





Digital Trade Issues from the U.S. Perspective

United States International Trade Commission

Digital Trade in the U.S. and Global Economies, Part 1

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International Trade Commission

Digital Trade in the U.S.
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Part 2

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What is “digital trade”?

- No standard definition of digital trade
- No standard definition of cross-border data flows
- No data currently collected intended to capture these concepts

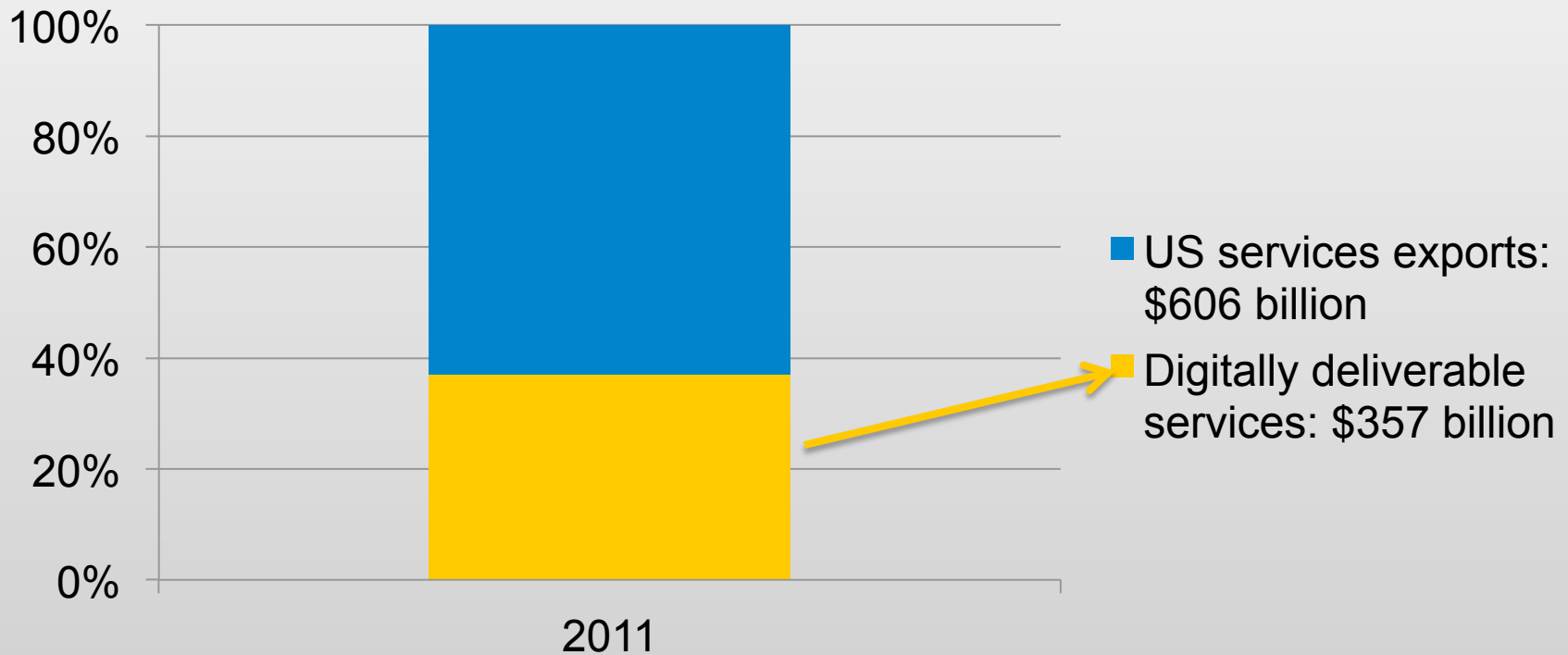


“Digital trade”: USITC 2013 report

- “Products or services **delivered via the Internet**”
- Measured by: US digitally enabled/deliverable services (UNCTAD), updated to 2011 using **US Department of Commerce/BEA trade data**
- Excluded physical goods that have a digital counterpart



Digital trade is big: Digitally deliverable services exports = 1/3 of total US services exports



Source: US Department of Commerce, BEA.



“Digital trade”: USITC 2014 report

- “US domestic commerce and international trade in which the **Internet and Internet-based technologies play a particularly significant role in ordering, producing, or delivering products and services**”
- Measured by: USITC survey and modeling of US **digitally intensive industries**

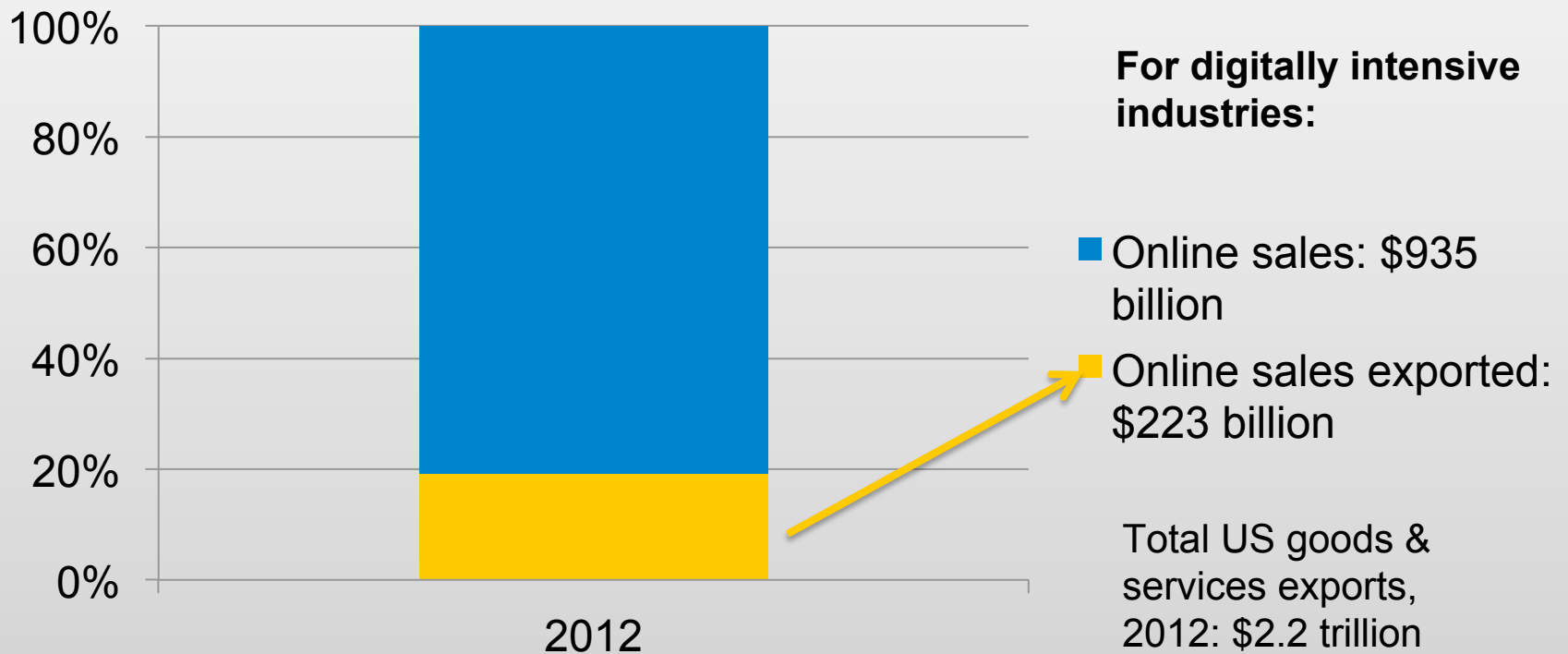


Digitally intensive industries

Industry	Sectors covered (more than 140,000 firms, or 17 % of US GDP in 2012)
Content	Publishing (print), motion picture, broadcasting, news syndicates, video and music production.
Digital communications	Software; data processing, hosting, and related services; Internet publishing and broadcasting; and Web search portals.
Finance and insurance	Establishments primarily engaged in financial or insurance transactions and/or in facilitating these transactions.
Manufacturing	Chemicals, printing, industrial machinery, metalworking machinery, engines, computers and electronics, power, distribution, specialty transformer, relay and industrial control, transportation equipment, and medical equipment and supplies.
Retail trade	Retail sales in motor vehicles and parts, furniture, electronics and appliances, and clothing through non-store retailers.
Selected other services	Accounting; architectural services; engineering services; graphic design; computer programming; computer systems design; marketing consulting services; media buying agencies; travel arrangement and reservation services; couriers and express delivery services.
Wholesale trade	Distribution of motor vehicles and parts, computers, electrical equipment, and clothing through business-to-business electronic markets.



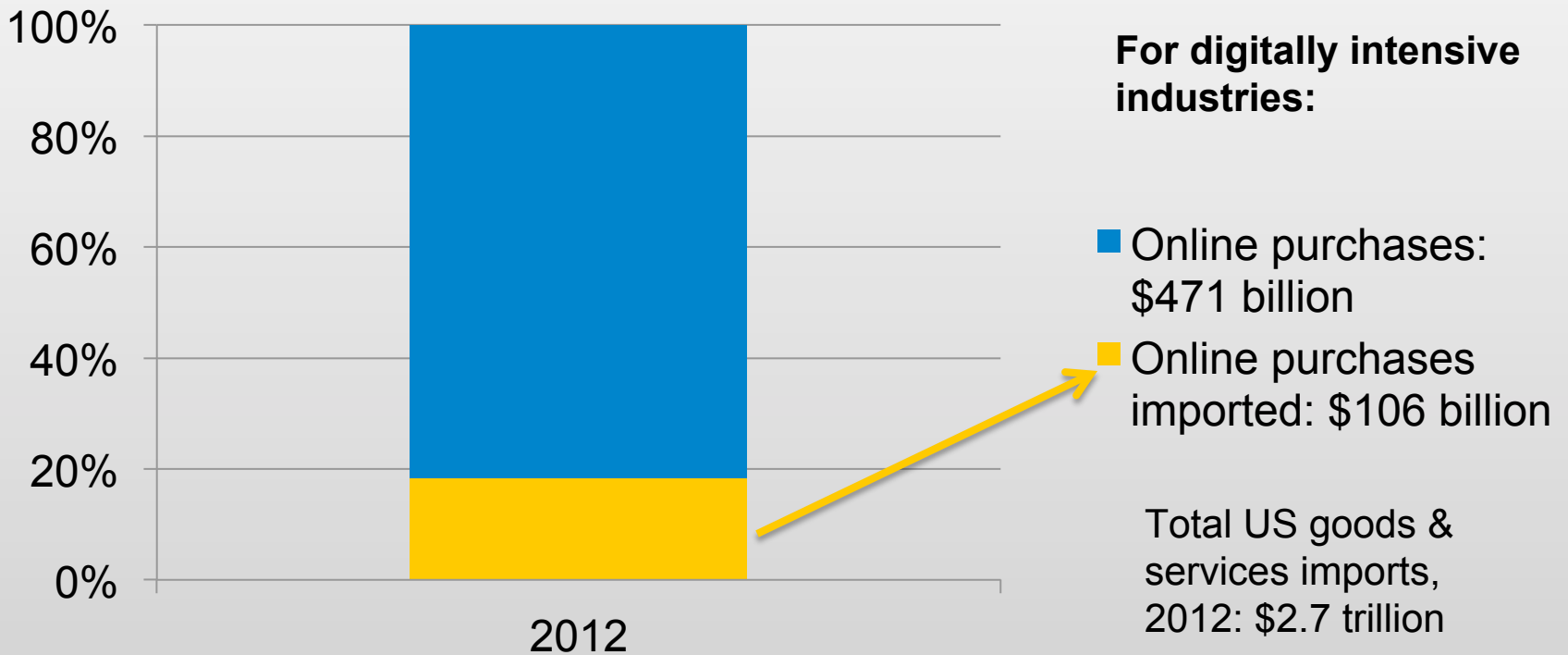
US online sales: Almost 1/5 are exported



Source: USITC, *Digital Trade 2014*.



US online purchases: Almost 1/5 are imported

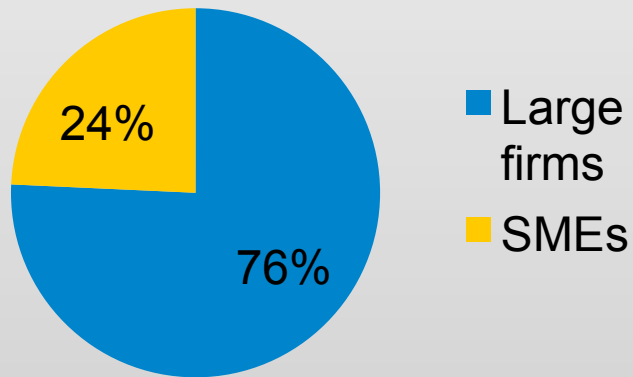


Source: USITC, *Digital Trade 2014*.

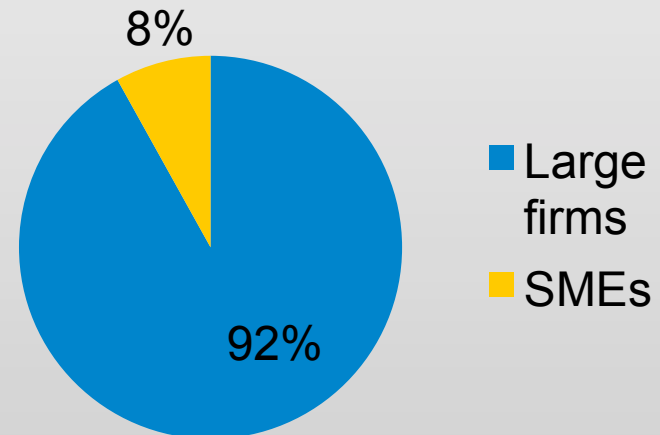


SMEs account for almost 1/4 of US online sales... but a smaller share of online exports

Online sales: \$935 billion



Online sales exported: \$223 billion

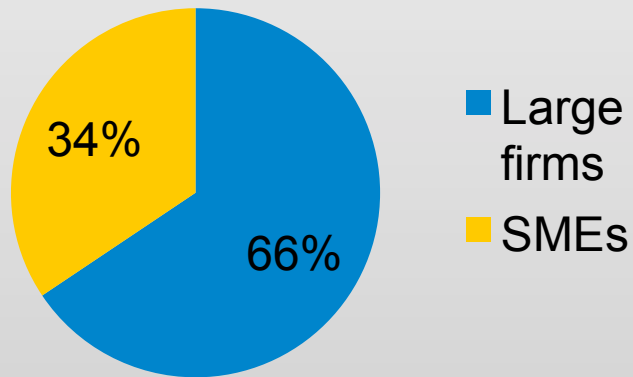


Source: USITC, *Digital Trade 2014*.

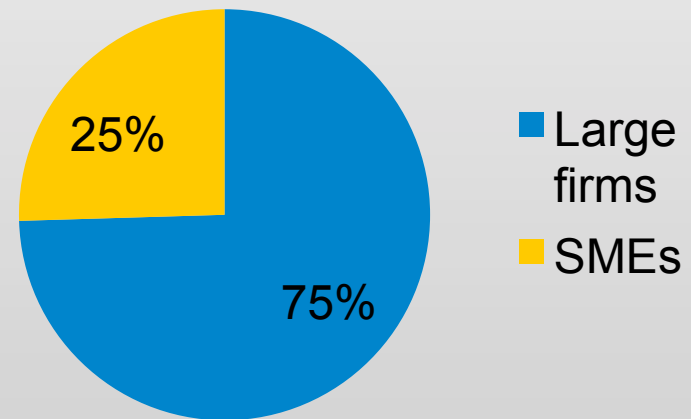


SMEs account for a significant share of US online purchases

**Online purchases:
\$471 billion**



**Online purchases
imported: \$106 billion**



Source: USITC, *Digital Trade 2014*.



Why does digital trade matter?

Case studies

- The Internet is changing business dynamics
- Big Data is changing the ways businesses and consumers interact
- The Internet facilitates international trade and SMEs



Case study: Easier job search and lower frictional unemployment

- **Markets are more efficient:** Search engines, data analysis, and targeted advertising help match buyers and sellers
- Search engines, social media sites, and **mobile apps make job search easier**
- Lower frictional unemployment implies a **lower overall unemployment rate:**
 - USITC econometric analysis estimates reduction in the 2012 unemployment rate from 2006 for 64 countries: 0.3% for the United States, Germany, Canada, and Japan; 1.0% for France; 1.2% for Mexico



Case study: Data analytics and M2M communications

- **Big Data collection and analytics** being incorporated into a variety of business practices to improve products and services
- Insurance companies are:
 - applying data analytics to **risk selection and pricing**
 - deploying telematics (M2M) for **usage-based** insurance, and
 - using **predictive and advanced analytics** to combat claims fraud

Policy concerns:

- **Localization requirements** can constrain cross-border data flows
- Tension between the **benefits of customer data collection** in terms of improved services, and consumer concerns about the **protection of data privacy and misuse of personal data**



Case study: The Internet facilitates international trade by SMEs

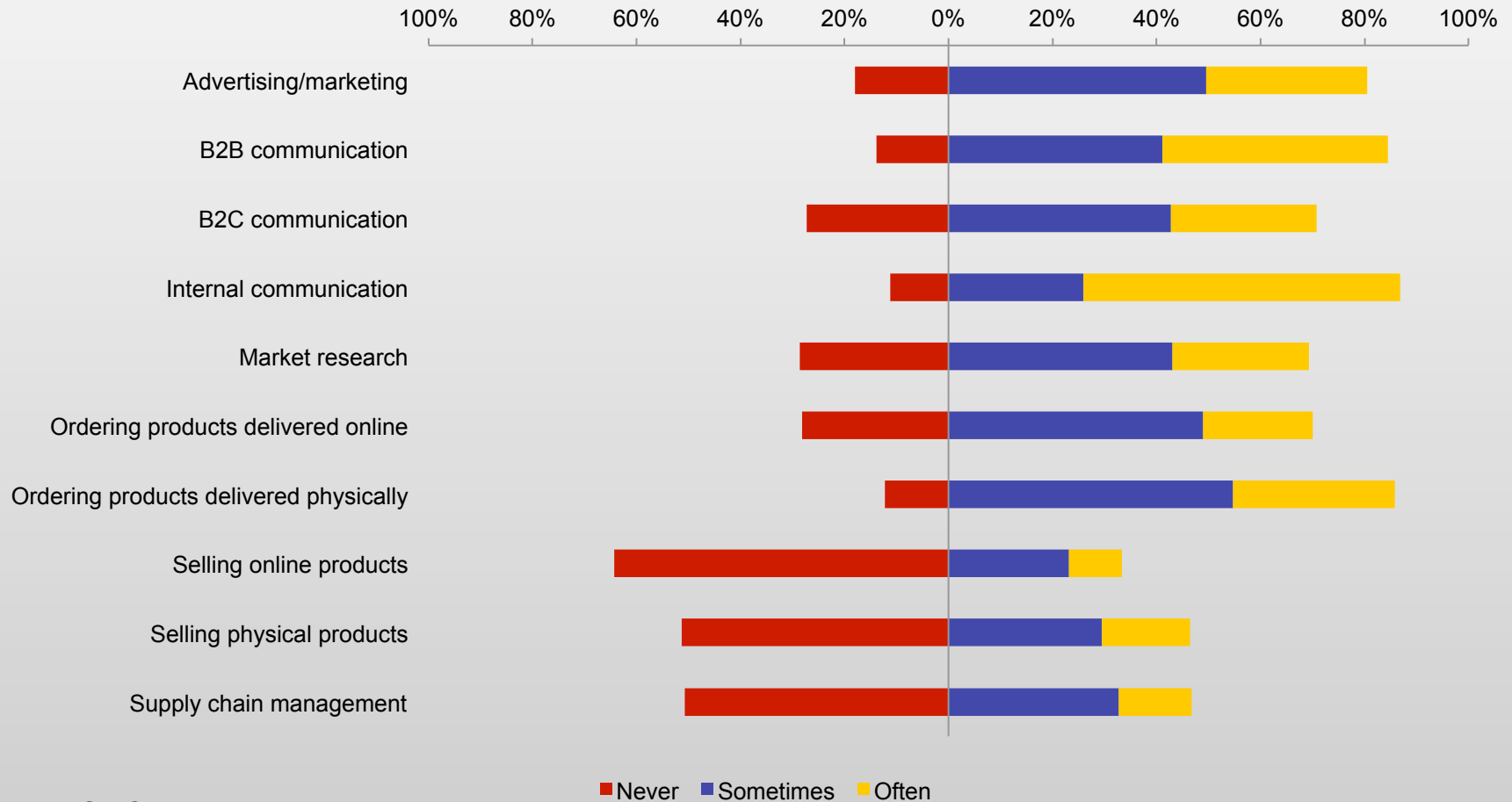
- The Internet makes it **easier for businesses to connect with customers and suppliers globally**
- How SMEs use the Internet for trade:
 - locate customers via **online presence** (“accidental exporters”)
 - online **retail platforms** (example: eBay, Etsy)
 - online **payment systems** (example: PayPal, Square)
 - **mobile apps** mean customers always in reach
- **Digital intensity is tied to SME growth and export performance**

Policy concerns:

- Despite the benefits of using the Internet, SME’s are at **greater risks from hacking and viruses than larger firms**



How US firms use the Internet, 2012



Source: USITC, *Digital Trade 2014*.



Effects of the Internet on the US economy

Productivity

- **Internet improves productivity** in US digitally intensive sectors by 7.8-10.9 percent
- This productivity improvement:
 - **increases US real GDP** by 3.4-4.5 percent (\$515-\$671 billion)
 - **increases US employment** by 0.0-1.4 percent
- Productivity gains **due primarily to Internet use for:**
 - **business-to-business communications**
 - **internal communications**



Effects of the Internet on the US economy

Trade costs

- **Internet significantly reduces trade costs** of US imports and exports of digitally intensive industries, by 26 percent on average
- **Lower trade costs:**
 - **increase US real GDP** by 0.0-0.3 percent (\$2-\$39 billion)
 - **increase US employment** by 0.0-0.3 percent

Source: USITC, *Digital Trade 2014*.



Barriers to US international digital trade

- Localization requirements
- Data privacy and protection requirements
- Market access limitations
- Intellectual property infringement
- Uncertain legal liabilities
- Censorship
- Customs measures

Source: USITC, *Digital Trade 2013*



Localization requirements

... as an obstacle to digital trade

Reported by:

- Most (83%) large digital communications firms and half (51%) SMEs
- More than half large (56%) content firms
- Almost half large (49%) retail firms

Specific concerns:

- **Local data storage requirements** undermine business models that depend on rapid and efficient data movement
- Local-content **requirements and preferences for domestic ICT and content firms**
- **Conflicting financial and payment processing requirements**

Source: USITC, *Digital Trade 2014*.



Data privacy and protection requirements

... as an obstacle to digital trade

Reported by:

- Most (79%) large digital communications firms and half (51%) SMEs
- Most (62%) large retail firms
- More than half (56%) large finance & insurance firms
- More than half (54%) large content firms

Specific concerns:

- **EU data protection requirements** are strict and compliance can be difficult
- Safe Harbor critical, but ongoing challenges
- Organizational accountability and interoperability work better



Effects of the Internet on the US economy

Removing foreign barriers to US digital trade

- would **increase US employment** in the digitally intensive sectors of the economy by 0.4-0.9 percent
- would **increase US real GDP** by 0.1-0.3 percent (\$17-\$41 billion)
- would **increase US employment** by 0.0-0.3 percent

Source: USITC, *Digital Trade 2014*.



Thank you!

James Stamps
US International Trade Commission
james.stamps@usitc.gov
www.usitc.gov