

# AMERICAN BUSINESS INNOVATION



## Fast facts



The share of businesses that perform or fund research and development (R&D active businesses) that introduced innovation in the past 3 years was about three times greater than the share of non-R&D active businesses that introduced an innovation during that period.



Industries that reported introducing product innovations new to the market at higher rates were

- Software publishers
- Communications equipment
- Navigational, measuring, electromedical, and control instruments



Innovation rates for business owners by demographic characteristics include

- A higher proportion of female-majority-owned companies than male-majority-owned companies reported innovation (**32%** vs. **29%**)
- More than a third of Asian-majority-owned companies (**37%**) and Black-majority-owned companies (**35%**) reported innovation
- Over a third (**36%**) of Hispanic-majority-owned companies reported innovation, compared with **29%** each of non-Hispanic-majority-owned and White-majority-owned companies

These fast facts represent some of the latest data available from the National Center for Science and Engineering Statistics.

Business innovation can drive advancements for many aspects of business activity, prompting improvements to national living standards, economic sectors, competitiveness, and infrastructure.

Commercially successful innovation fosters economic, employment, industry, and globalization growth, potentially transforming entire markets. These markets—whether local, national, or international—provide the opportunity for firms (i.e., business enterprises), individuals, and governments to exchange goods and services to achieve their goals.



## How does the U.S. federal statistical system measure innovation?

The National Center for Science and Engineering Statistics (NCSES), a principal federal statistical agency, measures and interprets the nation's product innovations using international standards and guidelines. The use of these standards can increase the comparability of statistical findings across multiple organizations, enabling more useful and accurate research. Accurate, timely, and unbiased measurement of innovation and related data can help policymakers understand the contribution of U.S. innovation to social and economic goals and assess the effectiveness of certain policies.

NCSES collects innovation data via the [Annual Business Survey \(ABS\)](#). The survey and development of innovation indicators are guided by the Organisation for Economic Co-operation and Development (OECD) and Eurostat's 2018 *Oslo Manual*, the international standard for collecting and using data on business innovation. In accordance with these new standards, NCSES recently has revised some of the questions it asks to understand innovation.

The *Oslo Manual* (2018) defines business innovation as

***A new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process).***

(The term "unit" is used to describe the actor responsible for innovations.)

An innovation can be either new to the market or new only to the firm. When and how these innovations are made available or are introduced differ depending on their type.

### Product Innovation Introduction

When something is made available (but not necessarily sold) on the market.

### Business Process Innovation Introduction

When something is implemented and brought into use by a firm.



## How is innovation data collected and studied?

The ABS, developed and cosponsored by NCSES in partnership with the Census Bureau, is the primary source of information on U.S. innovation. The ABS collects data from nonfarm, for-profit businesses operating in the United States.



For businesses with **one or more** employees, the ABS questionnaire collects data on innovation, owner characteristics, intellectual property, and technology.



For businesses with **one to nine** employees, the ABS questionnaire collects research and development data.

NCSES analyzes data gathered from the ABS to provide useful insights regarding U.S. business innovation trends. This information can be used to help inform policy, decision-making, and investments concerning U.S. innovation endeavors. Taking a detailed look at what industries, products, and processes make up U.S. innovation can help identify where funding is focused, what type of businesses are taking the lead, and the rate and type of outputs. Additionally, ABS data provide details on the characteristics of business owners, size and location of innovating businesses, and instances where innovation attempts do not succeed.



### National Center for Science and Engineering Statistics (NCSES)

To access additional innovation data, please visit the NCSES website at <https://ncses.nsf.gov/interest-areas/innovation-global-competitiveness>.

For more information about NCSES's products and data collection process, visit <https://ncses.nsf.gov>. NCSES is on Twitter! Join the conversation and connect with us [@NCSESGov](#).