# W3: Hi-tech services Cloud Computing and the Regulatory Framework

Second Bruges European Business Conference 24 March 2011

LIBERATING THE POWER OF SERVICES

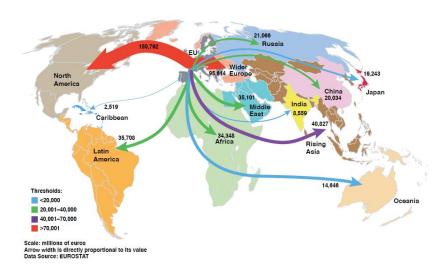
## **Services: Europe's Sleeping Giant**

- Services: all net job growth in EU
- EU#1 services trader 18 EU Member States among Top 40 43% export share
- EU#1 in 8 of 11 categories
- EU 10% export growth/yr; 1% > than global; 1% < than Asia; 4% > than NA
- EU15 4x trade surplus
- EU27 trade surplus with all except Caribbean and North America
- 70%+ of EU economy; only 23% of global exports = room to grow

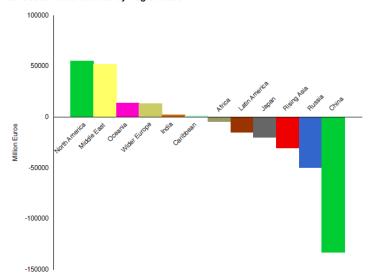
- North America: 1/3 of exports and imports
- Wider Europe: 18% EU exports/17% EU imports
- BRIC s trade: \*12% EU exports/10% EU imports
  - investment: \*services 60% of EU FDI; 33% manufacturing
    - \*top means to enter emerging markets

#### **EU Services Trade with Other World Regions in 2008**

#### EU Exports to the World



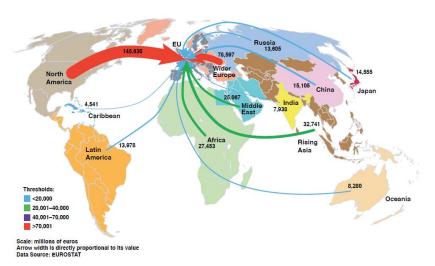
#### EU Goods Trade Balance by Region 2009



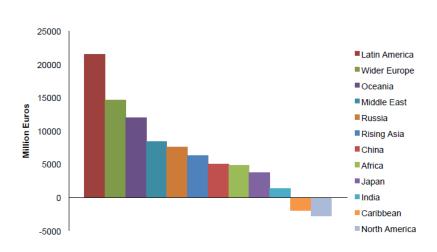
Source: Eurostat; IMF; WTO.

#### EU Services Trade with Other World Regions in 2008

#### EU Imports from the World



#### EU Services Trade Balance by Region, 2009



Source: Eurostat.





## Where is Microsoft?



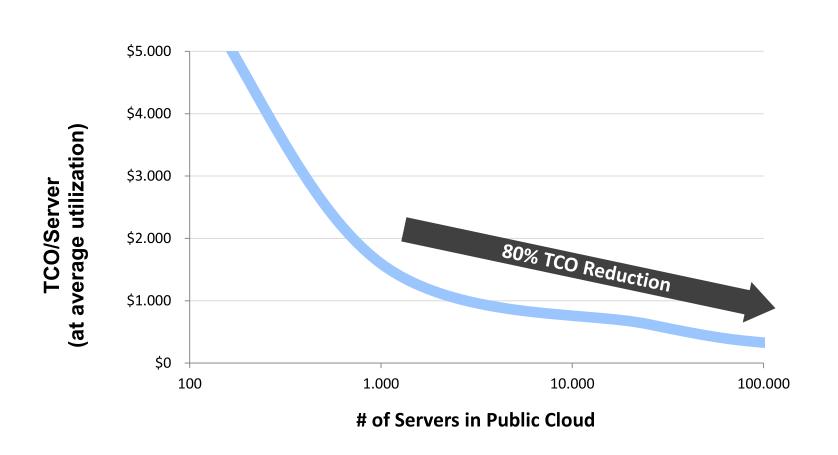


From "a PC in every home" to massive data centers

## Three Characteristics of the Cloud

- 1. Real-Time Access putting the power of technology in the hand of the masses
- 2. Scale removing the barriers technology infrastructure previously imposed
- 3. Elasticity reducing time to and cost of task completion

### **OVERALL ECONOMIES OF SCALE**



## Cloud Computing without borders?

- Scale requires big data flows and efficient crossborder transactions
- The need for harmonized regulations
- A Digital Single Market in EU and globally

# Cloud Computing Challenges

- Broadband infrastructure
- Data sovereignty, jurisdiction, applicable law
- Security (identity, access control, physical security)
- Data protection and privacy
- Data retention
- Interoperability and lock-in