Measuring Digital Trade in the U.S.

Overview of activities at the U.S. Bureau of Economic Analysis

UNCTAD E-Commerce Week – April 16, 2018
Roadmap

• Current data

• New initiative

• Related work
Current data: ICT services

ICT services

Those services used to facilitate information processing and communication. Includes:

• Telecommunications services
• Computer services
• Charges for the use of intellectual property associated with computer software
ICT-enabled services

“Services that are delivered remotely over information and communications technologies networks” and “include activities that can be specified, performed, delivered, evaluated and consumed electronically.” (UNCTAD)
Current data: Potentially ICT-enabled services

**PICTE services**

Services that *can* predominantly be delivered remotely over ICT networks

- PICTE services are a subset of services which are actually delivered via ICT networks.

- No certainty that PICTE services trade actually occurred electronically

- Collected by U.S. Bureau of Economic Analysis

- Follows UNCTAD methodology
# Current data: ICT and PICTE services trade

## Total services
- Maintenance and repair services n.i.e.
- Transport
- Travel (for all purposes including education)
- Insurance services
- Financial services
- Charges for the use of intellectual property n.i.e.
  - Industrial processes
- Computer software
- Trademarks
- Franchise fees
- Audio-visual and related products
- Other intellectual property

## Telecommunications, computer, and information services
- Telecommunications services
- Computer services
- Information services

## Other business services
- Research and development services
- Professional and management consulting services
- Technical, trade-related, and other business services
  - Architectural and engineering services
  - Construction
  - Industrial engineering
  - Mining
  - Operating leasing services
  - Trade-related services
  - Sports and performing arts
  - Training services
  - Other business services n.i.e.
  - Government goods and services n.i.e.

## ICT services

## PICTE services
Current data: U.S. services trade breakout

U.S. trade in ICT and potentially ICT-enabled services
2016, billions $U.S.

- Exports: $66.1 billion
  - ICT services: $337.4 billion
  - Other PICTE services: $419 billion
  - Non ICT-enabled services: $159.5 billion

- Imports: $260.6 billion
  - ICT services: $403.5 billion
  - Other PICTE services: $202.1 billion
  - Non ICT-enabled services: $24.2 billion

- Balance: $88.2 billion
  - ICT services: $135.3 billion
  - Other PICTE services: $24.2 billion
  - Non ICT-enabled services: $159.5 billion

U.S. Bureau of Economic Analysis
Current data: Estimates of PICTE services trade

Legend
Other PICTE – PICTE services within other business services
IP charges – Charges for the use of intellectual property
Financial – Financial services
TCI service – Telecommunications, computer, and information services
Insurance – Insurance services
U.S. trade in potentially ICT-enabled services by major area
2016, billions $U.S.

Canada
Europe
Latin America and Other Western Hemisphere
Africa
Middle East
Asia and Pacific

Exports
Imports
Balance

$14.0
$27.8
$111.5
$185.0-$189.0

$13.9
$11.5
$30.9
$45.5

$2.7-$4.4
$5.2-$6.3

$9.6

$3.7-$4.0
$1.9-$2.5
$5.6-$5.8
$63.8

$33.1

NOTE: When the statistics for one or more components of potentially ICT-enabled services are suppressed, a range of possible values is given. The total for major areas in this chart does not match the total for all countries because trade with international organizations is not shown.

U.S. Bureau of Economic Analysis
Current data: Exploratory estimates on mode of supply

Ranking by mode of services supplied and received by the United States:

1. Mode 3 – commercial presence
2. Mode 1 – cross-border supply
3. Mode 2 – consumption abroad
4. Mode 4 – presence of natural persons

<table>
<thead>
<tr>
<th>SERVICES SUPPLIED</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODE 1</td>
<td></td>
</tr>
<tr>
<td>Transport (excluding port)</td>
<td>62,931</td>
</tr>
<tr>
<td>Insurance services</td>
<td>17,142</td>
</tr>
<tr>
<td>Financial services</td>
<td>102,461</td>
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<tr>
<td>Telecommunication</td>
<td>12,645</td>
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<tr>
<td>Information services</td>
<td>7,299</td>
</tr>
<tr>
<td>Charges for the use of intellectual property n.i.e.</td>
<td>124,664</td>
</tr>
<tr>
<td>half of Computer services</td>
<td>7,976</td>
</tr>
<tr>
<td>three quarters of Other business services except Construction, Mining, Architectural and engineering, Sports and performing arts, and Professional and management consulting services</td>
<td>37,948</td>
</tr>
<tr>
<td>one third of Architectural and engineering services</td>
<td>3,806</td>
</tr>
<tr>
<td>two thirds of Professional and management consulting services</td>
<td>43,491</td>
</tr>
<tr>
<td>Distribution services</td>
<td>72,102</td>
</tr>
<tr>
<td>Total</td>
<td>492,464</td>
</tr>
</tbody>
</table>

Data are exploratory and do not represent official statistics of the U.S. Bureau of Economic Analysis.
New initiative: Remotely delivered services

**2017 BENCHMARK SURVEY OF TRANSACTIONS IN SELECTED SERVICES AND INTELLECTUAL PROPERTY WITH FOREIGN PERSONS**

**FORM BE-120**

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<td>Due date:</td>
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<tr>
<td>Electronic filing:</td>
<td><a href="http://www.bea.gov/efile">www.bea.gov/efile</a></td>
</tr>
<tr>
<td>Mail reports to:</td>
<td>Bureau of Economic Analysis Balance of Payments Division, BE-50 (SSB) 4600 Silver Hill Rd. Washington, DC 20233</td>
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<tr>
<td>Deliver reports to:</td>
<td>Bureau of Economic Analysis</td>
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**Name and address of U.S. Reporter**

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<tr>
<td>10001</td>
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<td>10002</td>
<td>In care of:</td>
</tr>
<tr>
<td>10003</td>
<td>Attention:</td>
</tr>
<tr>
<td>10004</td>
<td>Address:</td>
</tr>
<tr>
<td>10005</td>
<td>City, State, Zip Code (9-digit):</td>
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</table>
New initiative: Remotely delivered services

SCHEDULE D – Percentage of Sales of Services to Foreign Persons Performed Remotely

If you reported sales of any of the services listed in the table below on Schedule A, please provide an estimate of the percentage of those services that were performed remotely from the U.S. Reporter’s domestic offices via computer, email, telephone, etc. for the purchaser located abroad. The information provided in this section may be estimated based on recall or a general understanding of the U.S. Reporter’s business operations. A video tutorial on reporting services performed remotely can be found at www.bea.gov/be120.

U.S. Reporter’s Sales of Services Performed Remotely for Foreign Persons

EXAMPLE: Your architecture firm in the United States provides plans and advice to clients in a foreign country via internet/phone/mail.

Percentage of Services Performed Remotely by the U.S. Reporter’s Domestic Offices for Foreign Persons via Internet, Email, Text, Telephone, or Other Means
New initiative: Remotely delivered services

SCHEDULE E – Percentage of Purchases of Services from Foreign Persons Performed Remotely

If you reported purchases of any of the services listed in the table below on Schedule B, please provide an estimate of the percentage of those services that were performed remotely from the seller’s foreign offices via computer, email, telephone, etc. for your U.S. domestic operations. The information provided in this section may be estimated based on recall or a general understanding of the U.S. Reporter’s business operations. A video tutorial on reporting services performed remotely can be found at www.bea.gov/be120.

U.S. Reporter’s Purchases of Services Performed Remotely by Foreign Persons

U.S. Reporter’s Domestic Operations

The service is performed across the border. You do not travel to the country of the supplier, nor does the supplier come to the United States.

EXAMPLE: An accounting firm in a foreign country performs bookkeeping services for your offices in the United States via internet/phone/mail.

Percentage of Services Performed Remotely by the Foreign Seller via Internet, Email, Text, Telephone, or Other Means
New initiative: Remotely delivered services

<table>
<thead>
<tr>
<th>Transaction code</th>
<th>Transaction type</th>
<th>Did you report this service on Schedule A? (Check yes or no)</th>
<th>For each &quot;Yes&quot; response, check the appropriate percentage range, (Check one)</th>
<th>The information provided is based on (Check one)</th>
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</thead>
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<tr>
<td>9</td>
<td>Accounting, auditing, and bookkeeping services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 7</td>
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<tr>
<td>10</td>
<td>Advertising services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<tr>
<td>12.3</td>
<td>Other computer services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<td>15</td>
<td>Education services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<tr>
<td>16.1</td>
<td>Architectural services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<tr>
<td>16.2</td>
<td>Engineering services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<tr>
<td>16.3</td>
<td>Surveying, cartography, certification, and technical inspection services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<td>20</td>
<td>Legal services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<td>21.1</td>
<td>Market research services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<td>21.2</td>
<td>Public opinion and polling services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
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<tr>
<td>21.3</td>
<td>Other management, consulting, and public relations services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
</tr>
<tr>
<td>29.1</td>
<td>Provision of customized and non-customized research and development services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
</tr>
<tr>
<td>29.2</td>
<td>Other research and development services</td>
<td>1. Yes 2. No</td>
<td>1. 1 2 2 3 4 5 6</td>
<td>1. 1 2 3 4 5 6 2 3</td>
</tr>
</tbody>
</table>
The digital economy includes:

1. **Digital-enabling infrastructure:** the goods and services needed for an interconnected computer network to exist and operate.
   - Hardware
   - Software
   - Telecommunications equipment and services
   - Structures
   - The Internet of Things (IoT)
   - Support services

2. **E-commerce:** the digital transactions that take place using that system.
   - Business-to-business
   - Business-to-consumer
   - Peer-to-peer ("sharing" economy)

3. **Digital media:** the content that digital economy users create and access.
   - Direct sale/subscriptions
   - Free (often supported by advertising or marketing revenue)
   - Big data
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Digital economy was 6.5% ($1,209.2 billion) of total GDP in 2016.

From 2006 to 2016, real value added for the digital economy grew at an average annual rate of 5.6 percent, outpacing the average annual rate of growth for the overall economy of 1.5 percent.
Related work: E-commerce statistics

• Meeting with groups such as Retail Trade Federation to refine definition of e-commerce and keep statistics relevant.

• Looking into the possibility of using NPD data to supplement survey data. Covers more than 20 industries, with unique information assets, based on:
  o Actual point-of-sale (POS) data from retailers, distributors, and foodservice operators
  o More than 1,300 retailers, including both e-commerce and brick-and-mortar
  o Millions of receipts through all channels
  o More than 12 million consumer surveys annually

• Participating in international working groups through WCO, OECD, and others.
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Thank you!


• International Data, Bureau of Economic Analysis, https://bea.gov/iTable/index_ita.cfm.


