

E-commerce and Development

Key Trends and Issues

Torbjörn Fredriksson

Chief, ICT Analysis Section

UNCTAD, Division on Technology and Logistics

(torbjorn.fredriksson@unctad.org)

Workshop on E-Commerce, Development and SMEs

8-9 April 2013

WTO, Geneva, Switzerland



E-business vs. e-commerce



□ **E-business:** the use of ICT to:

- ✓ facilitate business processes e.g. by
 - communicating with governments, suppliers and clients
 - purchasing or selling goods and services on line (**e-commerce**)
- ✓ automate business processes
- ✓ manage resources and
- ✓ implement business policies (in marketing, HR, finance, etc.)

□ Working definition of **e-commerce**

- ✓ OECD: An e-commerce transaction is the sale or purchase of goods or services over computer mediated networks (broad definition) the Internet (narrow definition).
- ✓ Payment and delivery of the good or service can be offline.
- ✓ Orders received/placed by telephone, fax or normal mail are excluded.

The ICT landscape is evolving

- ❑ Number of Internet users growing
- ❑ Improved access to international broadband
- ❑ Mobile revolution
 - ✓ Rapid uptake of Internet-enabled mobile phones (smartphones)
- ❑ Spread of social media
- ❑ Governments eager to provide e-government services allowing for online transactions
- ❑ Cloud computing raises new opportunities and risks

Measuring e-commerce is difficult

- ❑ Little official statistics on e-commerce
- ❑ Core Indicators of the Partnership on Measuring ICT4D
 - ✓ Orders received or placed by enterprises (UNCTAD)
 - ✓ Orders placed by individuals in a household (ITU) over the Internet.
 - Do not measure *value* of transactions
 - Do not capture *domestic vs international dimension*
 - Do not consider *impacts* of e-commerce
- ❑ Private data sources
 - ✓ Varying, opaque methodologies
 - ✓ Limited geographical coverage, focus on developed countries
 - ✓ Expensive to use



Global e-commerce trends – estimates vary

Still well below levels once anticipated

❑ Forrester (for 2013)

- ✓ B2B e-commerce: \$559 billion (*US market only*)
- ✓ B2C e-commerce: \$252 billion (*US market only*)

❑ Interactive Media in Retail Group (for 2013)

- ✓ B2C e-commerce sales: \$1.25 trillion

❑ Goldman Sachs (for 2013)

- ✓ Retail web sales: \$963 billion

❑ eMarketer (for 2013)

- ✓ B2C e-commerce sales: \$1.3 trillion

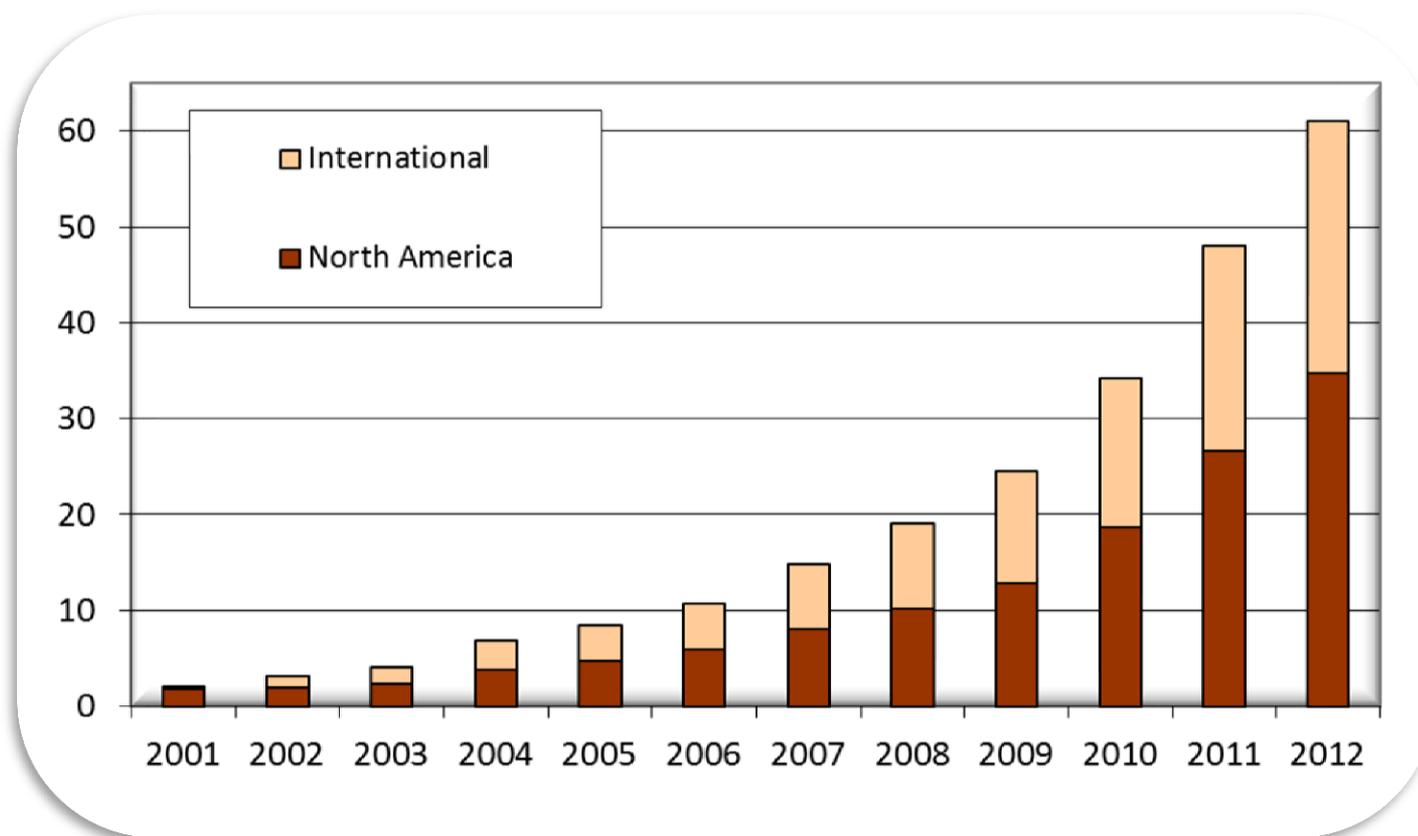
❑ Predictions before the dot.com bubble burst:

- ✓ B2B e-commerce: \$4.5 trillion by 2005 (Goldman Sachs)
- ✓ B2B e-commerce; \$7.3 trillion by 2004 (Gartner)

E-commerce is growing fast

Amazon net sales 2001-2012 (USD billions)

from \$2.5 billion to \$61 billion – ~43% outside North America

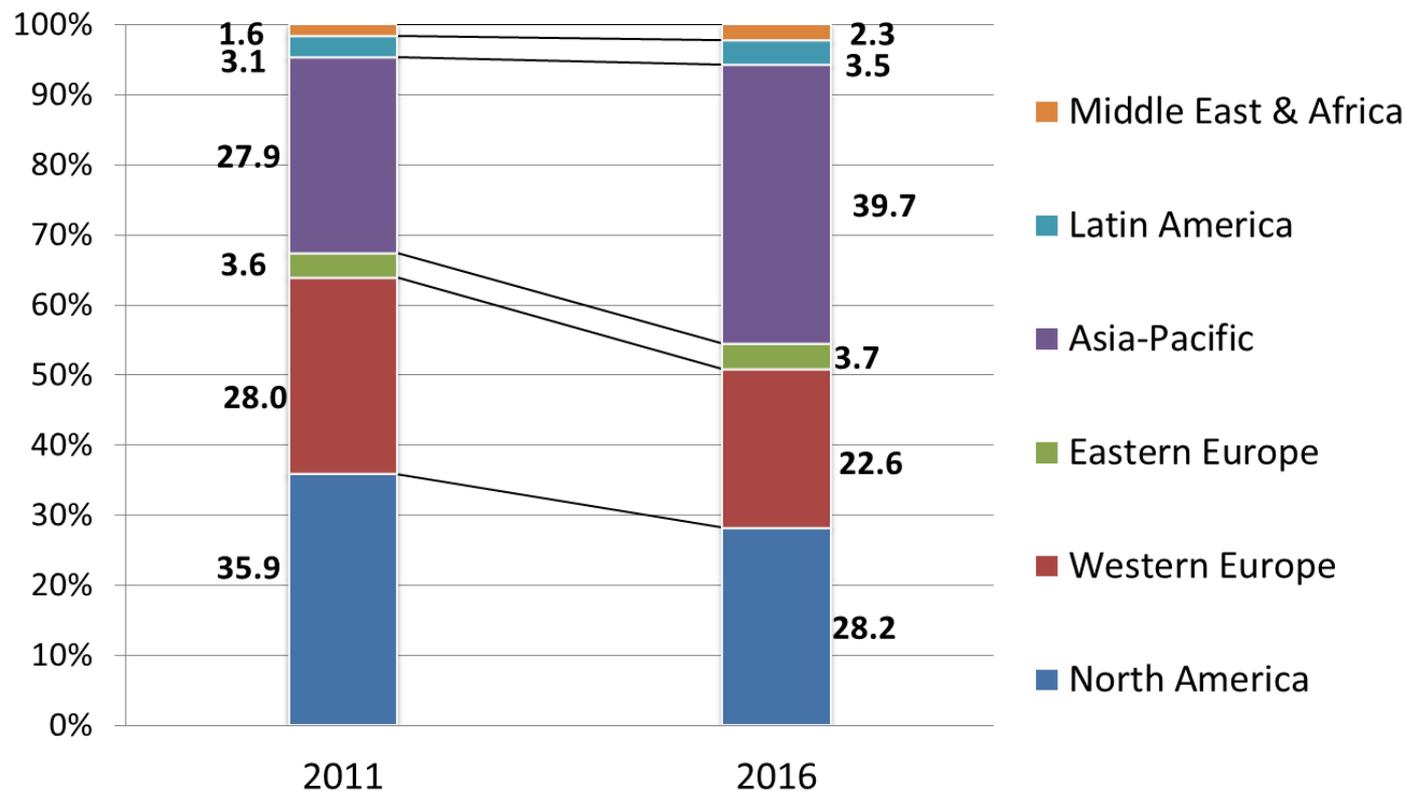


Source: Amazon annual reports

Developed economies dominate the market

...but emerging economies are expected to catch up

B2C E-commerce Sales, by region, 2011 and 2016



Sources: eMarketer

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

Other signs of rapid growth in the South

□ China

- ✓ E-commerce has grown by 120% a year since 2003
- ✓ Set to surpass US in 2013 as largest e-commerce market
- ✓ Alibaba now employs 24,000 workers

□ China, India and Indonesia expected to grow fastest in 2013

□ Latin America: from \$1.6 billion to \$43 billion in past decade

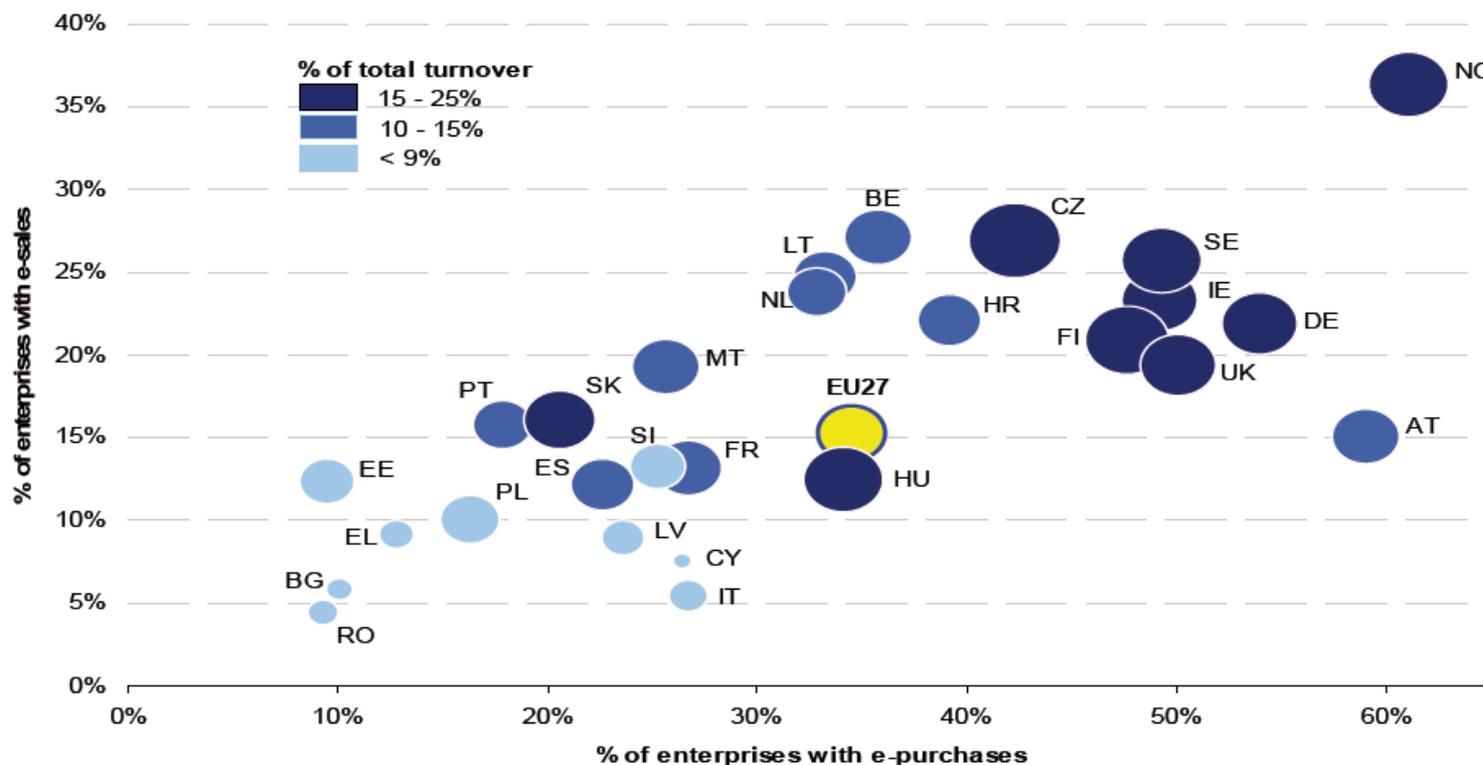
- ✓ Brazil accounts for largest market share (59%)

□ Middle East and Africa: its share in global e-commerce expected to rise from 1.6% to 3.5% by 2016

Lessons from European business surveys (1)

Great variation in e-commerce use

Figure 3: E-commerce sales and purchases, turnover from e-commerce, 2010 (% of enterprises, % of total turnover)

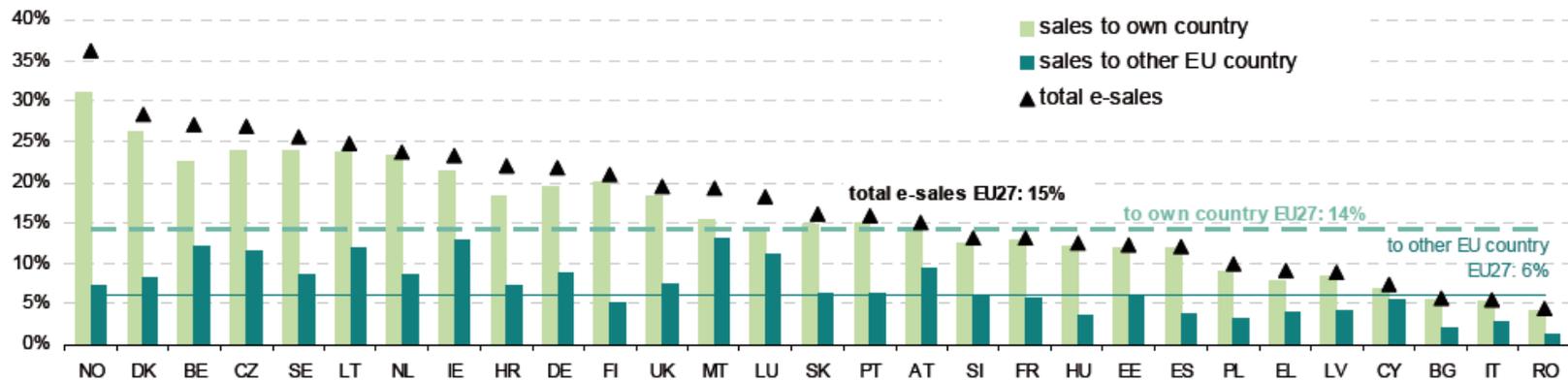


Source: Eurostat (online data codes : [isoc_bde15dec](#), [isoc_ec_evaln2](#))

Lessons from European business surveys (2)

- Larger enterprises more active in e-commerce
 - ✓ 19% of large companies' turnover from e-commerce
 - ✓ 4% of small companies' turnover from e-commerce
- Cross-border e-commerce sales not fully exploited
 - ✓ 14% of enterprises sell online to domestic market
 - ✓ 6% of enterprises export online to other EU market

Figure 8: E-commerce sales to own country and other EU countries, 2010 (% of enterprises)



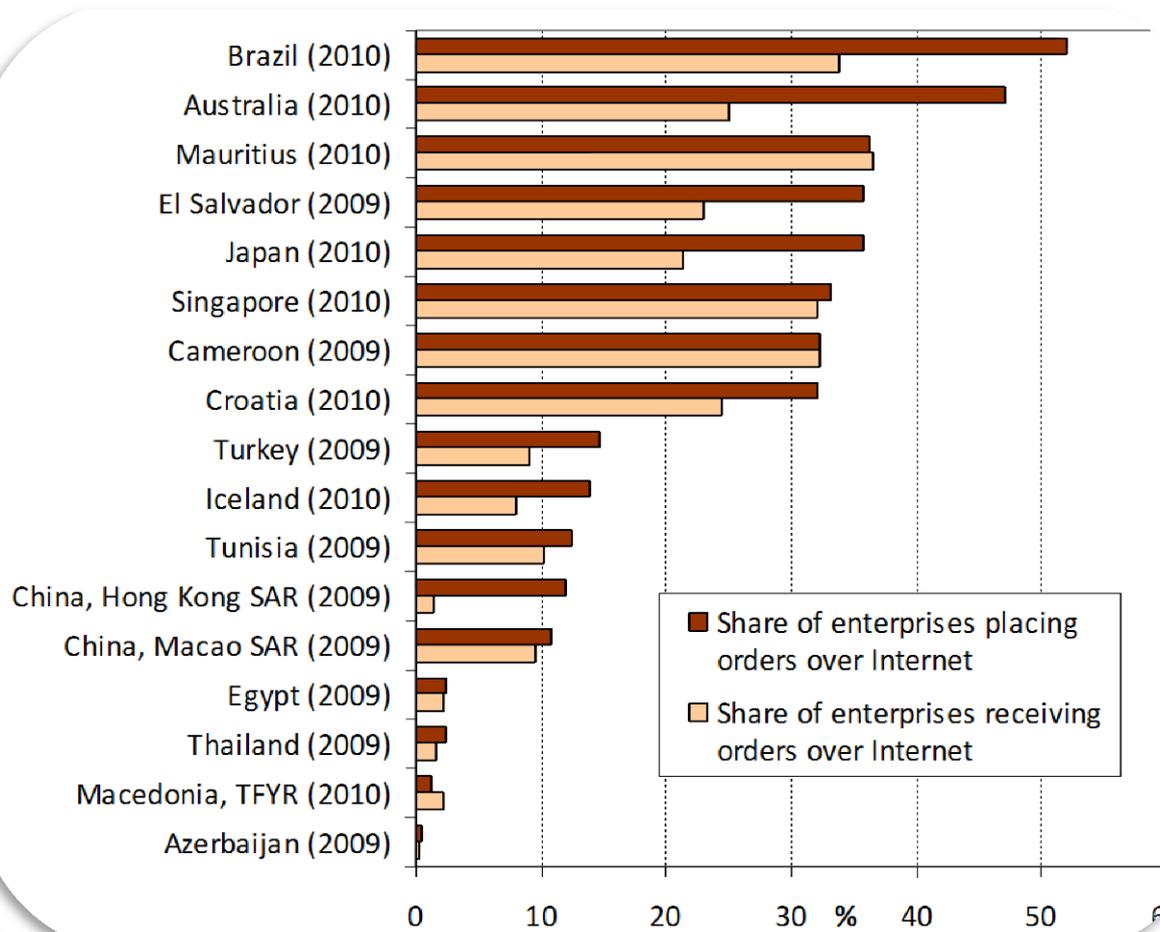
Source: Eurostat

Lessons from the Republic of Korea

- ❑ 62% of all businesses with 10 or more employees sold or bought online in 2011, up from 50% in 2010
- ❑ Industry variation
 - ✓ ICT sector has highest usage of e-commerce sales
 - ✓ Real estate and construction services use e-commerce sales the least
- ❑ E-commerce usage increases with the size of the business
- ❑ Main benefits from e-commerce sales
 - ✓ Reduced transaction time
 - ✓ Reduced transaction costs
 - ✓ Ability to reach new customers

What do UNCTAD data show?

Share of enterprises using e-commerce varies considerably



- More than half of all enterprises in Brazil placed on-line orders
- More than 95% of enterprises in Egypt, Thailand and Azerbaijan did not...

Source: UNCTAD
Note: methodology varies

UNCTAD's work on measuring e-commerce

- ❑ Awareness-raising of e-commerce data issues for ICT policies (e.g. @ ITU's WTIM 2012 in Bangkok)
- ❑ Advisory services on e-commerce statistics (e.g. ESCWA)
- ❑ Capacity building:
 - ✓ UNCTAD *Manual for the Production of Statistics on the Information Economy* (periodically revised)
 - ✓ Statistical training on core indicators and on e-commerce, through UNCTAD course and in collaboration with members of the Partnership on Measuring ICT for Development and countries (e.g. China, Latin America)
 - Draw on experience of EUROSTAT and Republic of Korea



Features of online consumers in LAC

- ❑ Most online consumers research products online before buying
- ❑ 90% use their smartphones for e-commerce
- ❑ Most consumers use credit cards to buy online
- ❑ Other forms of payment:
 - ✓ electronic funds transfer
 - ✓ debit card
 - ✓ cash on delivery
- ❑ Clothes and electronics top products bought online
- ❑ E-commerce made more on international than local sites
- ❑ Concerns: Shipping and delivery, costs, fraud, data protection

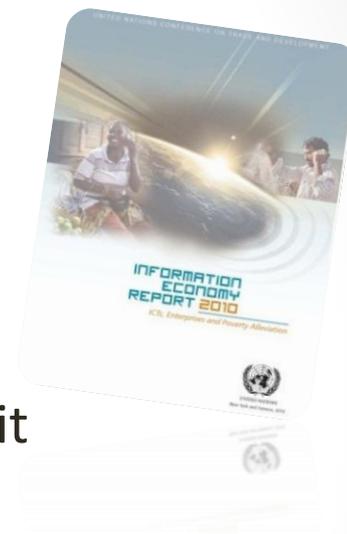
Source: comStore Study (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela)

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

Few micro-enterprises in low-income economies use e-commerce

- ❑ Micro/small businesses key for poverty reduction
- ❑ Limited impact of e-commerce due to:
 - ✓ Few micro-enterprises use computers or the Internet
 - ✓ Limited trust in on-line transactions
 - ✓ Lack of awareness of possibilities/limited digital literacy
- ❑ Growth-oriented enterprises more likely to benefit
- ❑ B2B important for to link up with value chains
 - ✓ E.g. E-Choupal (India) – farm inputs to soya growers
- ❑ B2C opportunity to reach new customers:
 - ✓ E.g. Web-based marketing of handicraft (Botswana, India)
- ❑ Mobile commerce offers opportunities



Opportunities for developing countries

AS PRODUCERS

- Access new markets
 - ✓ Domestic and foreign
- Overcome distance
- Interact with governments
- Fragmentation
 - ✓ Participate in value chains (B2B)
 - ✓ Offshoring of services

AS USERS

- Access to goods and services at lower prices (consumers)
- More competition
- Access to knowledge and technology

+ Link to e-government!



Challenges and issues: a long list

- ❑ Affordable ICT infrastructure (Internet, broadband)
- ❑ Digital literacy among producers *and* users
- ❑ Electronic payment systems
- ❑ E-commerce platforms – local content
- ❑ Branding/recognition
- ❑ Delivery and distribution networks (physical transportation)
- ❑ Tracking, monitoring and taxing transactions
- ❑ Legal framework to build trust
- ❑ Risk of bias/unfair competition
- ❑ Circumvention of trade barriers
 - ✓ Licensing, immigration restrictions, bans



Strategies to achieve e-commerce

A multidimensional challenge

- ❑ Key policy areas:
 - ✓ Infrastructure and access
 - ✓ Human resources
 - ✓ E-payment solutions
 - ✓ Legal issues
- ❑ Tailor national ICT strategies to each country
- ❑ Involve all stakeholders: supportive public intervention with private sector initiative
- ❑ Benchmark against and learn from other countries
- ❑ Use internationally agreed indicators and collect data



Challenges for creating enabling legal environment for e-commerce

- Lack of trust in e-commerce
 - ✓ Brand recognition
 - ✓ E-payment solutions
 - ✓ Delivery, etc
- Limited understanding on legal issues related to e-commerce
- Shortage of skills and trained experts in establishing and implementing e-commerce laws
- Differences among countries (legislation, capacity, resources)
- Existing regional agreements
- Need for global interoperability, use of international models (e.g. UN Convention on E-Contracting)



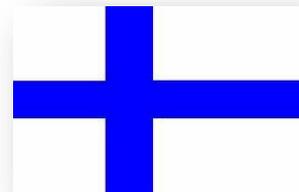
Legal issues related to e-commerce

- Electronic signatures and authentication
 - Electronic contracting
 - Consumer protection
 - Privacy and data protection
 - Computer crime
 - Taxation and custom duties
 - Intellectual property rights
-
- Cross-border e-commerce and regional harmonization
 - ✓ International models : UNCITRAL Models Laws on e-commerce and Convention on e-contracting; EU Computer crime Convention; OECD Consumer Protection Guidelines, etc.
 - ✓ Harmonization of taxation, customs duties, data privacy and security, difficult due to different socioeconomic conditions



UNCTAD's E-commerce and Law Reform Program

- ❑ Launched in 2002 to respond to the needs expressed by policy makers of developing countries at various fora, including UNCTAD conferences and the World Summit on the Information Society (WSIS)
- ❑ Assists countries in Africa, Asia and Latin America in building legal and regulatory frameworks for e-commerce
- ❑ UNCTAD works in close collaboration with partners (UNCITRAL, UN regional commissions, OECD, etc)
- ❑ Financially supported by Finland



UNCTAD's E-commerce and Law Reform Program

Objectives and activities

- Overall objective: to support developing countries' efforts towards the preparation of an enabling legal and regulatory environment for electronic commerce by:
 - ✓ *Raising awareness and building capacity* of policy and law makers, including parliamentarians
 - ✓ *Training course* on Legal Aspects of E-commerce
 - ✓ *Reviews of national laws and regional agreements*
 - ✓ *Technical support* in the preparation of *regional harmonized legal frameworks* (e.g. East African Community and the ASEAN)

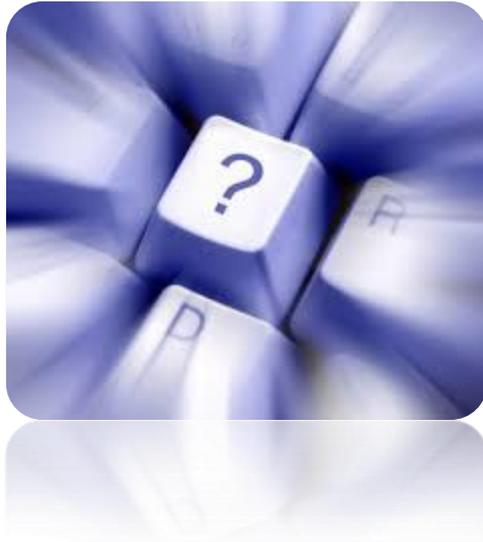


UNCTAD's E-commerce and Law Reform Program

Some achievements to date

- ❑ Comparative studies on regional cyberlaw harmonization
 - ✓ Latin America
 - ✓ Central America
 - ✓ East African Community (EAC)
 - ✓ Association of South-east Asian Nations (ASEAN) (in 2013)
- ❑ Developed distance learning course
 - ✓ English, French and Spanish
- ❑ Development of two cyberlaw frameworks in the EAC
- ❑ Helped with the drafting of laws
 - ✓ Cambodia, Lao PDR





Thank you for your attention!

