

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



- Current data
- New initiative
- Related work

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)

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

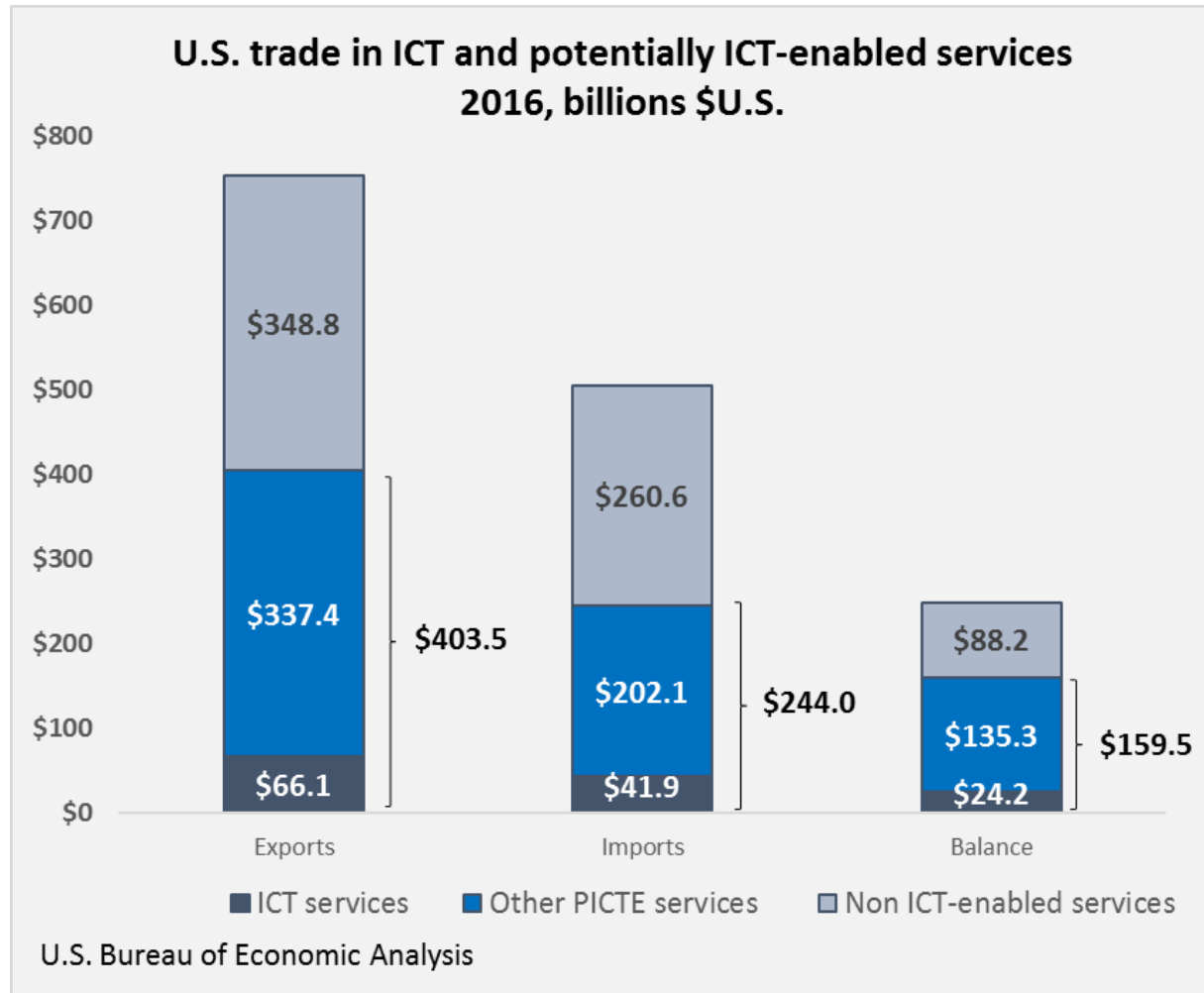
Current data: ICT and PICTE services trade

| |
|--------------------------------------------------------|
| 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

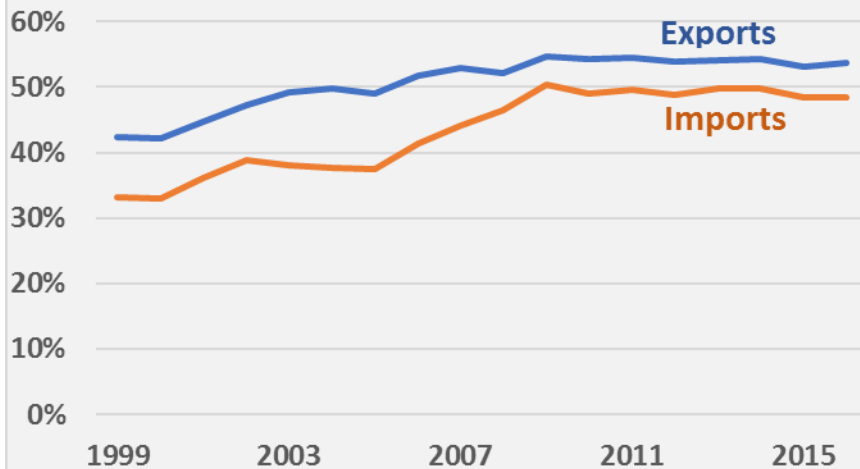
PICTE services

Current data: U.S. services trade breakout



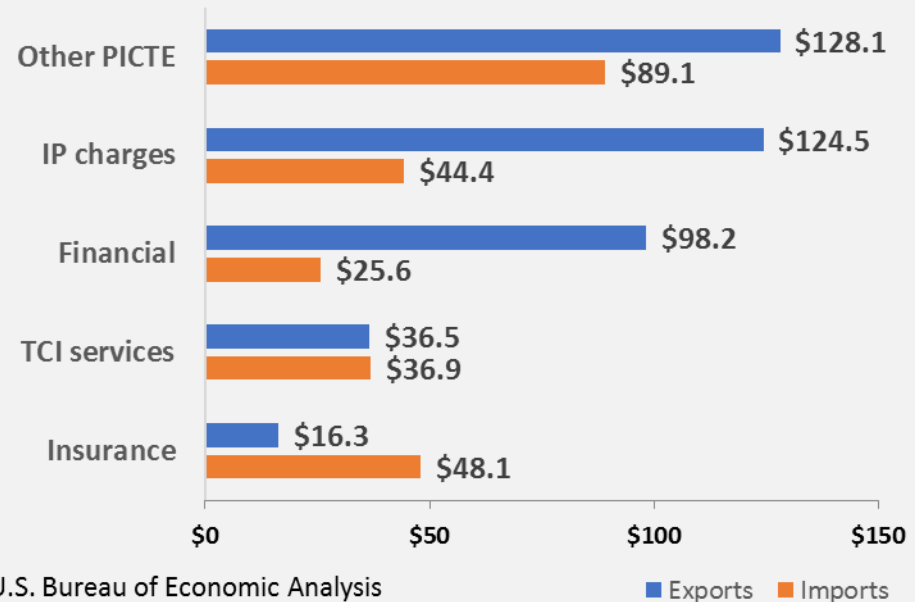
Current data: Estimates of PICTE services trade

PICTE services share of total U.S. international services trade 1999-2016



U.S. Bureau of Economic Analysis

U.S. PICTE international services trade 2016, billions \$U.S.



U.S. Bureau of Economic Analysis

Legend

Other PICTE – PICTE services within other business services

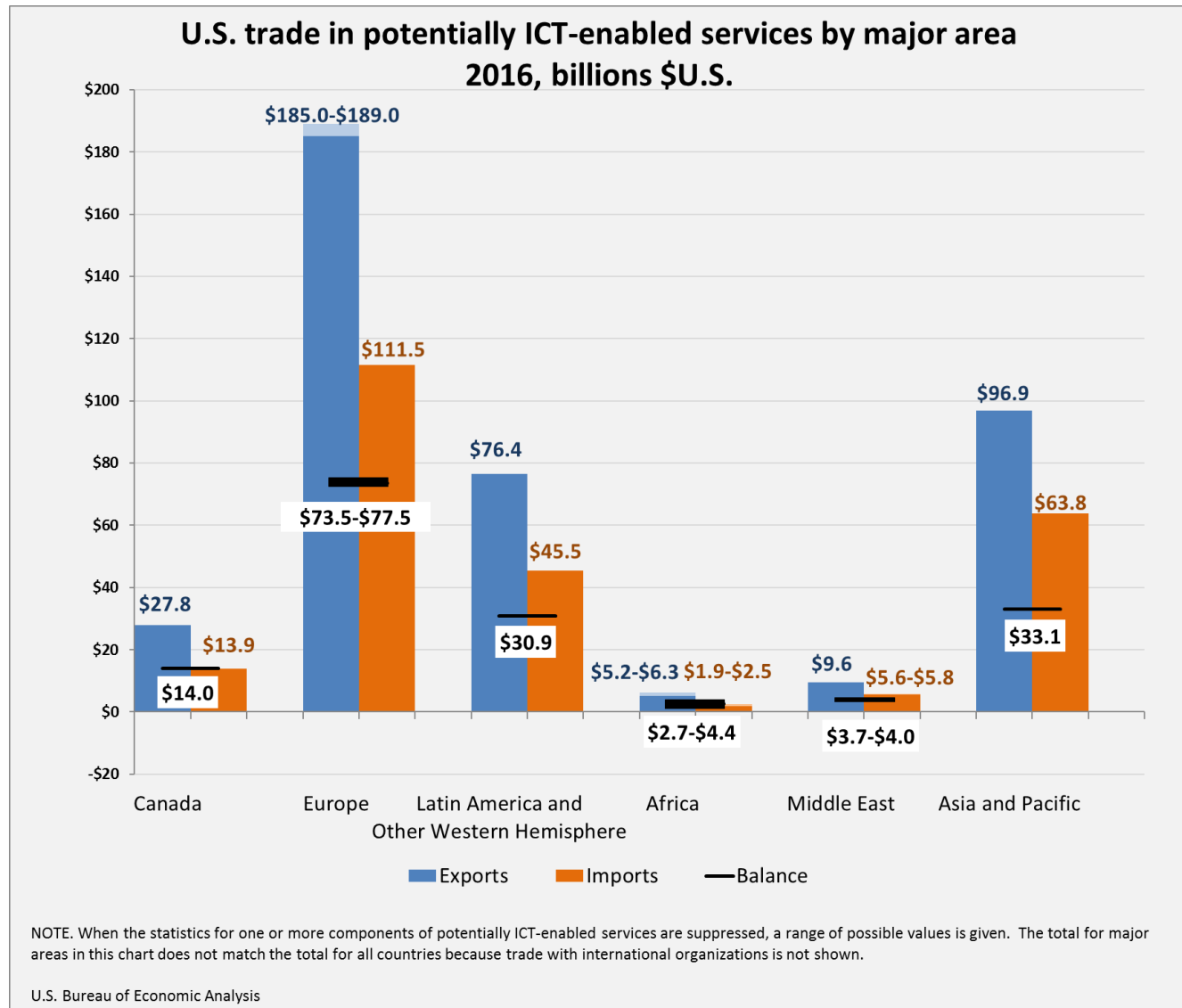
IP charges – Charges for the use of intellectual property

Financial – Financial services

TCI service – Telecommunications, computer, and information services

Insurance – Insurance services

Current data: Estimates of PICTE services trade



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

SERVICES SUPPLIED

MODE 1

2015

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

New initiative: Remotely delivered services



FORM **BE-120** (REV. 03/2018)

OMB No. 0608-0058: Approval Expires 04/30/2021



BE-120 Identification Number

2017 BENCHMARK SURVEY OF TRANSACTIONS IN SELECTED SERVICES AND INTELLECTUAL PROPERTY WITH FOREIGN PERSONS FORM BE-120

Due date:

June 29, 2018

Extension information:

See Part V, page 30 of the General Instructions.

Electronic filing:

www.bea.gov/efile

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| 10002 | Attention: 0 |
| 10003 | Address: 0 |
| 10004 | City, State, Zip Code (9-digit) 0 |

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



The service is supplied across the border. Your employees do not travel to the country of the purchaser, nor does the customer come to the United States.



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

Exclude the portion of the sales of each service type charged for services performed on-site in the country of the purchaser, or services performed for a foreign customer temporarily located in the United States.

| Transaction code | Transaction type | Did you report this service on Schedule A? (Check yes or no) | For each "Yes" response, check the appropriate percentage range. (Check one) | | | | | | The information provided is based on (Check one) | |
|------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------------------------------|----------------------------------------|
| | | | Less than 25% | 25-49% | 50-74% | 75-89% | 90-99% | 100% | Accounting records | Recall/general knowledge of operations |
| 9 | Accounting, auditing, and bookkeeping services | 51001 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 10 | Advertising services | 51002 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 12.3 | Other computer services | 51003 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 15 | Education services | 51004 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 16.1 | Architectural services | 51005 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 16.2 | Engineering services | 51006 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 16.3 | Surveying, cartography, certification, and technical inspection services | 51007 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 20 | Legal services | 51008 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 21.1 | Market research services | 51009 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 21.2 | Public opinion and polling services | 51010 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 21.3 | Other management, consulting, and public relations services | 51011 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 29.1 | Provision of customized and non-customized research and development services | 51012 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |
| 29.2 | Other research and development services | 51013 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No | 2 1 <input type="checkbox"/> | 2 2 <input type="checkbox"/> | 2 3 <input type="checkbox"/> | 2 4 <input type="checkbox"/> | 2 5 <input type="checkbox"/> | 2 6 <input type="checkbox"/> | 3 1 <input type="checkbox"/> | 3 2 <input type="checkbox"/> |

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

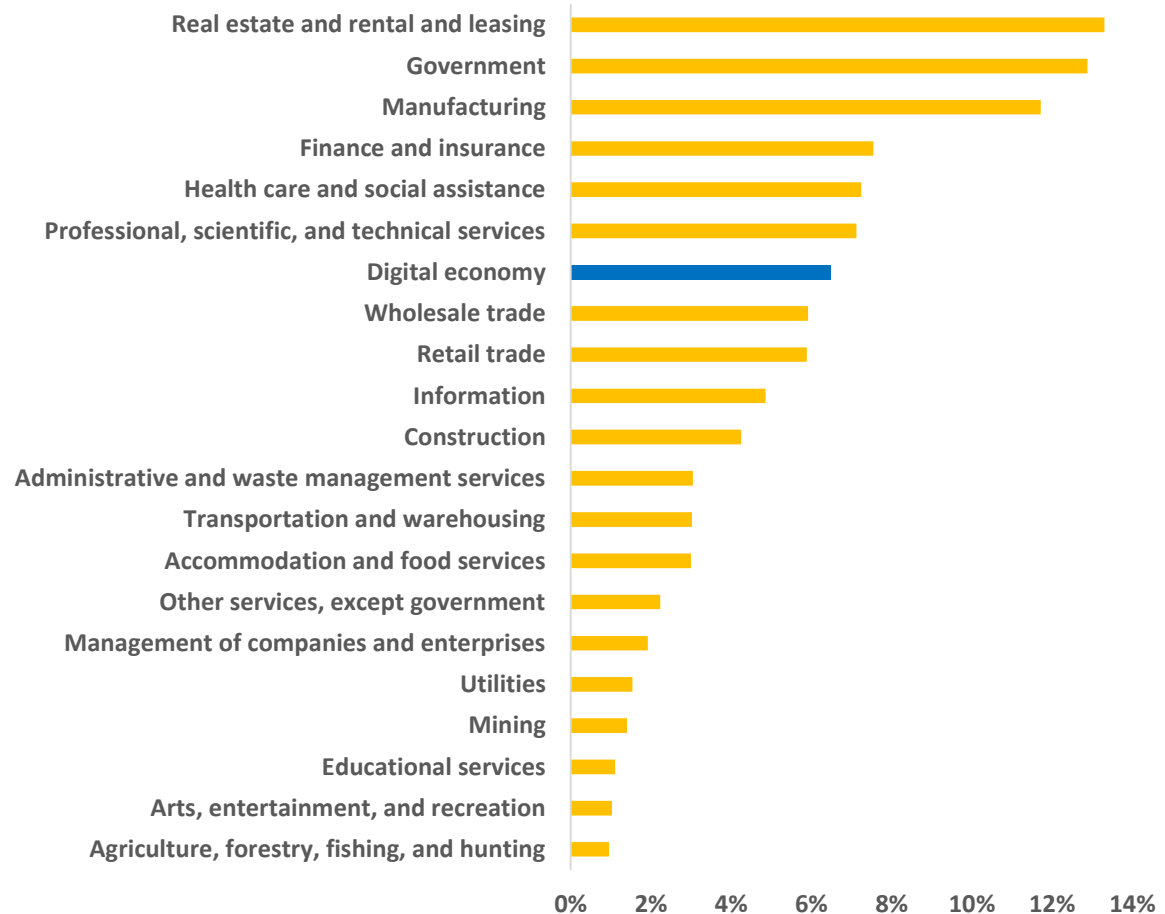
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Digital economy was 6.5% (\$1,209.2 billion) of total GDP in 2016.

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.

Digital economy and industry share of total gross domestic product, 2016



U.S. Bureau of Economic Analysis

- 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:
 - Actual point-of-sale (POS) data from retailers, distributors, and foodservice operators
 - More than 1,300 retailers, including both e-commerce and brick-and-mortar
 - Millions of receipts through all channels
 - More than 12 million consumer surveys annually
- Participating in international working groups through WCO, OECD, and others.

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Special thanks to my BEA colleagues:

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Thank you!

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