

## **Welcome to the 2017 Annual Business Survey**

This worksheet is intended to assist you with gathering information and preparing your data prior to reporting online. Businesses that reported business activity for all or any part of 2017 are eligible to be selected to respond to this survey. Businesses with 1-9 employees should use ABS-1 Worksheet for assistance. Businesses reporting for ABS-1 will be asked questions on the following topics:

- Company Information
- Owner Characteristics
- Innovation
- Research and Development
- Technology and Intellectual Property
- Financing and Other Business Characteristics
- Contact Information

Please view the online report for specific instructions.

Return to <https://portal.census.gov> when you are ready to report online.

**COMPANY INFORMATION**

**This section collects information on the operations and structure of the business. This section should take approximately 5 minutes to complete.**

**CEASED OPERATIONS**

Has this business ceased operations?

- Yes  
 No – Skip to BUSINESS OWNERSHIP – FOREIGN ENTITY

**REASON OPERATIONS CEASED**

Why did this business cease operations? **Select all that apply.**

- Owner's military deployment  
 Owner's illness or injury  
 Owner(s) retired  
 Owner(s) deceased  
 Operated for a specific or one-time event  
 Inadequate cash flow or low sales  
 Lack of business loans/credit  
 Lack of personal loans/credit  
 Started another business  
 Sold this business  
 Other

**DATE OPERATIONS CEASED**

Enter the month and year this business ceased operations.

**If response is between 1/2018 and 12/2018, you are still required to complete the survey covering the business activity for 2017, even though this business is not currently operating.**

**If response is between 1/2017 and 12/2017, you are still required to complete the survey covering the portion of the year this business was active for 2017, even though this business is not currently operating.**

**If response is prior to 1/2017, this business is not required to complete this survey. Skip to 'Contact Information'.**

**BUSINESS OWNERSHIP – FOREIGN ENTITY**

In 2017, was this business a majority-owned subsidiary of a foreign company?

- Yes – If 'Yes' note the **reporting unit for the survey is the U.S. located business**  
 No

**BUSINESS OWNERSHIP – U.S. ENTITY**

In 2017, did another U.S. company or other entity own more than 50 percent of this business? Examples of other entities include estates, trusts, employee stock ownership plans (ESOPs), associations, membership clubs, and cooperatives.

- Yes – Skip to **10% OR MORE OWNERSHIP**  
 No

**BUSINESS OWNERSHIP – GOVERNMENT OR TRIBAL ENTITY**

In 2017, was this business owned by a government or tribal entity?

- Yes  
 No

**10% OR MORE OWNERSHIP**

In 2017, did at least one person own 10% or more of this business? **(Do not count parent companies, estates, trusts or other entities.)**

- Yes  
 No – Select “No” only if no person owned 10% or more of this business

**NUMBER OF OWNERS**

In 2017, how many people owned this business?

- Do not combine two or more owners to create one owner
  - Count spouses and partners as separate owners
- 1 person  
 2 people  
 3 people  
 4 people  
 5-10 people  
 11 or more people  
 Don't know

**NUMBER OF PAID OWNERS**

Of the <response generated from **NUMBER OF OWNERS**> reported as owner(s), how many received a W-2 issued by this business for salary or wages? If none, report zero.

**NUMBER OF EMPLOYEES**

For the pay period including March 12, 2017, how many people worked for this business, including those paid through grants? **Include both full-time and part-time workers as well as yourself. Count each person only once.**

**Non-Owners**

- A. Employees who received a W-2 issued by this business for salary or wages
- B. Individuals who received payment in other ways (for example, contractors/consultants/ temporary workers who received a 1099 or payment from another business), including those who received stock or other forms of compensation.
- C. Unpaid individuals who worked for the business (for example, interns, friends, family members)

| Number of People |
|------------------|
|                  |
|                  |
|                  |

**TOTAL SALES AND REVENUES**

What was the amount of this business’s sales and revenues, including grants, during 2017? Round to the nearest one thousand dollars. If none report zero.

|                                  | \$ Billions | Millions | Thousands |
|----------------------------------|-------------|----------|-----------|
| 2017 sales, revenues, and grants |             |          |           |

**SOURCES OF SALES AND REVENUE**

Approximately what share of this business’s 2017 sales and revenues, including grants, came from the following?

- a. Selling goods to customers, including other businesses
- b. Selling services to customers, including other businesses
- c. Licensing
- d. Grants
- e. Other (specify):

|  |  |  |   |
|--|--|--|---|
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |

**DOMESTIC SALES AND REVENUES**

How much of the <response from ‘TOTAL SALES AND REVENUES’> in 2017 sales, revenue, and grants was attributable to or originated from domestic operations? Include sales and operating revenues to foreign customers, including foreign subsidiaries. For example, a U.S. manufacturing corporation sells parts to customers around the world, however, because all of its operations are located inside the United States it reports 100% of its sales in this question.

|                     | \$ Billions | Millions | Thousands |
|---------------------|-------------|----------|-----------|
| Domestic Operations |             |          |           |

**PRIMARY BUSINESS ACTIVITY**

Describe this business's primary business activity during 2017.

**OWNER CHARACTERISTICS**

**This section collects information on the owners of the business. Based on the number of owners you reported in the company information section, you may be asked to complete this section for up to four owners of the business. This section takes approximately 4 - 8 minutes to complete.**

**PERCENT OWNERSHIP**

For the person(s) owning the largest percentage(s) in this business in 2017, please list each person’s name and percentage owned.

- Do not report percentages owned by parent companies, estates, trusts, or other entities
- If more than 4 people owned this business equally, select any 4 people
- Round percentages to whole numbers. For example, report 1/3 ownership as 33%.

| Name of Owner | Percentage Owned |
|---------------|------------------|
|               |                  |
|               |                  |
|               |                  |
|               |                  |

**SEX**

What is the sex of Owner X?

- Male
- Female

**ETHNICITY**

Is Owner X of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, another Hispanic, Latino, or Spanish origin - enter origin below. For example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.

**RACE**

What is Owner X’s race? NOTE: For this survey, Hispanic origins are not races. **Select all that apply.**

- White
- Black or African American
- American Indian or Alaska Native –Enter name of enrolled or principal tribe

\_\_\_\_\_

- Asian Indian
  - Chinese
  - Filipino
  - Japanese
  - Korean
  - Vietnamese
  - Other Asian –Enter race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.
- 

- Native Hawaiian
  - Guamanian or Chamorro
  - Samoan
  - Other Pacific Islander –Enter race, for example, Fijian, Tongan, and so on.
- 

#### **MILITARY SERVICE**

Has Owner X ever served in any branch of the U.S. Armed Forces, including the Coast Guard, the National Guard, or Reserve component of any service branch?

- Yes
- No – **SKIP to INITIAL ACQUISITION**

#### **MILITARY SERVICE DISABILITY**

Is Owner X disabled as the result of illness or injury incurred or aggravated during military service?

- Yes
- No

#### **OTHER MILITARY SERVICE**

Do any of the following characteristics describe Owner X's military service? **Select all that apply.**

- Served on active duty military service, not including training for the Reserves or National Guard
- Served on active duty military service after September 11, 2001
- Served on active duty military service in 2017
- Served in the National Guard or as a reservist of any branch of the U.S. Armed Forces in 2017
- None of the above

**INITIAL ACQUISITION**

How did Owner X initially acquire ownership of this business? **Select all that apply.**

- Founded or started
- Purchased
- Inherited
- Received transfer of ownership or gift

**INITIAL ACQUISITION YEAR**

In what year did Owner X acquire ownership of this business?

- YEAR \_\_\_\_\_
- Don't Know

**JOB FUNCTION(S)**

In 2017, which of the following were Owner X's function(s) in this business? **Select all that apply.**

- Managing day-to-day operations
- Providing services and/or producing goods
- Financial control with the authority to sign loans, leases, and contracts
- None of these functions

**AVERAGE NUMBER OF HOURS WORKED**

In 2017, what was the average number of hours per week that Owner X spent managing or working in this business?

- None
- Less than 20 hours
- 20-39 hours
- 40 hours
- 41-59 hours
- 60 hours or more

**PRIMARY INCOME SOURCE**

In 2017, did this business provide Owner X's primary source of income?

- Yes
- No



**PRIOR BUSINESS OWNERSHIP**

Prior to establishing, purchasing, or acquiring this business, how many previous businesses has Owner X owned? (Include self-employed businesses.)

- 0 – Skip to Education Prior to Owning the Business
- 1
- 2
- 3
- 4
- 5 or more

**PRIOR BUSINESS OWNERSHIP – CONTINUED**

Not including this business, what is the status of the previous business Owner X started most recently?

- Business is still operating and Owner X still owns it
- Business is no longer in operation
- Business was purchased by another company
- Business was purchased by another individual
- Other (specify):

**EDUCATION PRIOR TO OWNING THE BUSINESS**

Prior to establishing, purchasing, or acquiring this business, what was the highest degree or level of school Owner X completed?

- Less than high school / secondary school graduate - **Skip to Age**
- High school / secondary school graduate – Diploma or GED - **Skip to Age**
- Technical, trade, or vocational school - **Skip to Age**
- Some college, but no degree - **Skip to Age**
- Associate Degree (for example, AA, AS) - **Skip to Age**
- Bachelor's Degree (for example, BA, BS)
- Master's, Degree (for example, MA, MEng, Med, MSW, MBA)
- Doctorate Degree (for example, PhD, EdD)
- Professional Degree, beyond a Bachelor's Degree (for example, MD, DDS, DVM, LLB, JD)

**FIELD OF HIGHEST DEGREE PRIOR TO OWNING THE BUSINESS**

Prior to establishing, purchasing, or acquiring this business, what was the field of the highest degree completed for Owner X? **Select all that apply.**

- Biological, agricultural and environmental life sciences
- Chemistry, except biochemistry
- Computer and mathematical sciences and other technology and technical fields
- Earth, atmospheric and ocean sciences
- Economics, political, psychology, sociology and other social sciences
- Engineering

- Health
- Physics and astronomy
- Science and mathematics teacher education
- Other science and engineering related fields, not listed above
- Art and humanities fields
- Education, except science and math teacher education
- Management and administration fields
- Sales and marketing fields
- Social service and related fields
- Other non-science and non-engineering related fields, not listed above

**AGE**

What was the age of Owner X as of December 31, 2017?

- Under 25
- 25-34
- 35-44
- 45-54
- 55-64
- 65 or over

**U.S. CITIZENSHIP**

Is Owner X a citizen of the United States?

- Yes
- No

**PLACE OF BIRTH**

Was Owner X born in the United States?

- Yes
- No

**REASONS FOR OWNING THE BUSINESS**

How important to Owner X are each of the following reasons for owning this business? *Select one for each row.*

|   | <b>Very<br/>Important</b> | <b>Somewhat<br/>Important</b> | <b>Not at all<br/>Important</b> |
|---|---------------------------|-------------------------------|---------------------------------|
| A. Wanted to be my own boss                   | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| B. Flexible hours                             | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| C. Balance work and family                    | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| D. Opportunity for greater income             | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| E. Best avenue for my<br>ideas/goods/services | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |

- |   |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
| F. Unable to find employment                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Working for someone else didn't appeal to me                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Always wanted to start my own business                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I. An entrepreneurial friend or family member was my role model | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J. Wanted to carry on the family business                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K. Wanted to help and/or become more involved in my community   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L. Other (specify)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**INNOVATION**

**This section collects information on the business’s innovations and innovation activities. An innovation is the introduction of a new or significantly improved product, process, organizational method, or marketing method by this business.**

**An innovation must have characteristics or intended uses that are new or which provide a significant improvement over what was previously used or sold by the business. However, an innovation can fail or take time to prove itself.**

**An innovation need only be new or significantly improved for the business. It could have been originally developed or used by other businesses or organizations.**

**This section asks about the three previous years including the calendar year 2017 instead of one year as in other sections of this questionnaire.**

**This section should take approximately 20 minutes to complete.**

**INNOVATION BUSINESS STRATEGIES**

During the three years 2015 to 2017, how important were each of the following strategies to this business? **Select one for each row.**

|   | Very<br>Important        | Somewhat<br>Important    | Not at all<br>Important  |
|---|--------------------------|--------------------------|--------------------------|
| a. Focus on improving existing goods or services                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Focus on introducing new goods or services                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Focus on reaching new customer groups                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Focus on customer-specific solutions                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Focus on low price   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Focus on reducing costs                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Focus on satisfying key customers                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Focus on developing niche or specialized markets             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Focus on opening up new domestic markets                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Focus on opening up new export markets                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Focus on internal processes/improve internal processes       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Focus on improving delivery of existing products or services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Focus on employee skills/improve work force                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- n. Focus on understanding and/or meeting customer needs

**GOODS OR SERVICES OFFERED**

During the three years 2015 to 2017, did this business sell any goods or offer any services?

- Yes  
 No – Skip to ORGANIZATIONAL AND MARKETING INNOVATION

**PRODUCT INNOVATION**

During the three years 2015 to 2017, did this business introduce new or significantly improved:  
**Select one for each row.**

|   | Yes                      | No                       | Not<br>Applicable        |
|---|--------------------------|--------------------------|--------------------------|
| A. <b>Goods</b> (exclude the simple resale of new goods and changes of a solely aesthetic nature). A good is usually a tangible object such as a smartphone, furniture, or packaged software, but downloadable software, music and film are also goods. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. <b>Services</b> . A service is usually intangible, such as retailing, insurance, educational courses, air travel, consulting, etc.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**If response to A. (Goods) OR B. (Services) from the ‘Product Innovation’ question is Yes, then we consider this to be a product innovation.**

**If response to A. (Goods) AND B. (Services) from the ‘Product Innovation’ question is No, then skip to ‘Process Improvement’**

**BUSINESS PRODUCT INNOVATION**

During the three years 2015 to 2017, were any of this business’s product innovations (goods or services): **Select one for each row.**

|                                   |  | Yes                      | No                       |
|-----------------------------------|--|--------------------------|--------------------------|
| <b>New to the market?</b>         | This business introduced a new or significantly improved product (good or service) into your market before its competitors (it may have already been available in other markets) | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>Only new to this business?</b> | This business introduced a new or significantly improved product (good or service) that was already available from its competitors in the market                                 | <input type="checkbox"/> | <input type="checkbox"/> |

**PERCENT OF SALES FROM PRODUCT INNOVATION**

Include your total sales only for the year 2017. Give the percent of total sales in 2017 only from:

A. New or significantly improved products (goods or services) introduced during the three years 2015 to 2017, that were **new to the market**

B. New or significantly improved products (goods or services) introduced during the three years 2015 to 2017, that were **only new to this business**

C. Products (goods or services) that were **unchanged or only marginally modified** during the three years 2015 to 2017, (include the resale of new products purchased from other companies)

|  |  |  |   |
|--|--|--|---|
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |

**TOTAL SALES FROM 2017**

|          |          |          |   |
|----------|----------|----------|---|
| <b>1</b> | <b>0</b> | <b>0</b> | % |
|----------|----------|----------|---|

**PROCESS INNOVATION**

During the three years 2015 to 2017, did this business introduce new or significantly improved:  
*Select one for each row.*

|   | Yes                      | No                       | Not Applicable           |
|---|--------------------------|--------------------------|--------------------------|
| A. <b>Methods of manufacturing</b> for producing goods or services  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. <b>Logistics, delivery or distribution methods</b> for inputs, goods or services   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. <b>Supporting activities</b> for processes, such as maintenance systems or operations for purchasing, accounting, or computing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If response to A. (Methods of Manufacturing), B. (Logistics, delivery, or distribution methods) or C. (Supporting activities) 'Process Innovation' question is Yes, then we consider this to be a process innovation.

If response to A. (Goods) AND B. (Services) from the 'Product Innovation' question is No, AND response to A. (Methods of Manufacturing), B. (Logistics, delivery, or distribution methods) AND C. (Supporting activities) from the 'Process Innovation' question is No, then skip to 'Organizational and Marketing Innovation'.

**PRODUCT OR PROCESS INNOVATION ACTIVITIES**

Innovation activities include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.

During the three years 2015 to 2017, did this business engage in the following product or process innovation activities? **Select one for each row.**

|   |   | Product or process innovation activities only |                          |
|---|---|---|--------------------------|
|   |   | Yes   | No                       |
| <b>A. In-house R&amp;D</b>  | Research and development activities undertaken by this business to create new knowledge or solve scientific or technical problems (include software development that meets this requirement)                      | <input type="checkbox"/>                      | <input type="checkbox"/> |
|   | If yes, did this business perform R&D during the three years 2015 to 2017:  |   |                          |
|   | <input type="checkbox"/> Continuously (business had permanent R&D staff in-house)   |   |                          |
|   | <input type="checkbox"/> Occasionally (as needed only)  |   |                          |
| <b>B. External R&amp;D</b>  | This business contracted-out R&D to other companies (include affiliated companies) or to public or private research organizations   | <input type="checkbox"/>                      | <input type="checkbox"/> |
| <b>C. Acquisition of machinery, equipment, software &amp; buildings</b>           | New machinery, equipment software and building that were acquired for the purpose of developing goods, services, manufacturing or logistics   | <input type="checkbox"/>                      | <input type="checkbox"/> |
| <b>D. Acquisition of existing knowledge from other companies or organizations</b> | Acquisition of existing know-how, copyrighted works, patented and non-patented inventions, etc. from other companies or organizations for the development of new or significantly improved products and processes | <input type="checkbox"/>                      | <input type="checkbox"/> |
| <b>E. Training for innovative activities</b>                                      | In-house or contracted out training for your personnel specifically for the development and/or introduction of new or significantly improved products and processes   | <input type="checkbox"/>                      | <input type="checkbox"/> |
| <b>F. Market introduction of innovations</b>                                      | In-house or contracted out activities for the market introduction of your new or significantly improved goods or services, including market research, launch advertising, and social media announcements          | <input type="checkbox"/>                      | <input type="checkbox"/> |

|                          |  |                          |                          |
|--------------------------|--|--------------------------|--------------------------|
| <b>G. Brand Building</b> | In-house or contracted out activities such as advertising or promotion to build this business’s brand identity or brand name   | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>H. Design</b>         | In-house or contracted out activities to alter the shape, appearance or usability of goods or services   | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>I. Other</b>          | Other in-house or contracted out activities to develop or implement new or significantly improved products or processes such as feasibility studies, testing, industrial engineering, etc. | <input type="checkbox"/> | <input type="checkbox"/> |

**RESULTS OF INNOVATION ACTIVITIES**

During the three years 2015 to 2017, did this business have any innovation activities that did not result in a product or process innovation because the activities were:

**Select one for each row.**

|   | <b>Yes</b>               | <b>No</b>                |
|---|--------------------------|--------------------------|
| A. Abandoned or suspended before completion | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Still ongoing at the end of 2017         | <input type="checkbox"/> | <input type="checkbox"/> |

**PUBLIC FINANCIAL SUPPORT FOR INNOVATION ACTIVITIES**

During the three years 2015 to 2017, did this business receive any public financial support for innovation activities from the following levels of U.S. government? Include financial support from tax credits, grants, subsidized loans, and loan guarantees. Exclude R&D and other innovation activities conducted entirely for the public sector under contract. **Select one for each row.**

|                              | <b>Innovation activities only</b> |                          |
|------------------------------|-----------------------------------|--------------------------|
|                              | <b>Yes</b>                        | <b>No</b>                |
| A. Local or State government | <input type="checkbox"/>          | <input type="checkbox"/> |
| B. U.S. Federal government   | <input type="checkbox"/>          | <input type="checkbox"/> |

**INNOVATION ACTIVITIES BY TYPE AND LOCATION OF COOPERATION PARTNER**

During the three years 2015 to 2017, with which of the following companies or organizations and indicating their location, did this business cooperate with on any of its innovation activities? Innovation cooperation is active participation with other companies or organizations on innovation activities. Both partners do not need to commercially benefit. Exclude work that is contracted out. **Select all that apply.**

| <b>Type and Location of Cooperation Partner</b> | <b>United States</b> | <b>All other countries</b> | <b>Not Applicable</b> |
|---|----------------------|----------------------------|-----------------------|
|---|----------------------|----------------------------|-----------------------|



- |   |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
| A. Other affiliated companies (legal entities under common ownership) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Suppliers of equipment, materials, components, or software         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Clients or customers from the private sector                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Clients or customers from the public sector                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Competitors or other companies in your sector                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Companies not in your sector                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Consultants or commercial labs                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Universities or other higher education institutes                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I. Government or public research institutes                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J. Private research institutes  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**ORGANIZATIONAL AND MARKETING INNOVATION**

During the three years 2015 to 2017, did this business introduce new:

*Select one for each row.*

- |   | <b>Yes</b>               | <b>No</b>                |
|---|--------------------------|--------------------------|
| A. <b>Business practices</b> for organizing procedures (for example, first time use of supply chain management, business re-engineering, knowledge management, lean production, quality management, etc.)   | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Methods of <b>organizing work responsibilities and decision making</b> (for example, first time use of a new system of employee responsibilities, team work, decentralization, integration or de-integration of departments, education/training systems, etc.) | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Methods of <b>organizing external relations</b> with other companies or public organizations (for example, first time use of alliances, partnerships, outsourcing or sub-contracting, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Aesthetic <b>design or packaging</b> of a good or service (exclude changes that alter the product’s functional or user characteristics – these are product innovations)  | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Media or techniques for <b>product promotion</b> (for example, first time use of a new advertising media, a new brand image, introduction of loyalty cards, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Methods for <b>product placement</b> or sales channels (for example, first time use of franchising or distribution licenses, direct selling, exclusive retailing, new concepts for product presentation, etc.)   | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Methods of <b>pricing</b> goods or services (for example, first time use of variable pricing by demand, discount systems, etc.)  | <input type="checkbox"/> | <input type="checkbox"/> |

**If response to A. (Goods) AND B. (Services) from the ‘Product Innovation’ question is No, AND response to A. (Methods of Manufacturing), B. (Logistics, delivery, or distribution methods) AND C. (Supporting activities) from the ‘Process Innovation’ question is No, AND response to A.**

**(Business Practices), B. (Organizing work responsibilities and decision making), C. (Organizing external relations), D. (Design or packaging), E. (Product promotion), F. (Product placement), AND G. (Pricing) from the ‘Organization and Marketing Innovation question is NO, then skip to ‘Business Reason for Not Innovating’.**

**FACTORS INTERFERING WITH BUSINESS INNOVATION**

During the three years 2015 to 2017, how important were the following factors in interfering with this business’s ability to innovate? **Select one for each row.**

|   | <b>Very Important</b>    | <b>Somewhat Important</b> | <b>Not at all Important</b> |
|---|--------------------------|---------------------------|-----------------------------|
| A. Lack of internal finance                                 | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| B. Lack of credit or private equity                         | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| C. Innovation costs too high                                | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| D. Lack of skilled employees within the business            | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| E. Lack of collaboration partners                           | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| F. Difficulties in obtaining government grants or subsidies | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| G. Uncertain market demand for your ideas                   | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |
| H. Too much competition in your market                      | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/>    |

**REGULATIONS AND INNOVATION**

What is the effect of the following types of legislation or regulations on this business’s innovation activities during the three years 2015 to 2017. **Select all that apply.**

| <b>Legislation or regulation</b>     | <b>Stimulated innovation</b> | <b>Created no major problems</b> | <b>Created uncertainty</b> | <b>Generated an excessive burden</b> | <b>Not applicable</b>    |
|--------------------------------------|------------------------------|----------------------------------|----------------------------|--------------------------------------|--------------------------|
| Product safety / consumer protection | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |
| Operational and worker safety        | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |
| Environmental                        | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |
| Intellectual property                | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |
| Tax                                  | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |
| Employment or social affairs         | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |
| Other, <i>Specify</i> _____          | <input type="checkbox"/>     | <input type="checkbox"/>         | <input type="checkbox"/>   | <input type="checkbox"/>             | <input type="checkbox"/> |

**Skip to ‘R&D Activities’**

**BUSINESS REASONS FOR NOT INNOVATING**

Which of the following best describes why this business had no innovation activities during the three years 2015 to 2017:

- No compelling reason to innovate - **Skip to ‘REASONS FOR NOT INNOVATING’**

- Considered innovating, but too many issues prevented it

**FACTORS PREVENTING INNOVATION**

During the three years 2015 to 2017, how important were the following factors in preventing this business from innovating? **Select one for each row.**

|  | <b>Very<br/>Important</b> | <b>Somewhat<br/>Important</b> | <b>Not at all<br/>Important</b> |
|--|---------------------------|-------------------------------|---------------------------------|
| A. Lack of internal finance  | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| B. Lack of credit or private equity  | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| C. Innovation costs too high   | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| D. Lack of skilled employees within the business                           | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| E. Lack of collaboration partners  | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| F. Difficulties in obtaining government grants or subsidies                | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| G. Uncertain market demand for your ideas                                  | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| H. Too much competition in your market                                     | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| I. Legislation/regulation that generated excessive burden                  | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| J. Legislation/regulation that created uncertainty                         | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| K. Legislation/regulation that lacked consistency across the United States | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |

**REASONS FOR NOT INNOVATING**

How important were the following reasons for this business not to conduct innovation activities during the three years 2015 to 2017? **Select one for each row.**

|  | <b>Very<br/>Important</b> | <b>Somewhat<br/>Important</b> | <b>Not at all<br/>Important</b> |
|--|---------------------------|-------------------------------|---------------------------------|
| A. Low demand for innovations in your market                                   | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| B. No need to innovate due to previous innovations                             | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| C. No need to innovate due to very little competition in the business's market | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |
| D. Lack of good ideas for innovations  | <input type="checkbox"/>  | <input type="checkbox"/>      | <input type="checkbox"/>        |

## **Research and Development**

This section collects information on research and development activity from businesses.

### **What is Research and Development (R&D)?**

Research and development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge and to devise new applications of available knowledge.

### **R&D activity in software INCLUDES:**

- Software development or improvement activities that expand scientific or technological knowledge
- Construction of new theories and algorithms in the field of computer science

### **R&D activity in software EXCLUDES:**

- Software development that does not depend on a scientific or technological advance, such as
- supporting or adapting existing systems
- adding functionality to existing application programs, and
- routine debugging of existing systems and software
- Creation of new software based on known methods and applications
- Conversion or translation of existing software and software languages
- Adaptation of a product to a specific client, unless knowledge that significantly improved the base program was added in that process

### **Reporting unit**

The reporting unit is this business, including all subsidiaries and divisions. Include subsidiary companies where there is more than 50 percent ownership.

### **Reporting period**

Report data for the calendar year 2017, if possible, or for this business's fiscal year ending between April 2017 and March 2018.

### **Estimates are acceptable:**

Report all items to the best of your ability.

This section should take approximately 12 minutes to complete.

**R&D ACTIVITIES**

During 2017, did this business do any of the following R&D activities? Include activities that:

- This business performed
- Others paid this business to do
- This business paid others to do

**Select one for each row.**

|   | <b>Yes</b>               | <b>No</b>                |
|---|--------------------------|--------------------------|
| A. Conducted activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses  | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Conducted activities aimed at acquiring new knowledge for solving a specific problem or meeting a specific commercial objective  | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Conducted systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new products or processes or to improving existing products or processes | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Developed and tested goods, services, or processes that were derived from scientific research or technical findings  | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Developed software that advanced scientific or technological knowledge   | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Produced findings that could be published in academic journals or presented at scientific conferences  | <input type="checkbox"/> | <input type="checkbox"/> |
| G. Applied scientific or technical knowledge in a way that has never been done before   | <input type="checkbox"/> | <input type="checkbox"/> |
| H. Created new scientific or technical solutions that can be generalized to other situations  | <input type="checkbox"/> | <input type="checkbox"/> |
| I. Conducted work to discover previously unknown technological facts, structures, or relationships  | <input type="checkbox"/> | <input type="checkbox"/> |
| J. Conducted work to extend the understanding of scientific facts, relationships, or principles in ways that could be useful to others  | <input type="checkbox"/> | <input type="checkbox"/> |

**If response is No to A – J, then skip to ‘Patents Pending’**

**R&D COSTS**

What was the total cost (both direct and indirect) in 2017 for all the R&D activities reported as “Yes” in the ‘R&D ACTIVITIES’ question? Your best estimate is acceptable.

**Include the following costs:**

- Salaries, wages, fringe benefits
- Plant, machinery, and equipment, except that which was capitalized because it had an alternative future use
- Materials, supplies, software
- Rent, utilities
- Consultants, contractors

- Depreciation expense from plant, machinery, and equipment that was capitalized because it had an alternative future use

**Do not include:**

- Costs for routine product testing, quality control, and technical services unless they are an integral part of an R&D project
- Market research
- Efficiency surveys or management studies
- Literary, artistic, or historical projects, such as films, music, or books and other publications
- Prospecting or exploration for natural resources

|   | \$ Billions |  |  | Millions |  |  | Thousands |  |  |
|---|-------------|--|--|----------|--|--|-----------|--|--|
| Total costs for R&D activities reported in the 'R&D Activities' question for 2017 |             |  |  |          |  |  |           |  |  |

**TYPES OF R&D COSTS**

Of the <response generated from 'R&D Costs'> total R&D amount reported in the 'R&D COSTS' question, what percent was for each of the following types of costs?

|  |  |  |  |   |
|--|--|--|--|---|
| a. Salaries, wages, and fringe benefits                                  |  |  |  | % |
| b. Expensed machinery and equipment (not capitalized)                    |  |  |  | % |
| c. Materials and supplies  |  |  |  | % |
| d. Payments to business partners for collaborative R&D                   |  |  |  | % |
| e. Purchased R&D services  |  |  |  | % |
| f. Depreciation on R&D property and equipment                            |  |  |  | % |
| g. All other costs (for example, consultants, contractors, travel, rent) |  |  |  | % |
| Total = 100%   |  |  |  |   |

**FUNDING SOURCES FOR R&D ACTIVITIES**

Of the <response generated from 'R&D Costs'> total R&D amount reported in 'R&D COSTS' question, how much was paid for by the following sources?

|  |  |  |  |   |
|--|--|--|--|---|
| a. This U.S. business                                    |  |  |  | % |
| b. Your foreign owner (if the business is foreign owned) |  |  |  | % |
| c. Another U.S. business                                 |  |  |  | % |
| d. Other businesses located outside the U.S.             |  |  |  | % |

- e. U.S. university or college
- f. U.S. non-profit organization
- g. U.S. Federal government (including R&D grants)
- h. U.S. State or Local government (not including state universities)
- i. All other organizations outside the U.S.

|  |  |  |   |
|--|--|--|---|
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |

Total = 100%

**R&D PAID FOR BY THIS BUSINESS**

Of the <response generated from 'R&D Costs'> total R&D amount reported in the 'R&D COSTS' question, how much did this business pay others to perform?

|   | \$ Billions |  |  | Millions |  |  | Thousands |  |  |
|---|-------------|--|--|----------|--|--|-----------|--|--|
| Total costs for R&D paid for by this business |             |  |  |          |  |  |           |  |  |

**PERCENT PAID FOR R&D CONDUCTED BY OTHERS**

Of the <response generated from 'R&D PAID FOR BY THIS BUSINESS'> R&D amount your company paid others to perform, what percentage went to another U.S. business, a U.S. university or college, or another source?

**AMOUNT OF R&D PAID TO:**

- a. Another U.S. business
- b. U.S. university or college
- c. Other (specify): \_\_\_\_\_

|  |  |  |   |
|--|--|--|---|
|  |  |  | % |
|  |  |  | % |
|  |  |  | % |

Total = 100%

**R&D CATEGORIES**

Of the <response generated from 'R&D Costs'> total R&D amount reported in the 'R&D COSTS' question, how much was for the following categories?

- a. Basic research— activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses
- b. Applied research— activities aimed at solving a specific problem or meeting a specific commercial objective

|  |  |  |   |
|--|--|--|---|
|  |  |  | % |
|  |  |  | % |

- c. Development— systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new products or processes or to improving existing products or processes

|  |  |  |   |
|--|--|--|---|
|  |  |  | % |
|--|--|--|---|

Total = 100%

**R&D EMPLOYEES**

For the pay period including March 12, 2017, how many employees from this business’s foreign and domestic operations, were **R&D employees** and how many were **all other employees**?

**R&D employees include** all employees who work on R&D or who provide direct support to R&D, such as researchers, R&D managers, technicians, clerical staff, and others assigned to R&D groups. **Exclude** employees who provide only indirect support to R&D, such as corporate personnel, security guards, and cafeteria workers.

|                        | (1) Domestic Operations | (2) Foreign Operations | (3) Total Employees |
|------------------------|-------------------------|------------------------|---------------------|
| a. R&D employees       | <Calculate Value>       | <Calculate Value>      | <Calculate Value>   |
| Female R&D employees   |                         |                        | <Calculate Value>   |
| Male R&D employees     |                         |                        | <Calculate Value>   |
| b. All other employees |                         |                        | <Calculate Value>   |
| c. Total employees     | <Calculate Value>       | <Calculate Value>      | <Calculate Value>   |

**R&D EMPLOYEE OCCUPATIONS**

For the pay period including March 12, 2017, how many of the **<response generated from ‘Total R&D Employees (a.3)’>** total R&D employees reported in the ‘R&D EMPLOYEES’ question worked in the occupations listed below?

|  | (1) Domestic Operations | (2) Foreign Operations | (3) Total Employees |
|--|-------------------------|------------------------|---------------------|
| a. Researchers (including R&D scientists, engineers, and their managers) |                         |                        | <Calculate Value>   |
| Number of Researchers with PhD (excluding MD, JD, and EdD)               |                         |                        | <Calculate Value>   |
| b. R&D technicians and equivalent staff                                  |                         |                        |                     |



|  |                   |                   |                   |
|--|-------------------|-------------------|-------------------|
| c. R&D support staff<br>(clerical and other) |                   |                   |                   |
| d. Total R&D employees                       | <Calculate Value> | <Calculate Value> | <Calculate Value> |

**DOMESTIC R&D EMPLOYEES FULL TIME EQUIVALENT**

Of the <response generated from ‘Domestic – R&D Employees Question’ (a.1)> domestic R&D employees reported previously, what was the number of full-time equivalents (FTEs) for R&D activity? For full-time R&D employees use the number of employees for the FTEs. For other full-time employees not working solely on R&D or part-time employees working on R&D use the share of full-time work week they work on R&D.

**Total FTEs** \_\_\_\_\_

**DOMESTIC RESEARCHERS FULL TIME EQUIVALENT**

Of the < response generated from ‘Domestic Researchers – R&D Occupations Question (a.1)> domestic researchers reported previously, what was the number of full-time equivalents (FTEs) for R&D activity?

**Total FTEs** \_\_\_\_\_

**TAX CREDIT FOR RESEARCH ACTIVITIES**

Did this business file for the tax credit for increasing research activities (IRS Form 6765) in 2017?

- Yes
- No

**TECHNOLOGY AND INTELLECTUAL PROPERTY**

**This section collects information on intellectual property and technology use for the business.**

**This section should take approximately 7 minutes to complete.**

**PATENTS PENDING**

How many U.S. patent applications, if any, did this business have pending as of the end of 2017? If none, report zero.

\_\_\_\_\_

**PATENTS OWNED**

How many U.S. patents did this business own as of the end of 2017? If none, report zero.

\_\_\_\_\_

**INTELLECTUAL PROPERTY ACTIVITIES**

Indicate whether this business did any of the following during 2017. **Select one for each row.**

|  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| a. Transferred intellectual property (IP) to others not owned by this business through participation in technical assistance or "know how" agreements  | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Received IP from others not owned by this business through participation in technical assistance or "know how" agreements   | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Participated in cross-licensing agreements in which two or more parties grant a license to each other for the use of the subject matter claimed in one or more of the patents owned by each party | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Allowed free use of patents or other IP owned by this business (for example, allowing free use of software patents by the open source community)  | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Made use of open source patents or other freely available IP not owned by this business   | <input type="checkbox"/> | <input type="checkbox"/> |

**IMPORTANCE OF INTELLECTUAL PROPERTY**

During 2017, how important to this business were the following types of intellectual property protection? **Select one for each row.**

| <b>Very Important</b> | <b>Somewhat Important</b> | <b>Not at all Important</b> |
|-----------------------|---------------------------|-----------------------------|
|-----------------------|---------------------------|-----------------------------|

|   |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
| A. Utility patents (patents for inventions) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B. Design patents (patents for appearance)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C. Trademarks                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D. Copyrights                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E. Trade secrets                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. Nondisclosure agreements                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**DIGITAL SHARE OF BUSINESS ACTIVITY**

In 2017, how much of each type of information was kept in digital format at this business?  
**Select one for each row.**

|                      | None                     | Up to 50%                | More than 50%            | All                      | Don't know               | This type of information not collected by this business |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|
| A. Personnel         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |
| B. Financial         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |
| C. Customer Feedback | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |
| D. Marketing         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |
| E. Supply Chain      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |
| F. Production        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |
| G. Other: (specify)  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>                                |

**CLOUD SERVICE PURCHASES**

Considering the amount spent on each of these IT functions, how much was spent on cloud services? (Cloud services are services provided by a third party that this business accesses on-demand via the internet.) **Select one for each row.**

|   | None                     | Up to 50%                | More than 50%            | All                      | Don't Know               | Don't use this IT function |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
| A. All IT functions                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| B. Security or firewall                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| C. Servers                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |
| D. Data storage and management (Examples: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>   |

|    |  |                          |                          |                          |                          |                          |                          |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|    | Amazon Web Services, IBM Bluemix, Microsoft Azure)                                 |                          |                          |                          |                          |                          |                          |
| E. | Collaboration and file synchronization (Examples: Dropbox, OneDrive, Google Drive) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F. | Data Analysis  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G. | Billing and account management   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H. | Customer relationship management   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I. | Other: (specify)   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**BUSINESS TECHNOLOGIES**

In 2017, to what extent did this business use the following technologies in producing goods or services? **Select one for each row.**

|   | No use                   | Testing, but not using in production or service | In use for less than 5% of production or service | In use for between 5% – 25% of production or service | In use for more than 25% of production or service | Don't know               |
|---|--------------------------|---|--|--|---|--------------------------|
| A. Augmented reality  | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| B. Automated guided vehicles (AGV) or AGV systems                             | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| C. Automated storage and retrieval systems                                    | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| D. Machine learning   | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| E. Machine vision software  | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| F. Natural language processing  | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| G. Radio-frequency identification (RFID) inventory system                     | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| H. Robotics   | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |
| I. Touchscreens/kiosks for customer interface (Examples: self-checkout, self- | <input type="checkbox"/> | <input type="checkbox"/>                        | <input type="checkbox"/>                         | <input type="checkbox"/>                             | <input type="checkbox"/>                          | <input type="checkbox"/> |

check-in,  
touchscreen  
ordering)

J. Voice recognition  
software

## **FINANCING AND OTHER BUSINESS CHARACTERISTICS**

**This section collects information on various characteristics of the business. This section should take approximately 3 minutes to complete.**

### **ONE FAMILY MAJORITY OWNERSHIP**

In 2017, did **two or more members of one family own the majority** of this business? Family refers to spouses/unmarried partners, parents/guardians, children, siblings, or close relatives.

- Yes  
 No

### **JOINT OWNERSHIP**

In 2017, did spouses/unmarried partners jointly own this business?

- Yes  
 No – Skip to FUNDING FROM OWNER(S)

### **EQUAL OPERATION**

In 2017, was this business operated equally by both spouses/unmarried partners?

- Yes, equally operated by spouses/unmarried partners  
 No, primarily operated by Owner 1  
 No, primarily operated by Owner 2

### **CAPITAL FUNDING**

For the owner(s) reported, what was the source(s) of capital used to start or initially acquire this business? ***Select all that apply.***

- Personal/family savings of owner(s)  
 Personal/family assets other than savings of owner(s)  
 Personal/family home equity loan  
 Personal credit card(s) carrying balances  
 Business credit card(s) carrying balances  
 Government-guaranteed business loan from a bank or financial institutions, including SBA-guaranteed loans  
 Business loan from a bank or financial institution  
 Business loan from a federal, state, or local government  
 Business loan/investment from family/friend(s)  
 Investment by venture capitalist(s)  
 Grants  
 Other source(s) of capital

- Don't know
- None needed – Skip to FUNDING FROM OWNER(S)

### **AMOUNT OF CAPITAL NEEDED TO START OR INITIALLY ACQUIRE THE BUSINESS**

For the owner(s) reported, what was the total amount of capital used to start or initially acquire this business?

- Less than \$5,000
- \$5,000 - \$9,999
- \$10,000 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$99,999
- \$100,000 - \$249,999
- \$250,000 - \$999,999
- \$1,000,000 - \$2,999,999
- \$3,000,000 or more
- Don't know

### **FUNDING FROM OWNER(S)**

For 2017, what was the total amount of money that the owner(s) personally put into the business? Your best estimate is fine.

Include:

- Investments from personal savings
- Personal retirement accounts
- Home equity loans
- Personally borrowed funds

- Business does not have owners
- \$0
- \$1 - \$4,999
- \$5,000 - \$9,999
- \$10,000 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$99,999
- \$100,000 - \$249,999
- \$250,000 or more
- Don't Know

**FUNDING FROM INSIDERS**

For 2017, what was the total amount of investment funds this business received from family, friends, and employees?

- \$0
- \$1 - \$4,999
- \$5,000 - \$9,999
- \$10,000 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$99,999
- \$100,000 - \$249,999
- \$250,000 or more
- Don't know

**FUNDING FROM BANKS OR OTHER FINANCIAL INSTITUTIONS**

For 2017, what was the total amount of money this business borrowed from a bank or other financial institutions, including business loans, a business credit card carrying a balance, or a business line of credit? Include all draws on a business line of credit, even if paid off during the year.

- \$0
- \$1 - \$4,999
- \$5,000 - \$9,999
- \$10,000 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$99,999
- \$100,000 - \$249,999
- \$250,000 or more
- Don't know

**FUNDING FROM OUTSIDE INVESTORS**

For 2017, what was the total amount of money this business received from angel investors, venture capitalists, or other businesses in return for a share of ownership in this business? (An "angel investor" is an affluent individual who provides capital for a business start-up, usually in exchange for convertible debt or ownership equity.)

- \$0
- \$1 - \$4,999
- \$5,000 - \$9,999
- \$10,000 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$99,999



- \$100,000 - \$249,999
- \$250,000 or more
- Don't know

#### **FUNDING FROM GOVERNMENT GRANTS**

For 2017, what was the total amount of money this business received from government grants (such as the Small Business Innovation Research (SBIR) and/or Small Business Technology Transfer (STTR) programs)?

- \$0
- \$1 - \$4,999
- \$5,000 - \$9,999
- \$10,000 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$99,999
- \$100,000 - \$249,999
- \$250,000 or more
- Don't know

#### **AVOIDANCE OF ADDITIONAL FINANCING**

At any time during 2017, did this business need additional financing?

- Yes, business needed additional financing and the owner(s) chose not to apply
- Yes, business needed additional financing and the owner(s) did apply - **Skip to PROFITABILITY**
- No, business did not need additional financing – **Skip to PROFITABILITY**

#### **REASON FOR AVOIDANCE OF ADDITIONAL FINANCING NEEDED**

Why did this business choose not to apply for additional financing? **Select all that apply.**

- Did not think business would be approved by lender
- Did not want to accrue debt
- Decided the financing costs would be too high
- Preferred to reinvest the business profits instead
- Felt the loan search/application process would be too time consuming
- Decided to wait until funding conditions improved
- Decided to wait until business hit milestones to be in stronger position to raise funds
- None of the above

**PROFITABILITY**

For 2017, did this business have profits, losses, or break even?

- Profits
- Losses
- Break even

**NEGATIVE IMPACT ON PROFITABILITY**

For 2017, which of the following negatively impacted the profitability of this business? Only include responses that impacted profitability. **Select all that apply.**

- Access to financial
- Cost of financial capital
- Finding qualified labor
- Taxes
- Government regulations (for example, U.S. Federal, state and/or local)
- Slow business or lost sales
- Customers or clients not making payments or paying late
- The unpredictability of business conditions
- Changes or updates in technology
- None of the above

**TYPES OF CUSTOMERS**

In 2017, which of the following types of customers accounted for 10% or more of this business's total sales of goods and/or services? **Select all that apply.**

- U.S. Federal government
- State and local government, including school districts, transportation authorities, etc.
- Other businesses, including distributors of your product(s)
- Other organizations (foreign governments, nonprofits, etc.)
- Individuals

**TYPES OF WORKERS**

In 2017, which of the following types of workers were used by this business? **Select all that apply.**

- Full-time paid employees (workers who received a W-2)
- Part-time paid employees (workers who received a W-2)
- Paid day laborers
- Temporary staffing obtained from a temporary help service
- Leased employees from a leasing service or a professional employer organization

- Contractors, subcontractors, independent contractors, or outside consultants (workers who received a 1099 or payment from another company)
- None of the above

**EMPLOYEE BENEFITS**

In 2017, which of the following employee benefits were paid totally or partly by this business?

**Select all that apply.**

- Health insurance
- Contributions to retirement plans, including 401(k), Keogh, etc.
- Profit sharing and/or stock options
- Paid holidays, vacation, and/or sick leave
- Tuition assistance and/or reimbursement
- None of the above

**CONTACT INFORMATION**

**Enter the first and last name of the person who is filling out this survey. We request a telephone number so we can contact you if there is a question.**

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Email address: \_\_\_\_\_

**Additional Remarks: Please use this space for any explanations that may be essential in understanding your reported data.**

**THANK YOU**