



National E-commerce Strategies *for Economic Growth and Development*

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Overview

- ❑ Introduction
- ❑ Global trends in E-commerce
- ❑ Economic growth implications, drivers and challenges
- ❑ Opportunities and risks
- ❑ ICTPR E-commerce Assessment and Enabler Framework:
Economic Dimensions
- ❑ ICTPR Technical Assistance



E-commerce: What is it?

- Online shopping through internet ie. Migros, eBay website
- Setting up virtual shop on e-marketplace ie. Alibaba, Amazon
- Order stamps in Switzerland by mobile phone
- Smartphone app to buy and download music and movies
- Buying food from a vending machine where you pay with a smart card or a cell phone. Popular in Japan.
- Orders between large companies for wholesale orders or supplies or inputs to their products.



What is E-commerce and E-trade?

- OECD definition of an e-commerce transaction:
 - “...the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders”.
 - Payment and delivery do not have to be conducted online.
- WTO definition of e-commerce for its work programme
 - “the production, distribution, marketing, sale or delivery of goods and services by electronic means”.

Different types of e-commerce: classified by who is transacting

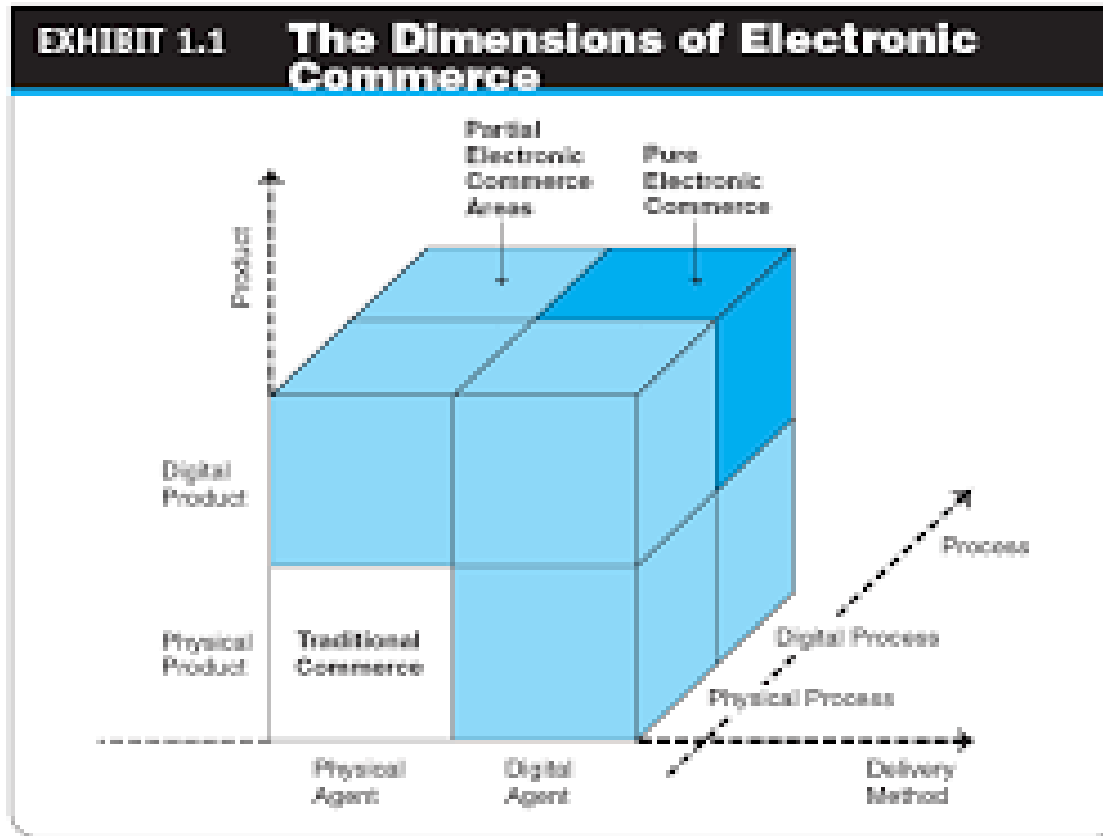
- Business-to-business (B2B)
 - Electronic/online sales between enterprises, including linked to outsourcing and offshoring.
 - Online presence needed for SMEs to participate in B2B value chains.
- Business-to-consumer (B2C)
 - Involves sales by "pure play" e-commerce enterprises and traditional bricks-and-mortar firms adding online sales channels.
 - Many ways to reach consumers: social networks, crowdsourcing, e-commerce websites, mobile applications.
- Consumer-to-consumer (C2C): e.g. eBay and Taobao
- Government-to-business (G2B): e.g. e-procurement



B2B E-commerce

- In developed markets, much B2B e-commerce in use across industries through electronic data interchange (EDI) – automated purchase order, invoicing and other info exchange between businesses in standard electronic formats.
- In developing markets, less B2B e-commerce. Orders and transactions between companies primarily done through visits by distributors/sales reps and paper-based purchase orders.
- In past, major obstacle to B2B e-commerce was high cost of setting up EDI. Today, internet makes EDI and equivalent applications for B2B e-commerce more affordable.

Models of B2C E-commerce: pure play e-commerce vs. partial e-commerce





Global Trends in E-commerce



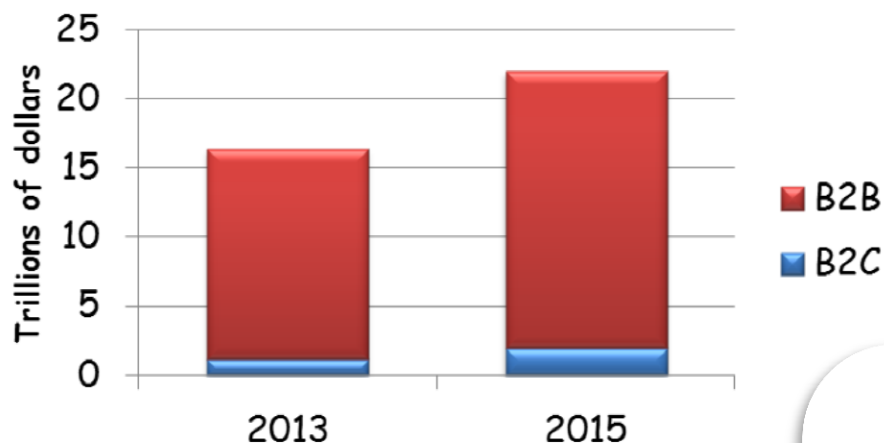
E-Commerce is Growing Fast

- B2B: \$20 trillion in 2015; B2C: \$2 trillion in 2015
- Online shoppers in the top ten e-commerce markets rose from 600 million to 850 million between 2013 and 2015
- As consumers and enterprises increasingly turn to the Internet to buy and procure...
- ...companies without Internet presence become disadvantaged ...
- ...and digitalization has only begun
 - Internet-enabled devices to rise from 6-8bn to 25-50bn by 2020

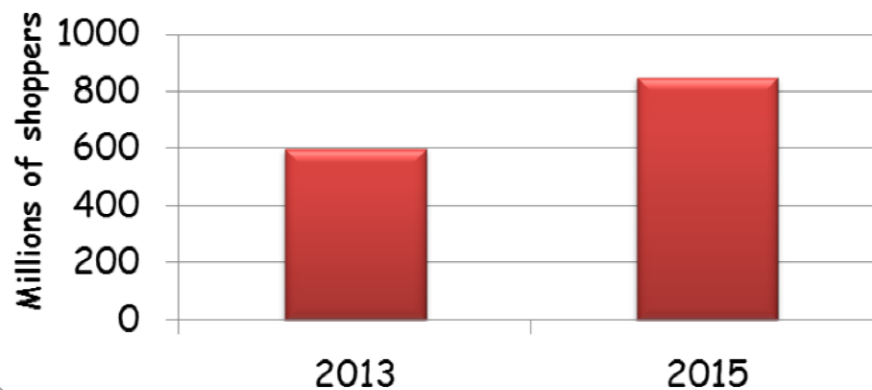


E-Commerce is Growing Fast

Global E-Commerce



Online shoppers in Top 10 B2C Markets



Source: UNCTAD and eMarketer.

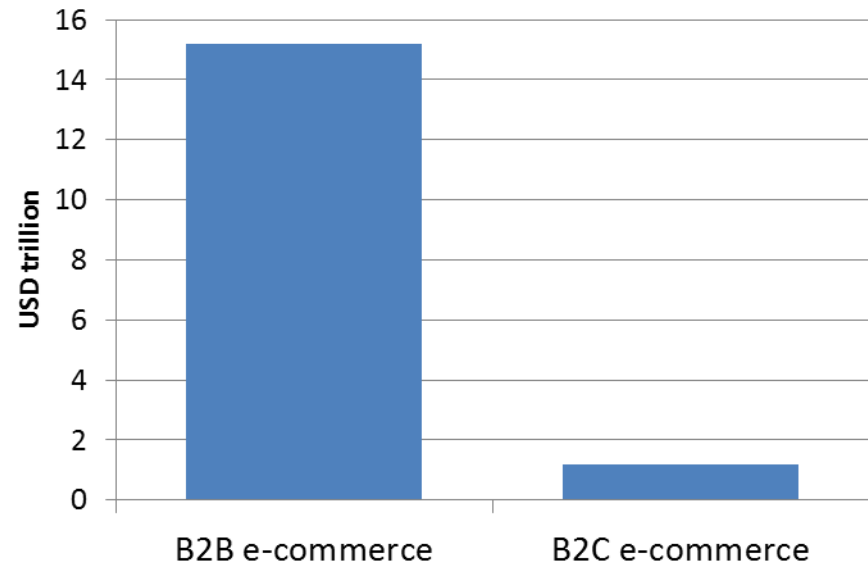


B2B revenues by far the largest

Share of B2B in e-commerce revenue:

- US - 89%
- Canada - 64%
- EU - 87%
- Republic of Korea - 91%
- Russia - 57%

Global B2B and B2C global revenues, 2012-13



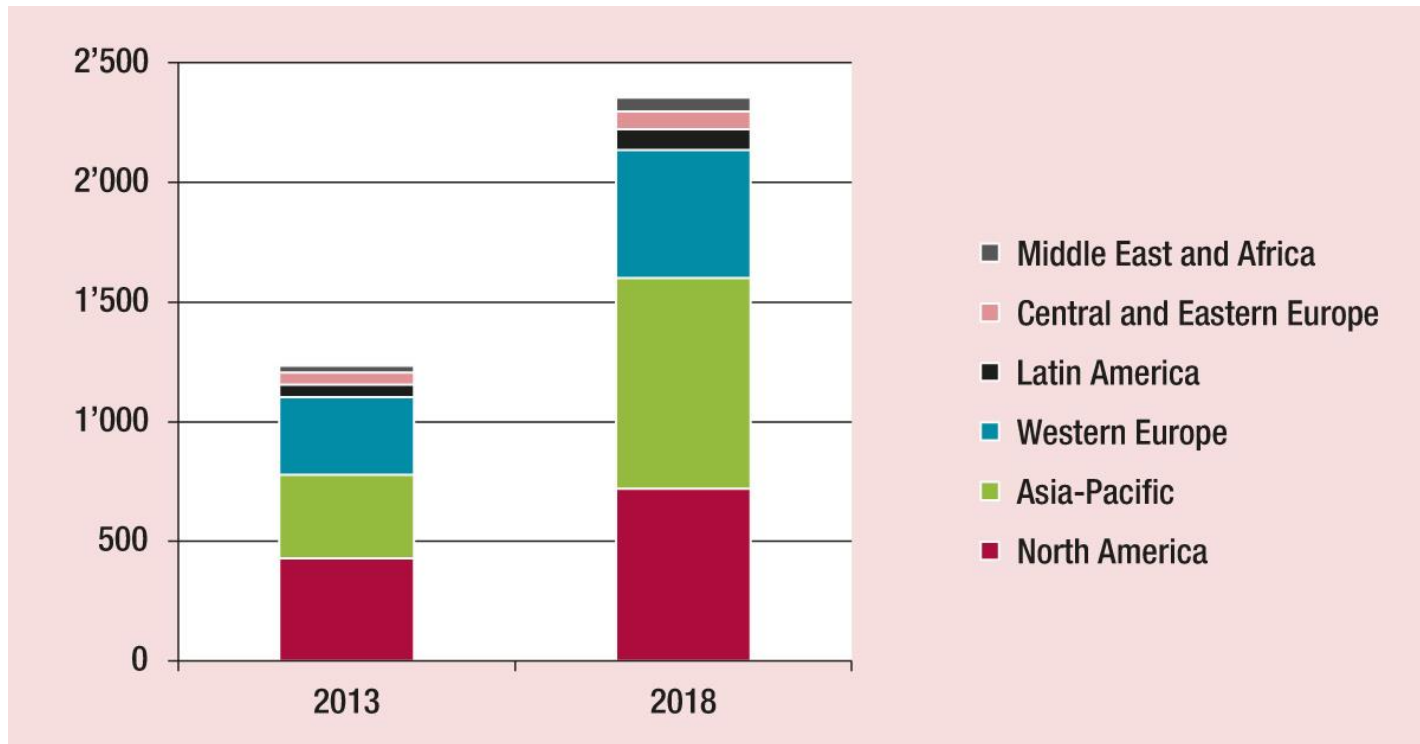
Source: UNCTAD estimates based on national sources, eMarketer, and others.



B2C e-commerce growing fast

especially in developing countries

B2C e-commerce sales, by region, 2013 and 2018 (\$ billions)

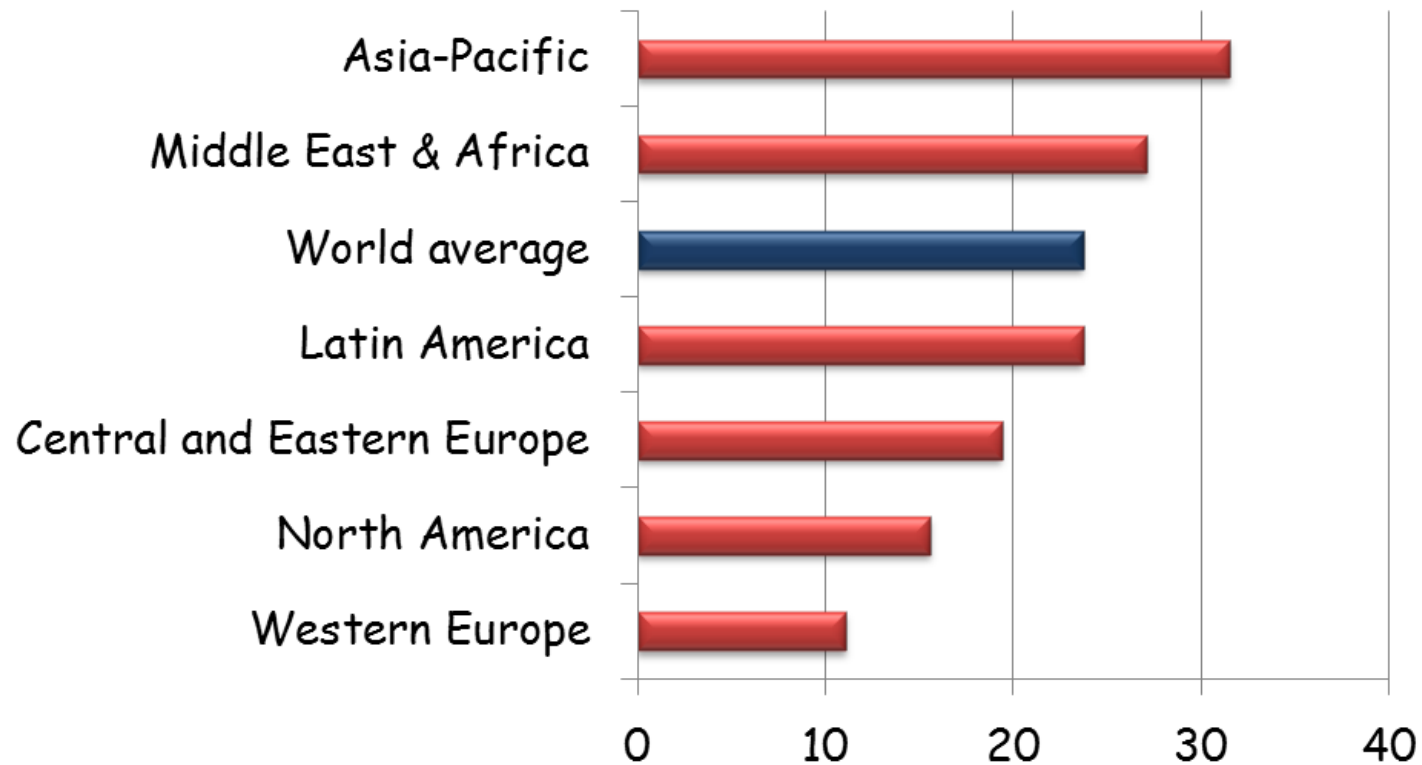


Source: eMarketer, July 2014.



Emerging markets growing fast

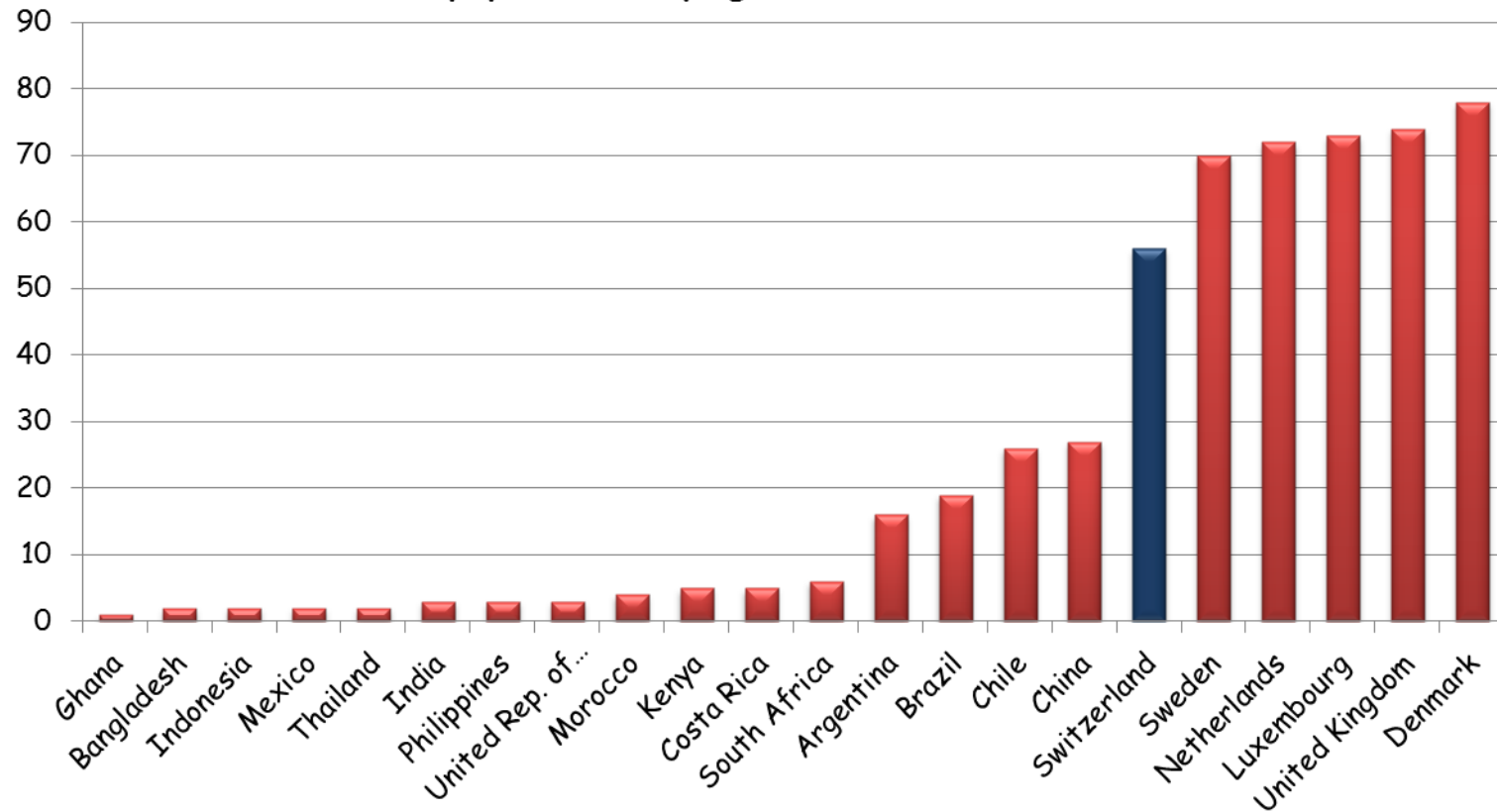
Retail E-Commerce Growth 2016 (%)





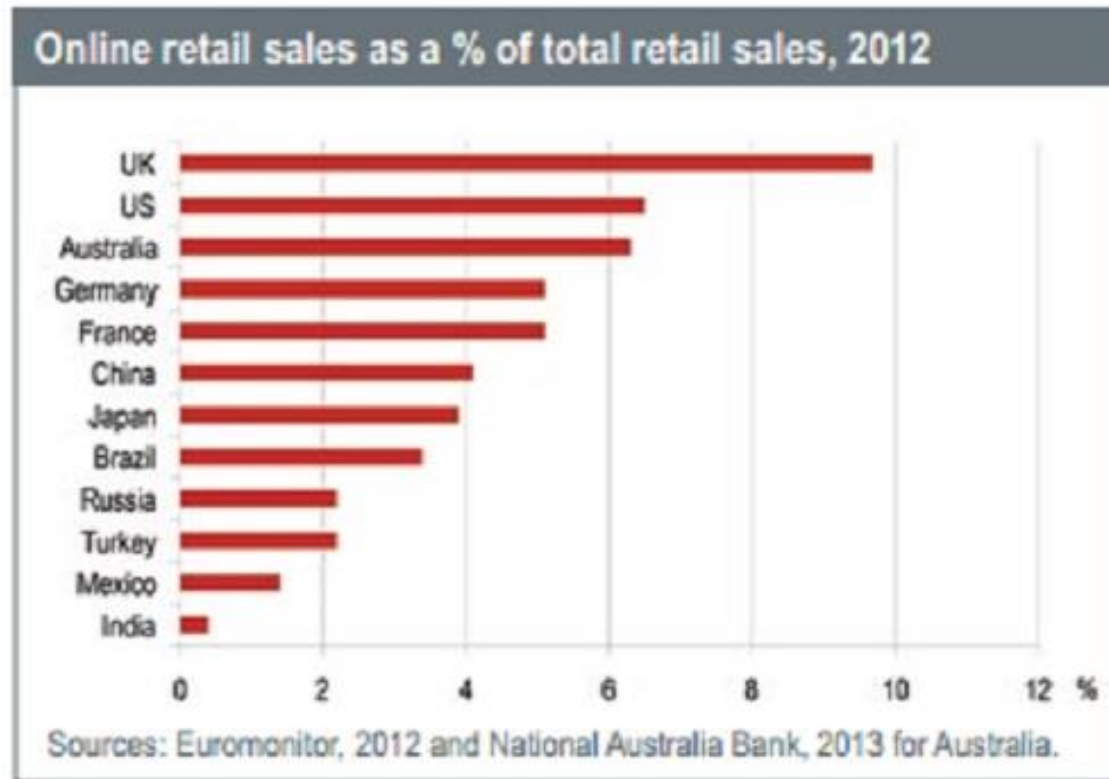
Huge divides - Huge potential

Share (%) of population buying online, 2014, selected countries



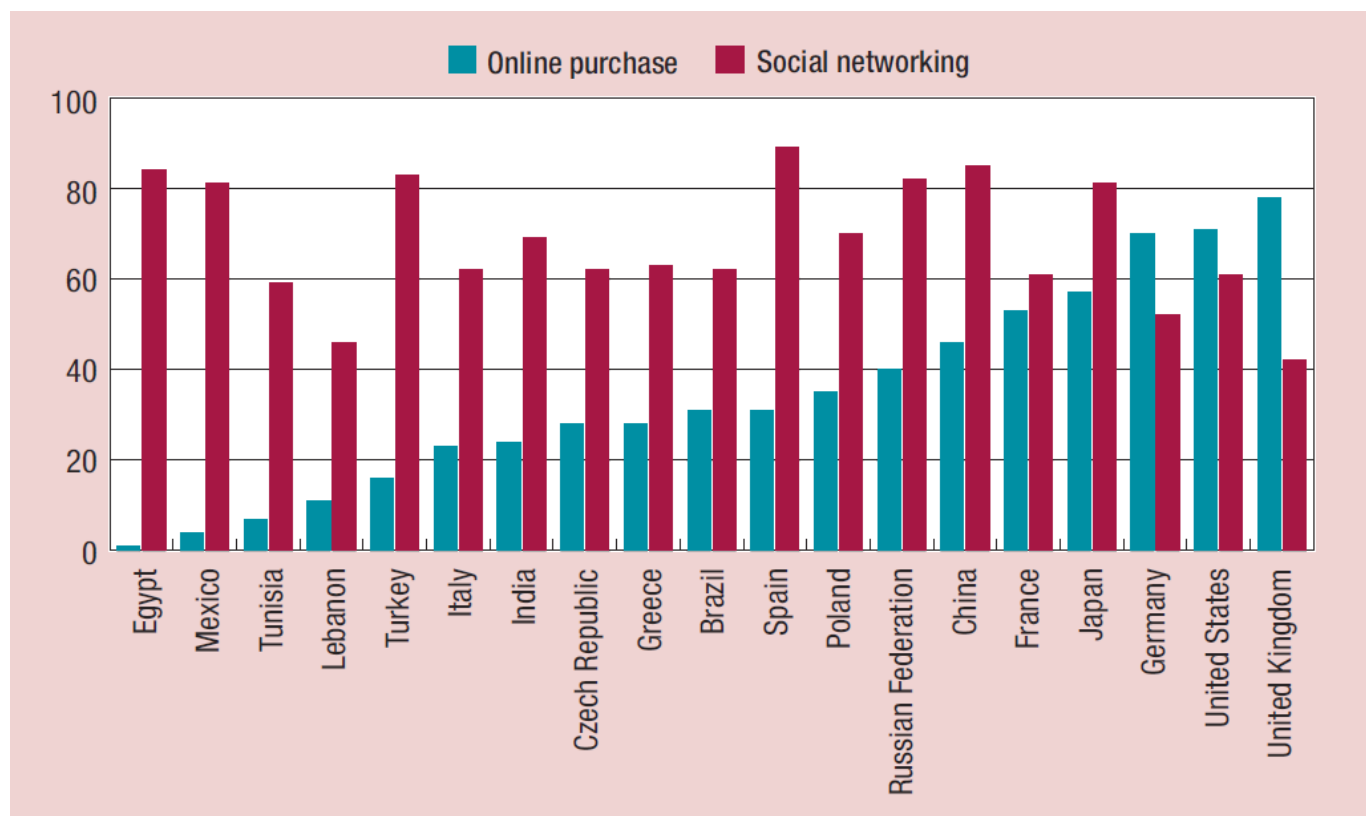


Online retail sales as % of total retail sales, 2012



It takes more than Internet access...

Share of Internet users involved in buying online and social networking, selected countries, 2012-13



Source: UNCTAD, based on national sources, Pew and Eurostat



Domestic vs Cross-border E-commerce

- Domestic transactions dominate in developed countries
 - Canada: 80% domestic; 15% to US; 5% to rest of the world
 - Japan: 82% domestic
 - Republic of Korea: 75% domestic
- Different picture in some developing countries
 - In India and Singapore: >50% are cross-border
 - In Colombia, Paraguay and Venezuela, cross-border trade accounts for the bulk of e-commerce



E-commerce for economic growth and development



Implications of E-commerce

- More competition
- Higher productivity
- Job creation
- Access global value chains
- Access to markets/exports
- Access to suppliers/imports
- Greater consumer choice
- Costs of adaptation
- Risk of crowding out
- Risk of losing tax revenue
- Risk of job losses
- Risk of fraud
- Risk of widening divides



E-commerce role: driving competitive business, economic growth and jobs

- Enabling micro-enterprises and SMEs to engage in e-commerce
- Enhancing the productivity of the business sector
- Boosting export revenue, including by strengthening the IT sector or other selected industries for exports
- Facilitating innovation in the ICT sector
- Building rural capacity and the rural customer base for e-commerce



Economic Opportunities and Potential Growth Areas

- Grow GDP and productivity gains to overall economy
- Create jobs
- Generate revenue (taxes, import duties, customs tariffs, e-procurement savings)
- Growth of businesses (small and large)
- Growth in retail and affiliated markets
- Growth in supporting services sectors
- Growth of industries



Productivity gains

- E-commerce expands access to national and international markets.
- With minimal capacity, a company can more easily locate new customers, suppliers, and business partners
 - In 1997, Boeing Corporation reported a savings of 20% after a request for a proposal to manufacture a subsystem was posted on the Internet. A small vendor in Hungary answered the request and won the electronic bid. Not only was the sub-system cheaper, it was delivered more quickly.
- E-commerce decreases the cost of creating, processing, distributing, storing, and retrieving paper-based information.
 - By introducing an electronic procurement system, companies can cut the purchasing administrative costs by as much as 85%.

Many barriers to e-commerce uptake

- Inadequate ICT infrastructure and power supply
- Limited Internet and e-commerce use and skills by SMEs and consumers
- Limited use of electronic payments, reliance on cash and under-developed financial systems
- Inadequate trade logistics and facilitation
- Lack of purchasing power
- Weak legal and regulatory frameworks
- Cultural preferences for face-to-face interaction
- Poor ICT literacy
- Lack of awareness and knowledge of e-commerce benefits



Risks

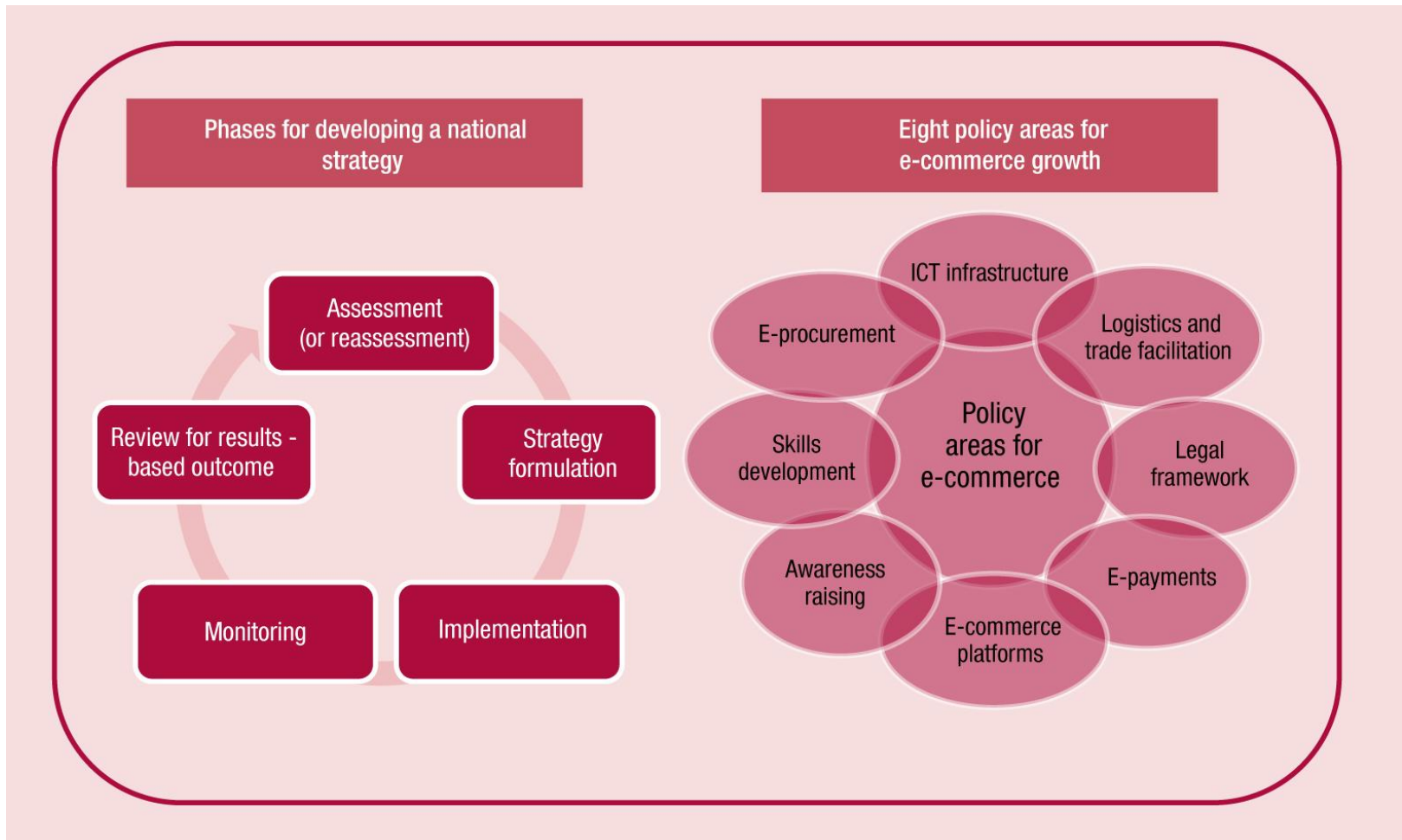
- Increased competition for traditional bricks and mortar shops
ie. Netflix led to demise of the video rental industry.
- Increased competition from foreign sellers
- Players who fail to modernize and adopt technologies may become marginalized
- Issue of national versus international e-commerce companies and how to maximize both for economic growth.



ICTPR E-commerce Enabler and Assessment Framework: Economic Dimensions



Facilitating e-commerce





ICT Sector

- ICT sector crucial for the development of e-commerce.
- ICT infrastructure, telecommunications services, the availability of handhelds and ICT devices pre-requisite to ensuring ICT usage among the population.
- Enabling consumers to access e-commerce websites, businesses to market their products online, and to make and receive electronic payments over the Internet.
- Mobile and fixed broadband, high speed telecommunications services are essential for downloading and streaming digital content bought online.



ICT Sector: Example of economic growth dimension

- E-commerce can spur employment in the ICT Sector. New demand for IT personnel, engineers and other related employees involved in e-commerce systems and organisations and its website design.
- IT workers needed to set up, maintain, and oversee the additional hardware and software systems that e-commerce requires. This includes computers and information system managers, computer system analysts, computer engineers, computer support specialists, database administrators, computer scientists and computer programmers.
- E-commerce can create jobs for artist and commercial artists, designers, as well as for writers and editors to create website content.
- By early 2000s, Silicon Valley had about 8 000 SMEs and firms specialising in IT and employing about 500,000 high tech jobs.



Logistics and trade facilitation

- Smooth, rapid and reliable logistics are crucial for domestic and international e-commerce to thrive and require adequate infrastructure - by road, rail, air, sea.
- Cross-border e-commerce raise particular issues. Common barriers include bottlenecks in land ports, customs-related problems and complex export procedures and document requirements.
- Such problems jeopardize the viability of e-commerce, hampering the ability of firms to deliver on time to clients and businesses.

Logistics sector and trade facilitation: Growth opportunities

- E-commerce can trigger a growth in the retail logistics industry.
- In China, e-commerce boom reported to be generating growth in logistics sector (small parcel delivery) of about 30 percent a year.
- In Russia, large retailer e-fulfillment centers have been developed to service Moscow and St Petersburg, including a facility for Enter, a Russian multi-channel retailer, in the Moscow region



Electronic payments

- Due to the distance and third party factors involved in e-commerce, reliable payment methods must be ensured for e-commerce transactions to take place.
- Cash-based, underdeveloped electronic payment systems impede e-commerce growth.
- Challenges caused by COD: constraints on e-commerce businesses, logistical challenges, high profit losses jeopardizing business survival and sustainability.
- Electronic payments important for international e-commerce.



Electronic payments: Helping to galvanize e-commerce

- Important factor in success of Alibaba's Taobao, national C2C platform, similar to eBay, is the existence of Alipay, an online payment escrow service, which accounts for roughly half of all online payment transactions within China. Important factor in the uptake of Taobao among small businesses across China when launched in 2003.
- Another example is gains in converting benefit payments to electronic payments. For the US federal government in 1990s, the cost of issuing a paper check was 43 cent. In contrast, the cost of electronic payment was 2 cent. Tremendous savings from converting to electronic payments.



Legal and regulatory environment

- Proper laws and regulations crucial for creating market conditions where e-commerce can flourish
- Optimal market conditions encourage consumer consumption, healthy competition among businesses, a thriving services sector, ease of enterprise start-up, management and compliance, etc
- Key areas of laws and regulations include telecommunications, electronic contracts, intellectual property, consumer protection, data protection, privacy, information security and cybercrime, and taxation



Legal and regulatory environment: finding the right balance

Poor legal and regulatory environment can impede e-commerce. Minimalist touch appears most effective, over-regulation can block e-commerce growth.

Consumer Protection

In world's largest e-commerce markets, e-commerce grew largely without consumer protection measures in place. But later become major priority ie. China.

Case of Louisiana consumer protection "auctioneer" law vs eBay. Over-regulation could have discouraged sellers from joining eBay and killed the e-commerce company.



Electronic Platforms

- E-marketplaces - B2C, B2B, C2C - can serve as a driver for e-commerce, catalyzing e-commerce among small businesses.
- Marketplaces and portals may include links to payment services and logistics services which can be used by the supported online merchants.
- Ready-made online trading environment enables smaller businesses to start trading online with the minimum of expense, effort and time and expand their market reach.



Electronic platforms: enabling e-commerce and empowering businesses

- Electronic platforms can launch an industry
- B2B - initial driver of e-commerce in USA in 1990s
- B2C - Amazon, originally an online store for books launched in 1993, credited with starting the B2C e-commerce industry
- B2B e-marketplace - Alibaba
- C2C - eBay, Alibaba Taobao



Skills development

- Skills development, investment in human resource capacity and building talent at many levels, across sectors and among all segments of the population are crucial to grow e-commerce in a country.
- Digital skills are important for consumers to access e-commerce platforms whether through PCs, laptops or mobile phones.
- Businesses, including MSEs, must develop their digital capacity to engage in e-commerce and make use of the e-commerce opportunities available to them.



Skills development: cost benefit analysis

- Digital skills for governments, consumers and businesses.
- In UK, people with digital skills see 3-10% higher earnings. By 2025, estimated benefits of net earnings of £358 million per year. In addition, Government expected to see £243 million per year of higher income tax and national insurance receipts*
- In retail sector, shopping online saves individuals on average 13% compared to in-store shopping, or £143 per person per. Consumer surplus and great value on available money. Transaction benefits to individuals of some £796 million per year by 2025.

* Study "The economic impact of Basic Digital Skills and inclusion in the UK"



Awareness raising, including consumer awareness

- Key barrier to e-commerce is lack of awareness of potential benefits and resistance to change in the traditional and habitual way of doing business.
- Skepticism, fear of uncertainty, as well as risk aversion to innovations and technologies such as e-commerce platforms, e-solutions, and third parties can hamper adoption
- Pro-active efforts needed to inform and educate consumers, governments, and the business sector on benefits as well as challenges



Awareness-raising: Empirical evidence of benefits

- Needs to target: businesses, consumers, government, sectors
- Shifts in "perceived usefulness" of e-commerce among small businesses can drive behavioral change dramatically increasing their profit margins.
- Wide awareness-raising outreach through different channels important:
 - Mauritius Cyber Caravan project. Launched in November 2000, three Cyber Caravans, which are equipped with 9,10 and 21 PCs respectively and broadband Internet Connection. As at 14th November 2016, have trained about 196,306 persons in ICT literacy and awareness.



E-procurement

- E-procurement: use of electronic methods to conduct procurement between awarding authorities and suppliers. A form of e-commerce involving B2B or B2G purchase of supplies, work, and services.
- The process covers requisitioning and tendering (normally involving tenders or requests for proposals (RFPs) published on an online platform), payment and potentially contract management.
- B2G e-procurement can serve to introduce government employees to e-commerce
- It can encourage open tendering and competition and stimulate the modernization of SMEs. E-procurement in public tenders can provide incentive for SMEs to use ICTs and the Internet for business and to adopt e-commerce.



E-procurement: efficiencies and savings

- Public sectors typically represent between 15 and 35% of national economies (or more). As a result, government adoption of technology, including e-procurement, is one of the largest drivers of technology into the economy.
- In 2010, Kazakhstan launched its electronic Government E-Procurement system. Results: savings of over \$1.3 billion in budget spending since then. Familiarizing government work force with a form of electronic shopping. The e-procurement process has seen a significant reduction in time, cost, and paperwork.



Other dimensions

- Micro and small enterprises
- Large corporations
- Investment
- Building the consumer market
- Cross-border/international e-commerce
- Sector-specific dimensions ie. Tourism, IT Enabled Services/BPO industry
- Tariffs and non-tariff measures
- Innovation and technology
- Socio-demographic factors and urban/rural



Tailored strategies and policies needed

- Policy emphasis needs to be adapted to each country
- Starting point: assessment of strengths and weaknesses
- Engage relevant stakeholders
 - Improve ICT infrastructure
 - Facilitate e-payments
 - Develop skills to harness e-commerce
 - Promote government use of e-services
- Develop relevant surveys and collect data
- Monitor and evaluate

UNCTAD ICT Policy Review Programme

- Technical assistance at the request of member states in areas of e-commerce and ICT national planning
- Diagnostics, national assessments and strategy development: develops new strategies, augments existing strategies, provides research, analysis and policy advice for building and maintaining a dynamic and responsive policy environment in ICTs, e-commerce and related areas.
- Trainings and workshops: Introduction to e-commerce, customized trainings as per government request.
- Collaboration: Work conducted with UN and Bretton Woods partners.
- Technical assistance requests received for national e-commerce strategies (Egypt, Rwanda, Botswana, Madagascar, Gambia, Kenya, Ecuador, Mauritius). Awaiting funding.



In progress: ICTPR National E-commerce Strategy for Egypt

- Responds to the request of the Government of Egypt for an ICT Policy Review to assist in the development of its national e-commerce strategy. Cooperation with the Ministry of Communications and Information Technology (MCIT) and other ministries.
- ICTPR launched in November 2015 with first mission. Three fact-finding missions (November 2015, February 2016 and March 2016) and Vision Workshop. Consultations with government officials and other stakeholders, diagnostic and SWOT analysis.
- E-commerce Survey of Micro-enterprises in Handicraft Sector designed and conducted through cooperation between UNCTAD and the Ministry of Communications and Information technology (MCIT) with the national statistical office. Data collection in all governorates in first quarter of 2016. Egypt's first national survey of micro-enterprises.
- UNCTAD/World Bank E-commerce Survey on Payments and Banking Services in Egypt in progress.
- Partnered with World Bank, UPU, ILO, ITC.
- Launch of ICTPR National E-commerce Strategy for Egypt scheduled for early 2017.



ICTPR research & analysis, and requests for information and technical assistance

- ICTPR research and analysis in the Information Economy Report 2015 on e-commerce.

http://unctad.org/en/PublicationsLibrary/ier2015_en.pdf

- For further information on the ICTPR Programme and to request technical assistance, see: unctad.org/ictpr





Thank you for your attention!

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