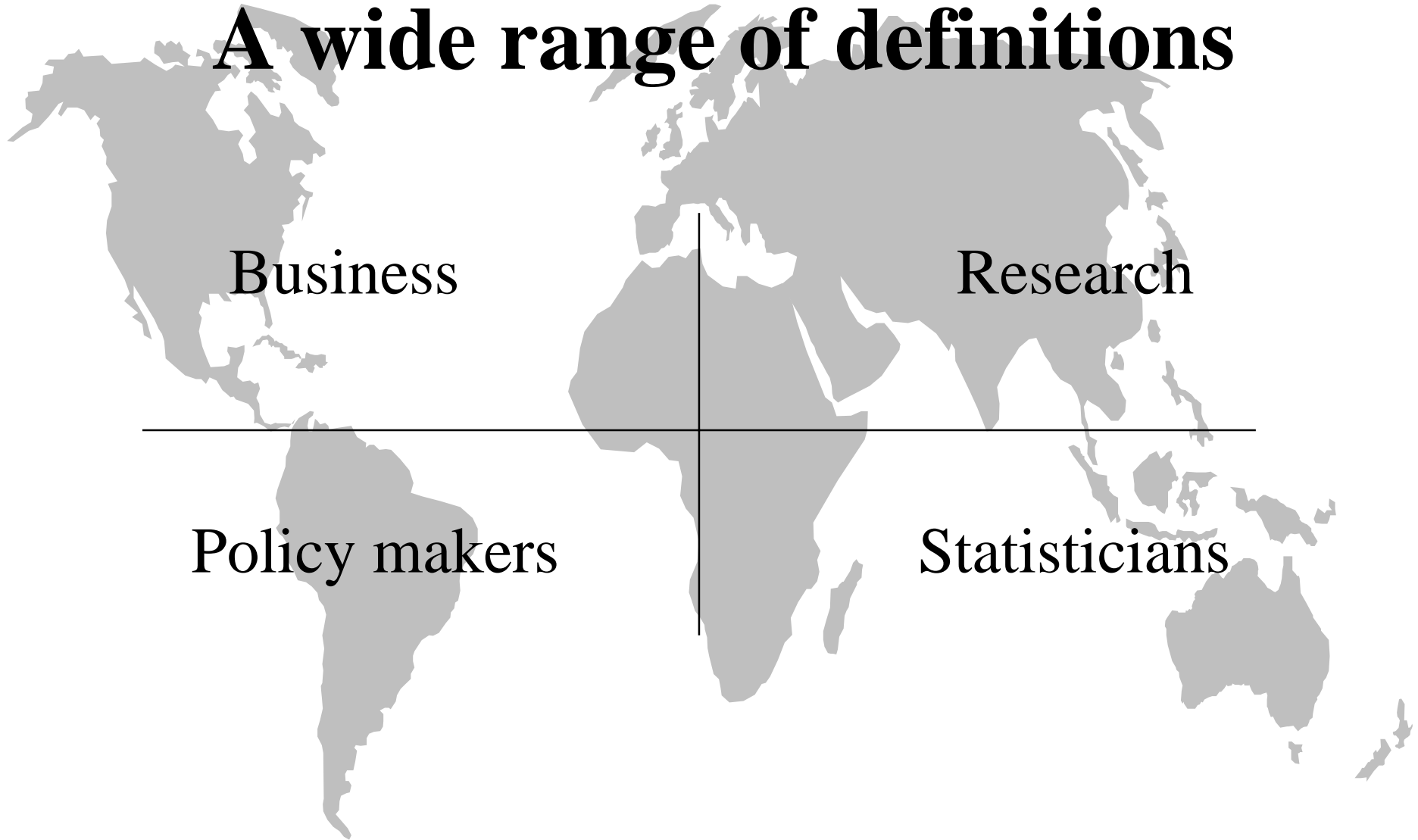
Business

Research

Policy makers

Statisticians

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## What does the business say?

broad

“.. business model for prospecting customers, order management, and order fulfillment..” (**General Electric**)

“..conducting transactions over the Internet. This may include the transaction as well as the presale attraction and interaction, and post sale support and services..” (**IBM**)

narrow

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## What does the business say?

e-commerce = business activities (both communications and transactions) conducted electronically (includes not only ordering, invoicing and payment but also marketing, advertising and communications)

200 companies in each country by class size						
	100-249	250-499	500+	Total		
Familiar with the term "e-commerce"?	96	97	100	97	UK	
	78	82	75	79	France	
	72	80	80	77	Germany	
Agree with the statement?						
	about right	87	84	73	83	UK
		84	76	79	80	France
too broad		97	98	100	98	Germany
		12	16	27	16	UK
		19	21	24	15	France
too narrow		2	0	0	1	Germany
		1	0	0	1	UK
		1	0	0	1	France
	1	2	0	1	Germany	

Source: Pan-European e-commerce survey, PFA Research co-sponsored by DTI (UK)

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definition

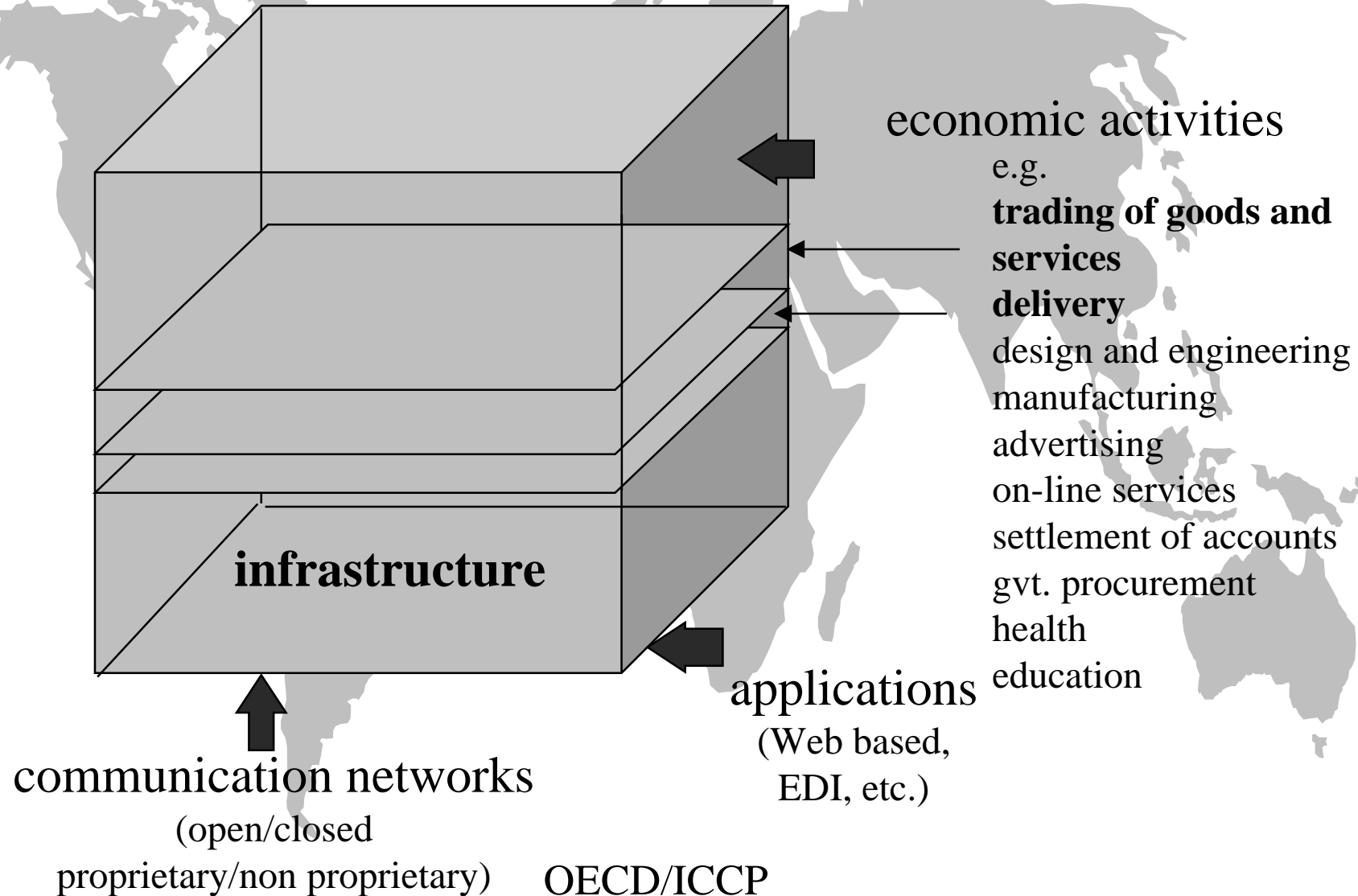
“..all forms of transaction relating to commercial activities, including both organisation and individuals, that are based upon the processing and transmission of digitised data, including text, sound and visual images..”  
**(OECD 1997)**

business occurring over open, non-proprietary networks such as the Internet, included the related infrastructure  
**(OECD, 1998)**

“..the production, distribution, marketing and sale or delivery or delivery of goods and services by electronic means **(WTO, Committee on Trade and Development, November 1998)**.

“..the provision of Internet access services + the electronic delivery of services + distribution over the Internet ..” **(WTO, General Council, July 1998)**

# doing economic activities electronically?



# why measure? policy driven definitions



open/closed proprietary/non proprietary

B-to-B versus B-to-C

potential impact on the economy

international on-line transactions

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# Why focus on Internet commerce?

## Discussion

- ⇒ Internet EDI system versus proprietary EDI system
- ⇒ Do Intranets constitute e-commerce?
- ⇒ Is AOL doing e-commerce?



# can the Internet measure itself?

CISCO	ON-LINE ORDERS
	<b>1997</b>
Number of registered users	80,000
Number of hits per day	\$3.5 M
Estimated annualised savings	\$270 M
Percentage of total sales derived from online ordering in 1997	40 %
Percentage of total sales expected to come from online ordering in 1998	60 %
Percentage of online orders from US accounts	40%
Percentage of online orders from non-US accounts	60%
Average order size	\$25,000
Number of on-line orders per day	500 to 600

**Discussion**

**measuring I-transactions**



**E-commerce sales too small to be measured?**

**What parts of the transaction to be included?**

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## How can we compare across countries?

Q: what percentage of your sourcing or purchase orders are processed by on-line systems such as EDI, CALS, WWW, and other e-commerce applications?

A: in Japan companies have difficulties answering this question as a percent of money, but could provide the answer as a percent of companies with whom they have transactions.

# What can we actually measure?

## Learning from official surveys

### (1) measuring e-commerce usage

(a) general purpose surveys (e.g. ABS)

(b) technology diffusion surveys (e.g. Statistics Canada, Nordic statistical offices)

### (2) measuring e-commerce supply

surveys of Internet or on-line services providers

### (3) ad hoc e-commerce surveys

(a) broad coverage (e.g. DIST/Australia, DTI/UK)

(b) specific coverage (e.g. MPT/Japan survey of BtoB e-commerce)

### (4) measuring Internet-based retail sales (US)

### (5) measuring on-line transactions (Australia)

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Workshop on

**“Defining and Measuring Electronic  
Commerce”**

- **Session I: can the Internet measure itself?**
- **Session II: why should we care about measuring?**
- **Session III: what can be measured and how?**
- **Session IV: can we develop a set of “common and measurable” definitions ?**