## Measuring the Digital Economy

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## Components of the Digital Economy

- E-business infrastructure: the share of total economic infrastructure used to support electronic business processes and conduct electronic commerce.
- E-business: any process that a business organization conducts over computer-mediated networks.
- E-commerce: the value of goods and services sold over computermediated networks.


## US Census Bureau's E-Commerce Products

- Quarterly Retail E-Commerce Sales
- First published in 1999
- Presented as seasonally adjusted and not-seasonally adjusted series
- Annual E-Commerce Statistics
- Covers manufacturing, retail, wholesale, and selected service industries


## E-Commerce Sales as a Percent of Total Retail Sales



## E-Commerce in the US is growing but evolving at different rates in different sectors

## E-Commerce Sales as a Percent of Total Sales

By Sector


## U.S. Department of Commerce

Millions


## Retail E-commerce

- The North American Industry Classification System (NAICS) separates retail business operations that conduct all business without a physical store
- NAICS 454110: Electronic Shopping and Mail Order Houses
- Operations with both store and non-store transactions are classified as store retailers
$>$ No clean measure of total retail e-commerce sales
- Census Bureau developed a supplemental product to begin to address this problem


## Supplemental Annual Retail E-commerce Table

2015 Electronic Shopping and Mail Sales by Product


## U.S. Department of Commerce

## Services E-Commerce: Clarifying questions to reduce suspected under-reporting

## 8 E-COMMERCE

E-commerce is the sale of goods and services where the buyer places an order, or the price and terms of the sale are negotiated, over an Internet, mobile device (M-Commerce), extranet, EDI network, electronic mail, or other comparable online system. Payment may or may not be made online.
A. Did this firm have any e-commerce revenue in 2016 or 2015 ?YesNo - Go to 9
B. What was the total e-commerce revenue in 2016 and 2015?

| 2016 |  |  |  |  | 2015 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ Bil. | Mil. | Thou. | Dol. | \$ Bil. | Mil. | Thou. | Dol. |  |
|  |  |  |  |  |  |  |  |  |

## Services E-Commerce

8 REVENUES FROM ELECTRONIC SOURCES
A. Did this firm have any revenues from customers entering orders directly on the firm's websites or mobile applications in 2017?

0040
Yes
$\square$
B. Did this firm have any revenues from customers entering orders directly on third-party websites or mobile applications in 2017?

0041 $\square$
$\square$ No
C. Did this firm have any revenues from customers entering orders via any other electronic systems (such as private networks, dedicated lines, kiosks, etc.) in 2017?
0042
$\square$ Yes
D. Of the total 2017 revenues reported in ©, what was the dollar amount (or percentage) that was from the revenues identified in A-C above? Please provide an estimate if exact figures are not available.

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| 2017 |  |  |  | OR | 2501 | $2017$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ Bil. | Mil. | Thou. | Dol. |  |  | Perce |  |
|  |  |  |  |  |  |  | \% |

## Measurement of the Gig Economy: Nonemployer Statistics Program



## Measurement of the Gig Economy: Nonemployer Statistics Program

—Number of Taxi and Limousine Nonemployers



United States ${ }^{\text {N }}$ Census
U.S. Department of Commerce

Economics and Statistics Administration
U.S. CENSUS BUREAU
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Source: Nonemployer Statistics, American FactFinder

# US Bureau of Labor Statistics Digital Economy Data 

■ Quarterly Census of Employment and Wages
■ Current Employment Statistics
■ Producer Price Index

## US Bureau of Labor Statistics

■ BLS Quarterly Census of Employment and Wages

- Number of establishments, employment, and total wages paid for each county, metropolitan area, state, and the nation by ownership (private and government - federal, state, local) and industry
- A census of all unemployment-insurance covered establishments collected each quarter, covering all industries, including:
- Electronic Markets
- Electronic shopping
- Electronic auctions


## US Bureau of Labor Statistics (BLS)

■ Current Employment Statistics

- Monthly data on employment, hours, and earnings for all employees and for production/nonsupervisory employees, by industry, for the nation, states, and metropolitan areas.
- Industry detail decreases as geographic areas get more local. Industries include:
- Electronic markets and agents and brokers
- Electronic shopping


## US Bureau of Labor Statistics (BLS)

■ Producer Price Index (PPI)

- A family of monthly price indexes
- Measures average change over time in selling prices received by domestic producers of goods and services.
-The PPI produces approximately 535 industry price indexes in combination with over 4,000 product line and product category sub-indexes, including:
- Electronic and mail-order shopping

