



2014 Microbusiness Innovation Science and Technology Survey

Dear Small Business Owner,

You are part of a vital but often unrecognized part of the economy – the small business community – and the National Science Foundation (NSF) wants to hear from you.

NSF is an independent federal agency tasked with examining U.S. competitiveness in science, engineering, technology, and R&D. We are surveying all types of businesses in the U.S. to measure the extent of innovation and research and development (R&D) activities in our nation. This survey focuses on the smallest businesses in the U.S. Your answers will help policymakers address issues such as how small businesses are affected by the rapid changes in our economy and what the smallest businesses are doing to be competitive.

Please return the completed questionnaire to the address below. A postage-paid envelope is provided for your convenience.

National Science Foundation
c/o Westat, Room TA 2133
1600 Research Blvd.
Rockville, MD 20850

Your responses are confidential under law. See the statement at the bottom of this page for more details.

Contact Westat, our contractor, toll-free at 888-225-0236 OR by e-mail at MISTsurvey@westat.com.

Thank you for contributing to our study of our nation's smallest businesses.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information you provide is protected under the NSF Act and Title 26, U.S. Code. Any information publicly released (such as statistical summaries) will be in a form that does not personally identify you or your company. Your response is voluntary and failure to provide some or all of the requested information will not in any way adversely affect you or your company. Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0237 (exp. Oct. 31, 2017). Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Facilities and Operations Branch, Division of Administrative Services, National Science Foundation, Arlington, VA 22230.

A. OVERALL COMPANY INFORMATION

If you have more than one business, please answer only for the business named above.

1. Did your company have any revenues or grants in 2014?

- Yes → Go to Question 2.
 No → Go to Question 47.

2. Did another company own more than 50 percent of your company at any time during 2014?

- Yes → Go to Question 47.
 No → Go to Question 3.

3. How important to you are each of the following reasons for owning your company?

	Very important	Somewhat important	Not important
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. Opportunity for greater income	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Best avenue for my ideas/goods/services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Had to start company to find work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f. Please list any other important reasons for owning your own company:

4. For the pay period including March 12, 2014, how many people worked for your company, including those paid through grants? *Include both full-time and part-time workers as well as yourself. Please count each person only once.*

	Number of people
Owners	
a. Owners who received a W-2 issued by your company for salary or wages	<input type="text"/>
b. Other owners (paid or unpaid)	<input type="text"/>
Non-owners	
c. Employees who received a W-2 issued by your company for salary or wages	<input type="text"/>
d. Individuals who received payment in other ways (e.g., contractors/consultants/ temporary workers who received a 1099 or payment from another company)	<input type="text"/>
e. Unpaid individuals who worked for your company (e.g., interns, friends, family members)	<input type="text"/>

5. Not counting those listed in question 4, which of the following were key people you used as advisors for your company during the past year?

	Yes	No
a. Scientist or technical expert	<input type="checkbox"/>	<input type="checkbox"/>
b. Financial expert or accountant	<input type="checkbox"/>	<input type="checkbox"/>
c. Business expert	<input type="checkbox"/>	<input type="checkbox"/>
d. Marketing expert	<input type="checkbox"/>	<input type="checkbox"/>
e. Individual who offered general advice	<input type="checkbox"/>	<input type="checkbox"/>
f. Legal, regulatory, or compliance expert	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify): <input style="width: 150px;" type="text"/>		

6. Did your company hire a full-time or part-time employee within the last three years?

- Yes → Go to Question 7.
 No → Go to Question 8.

7. Please answer the following about your most recently hired employee.

	Yes	No
a. He/she performs the same tasks we performed before hiring him/her.	<input type="checkbox"/>	<input type="checkbox"/>
b. We hired him/her to get skills we otherwise would not have had.	<input type="checkbox"/>	<input type="checkbox"/>
c. We hired him/her to take over certain tasks.	<input type="checkbox"/>	<input type="checkbox"/>

8. What year did your company start? *Give the year your company first obtained an EIN (Employer Identification Number) or first filed a tax return, whichever is earlier. Please answer for the firm identified.*

Year company started

9. Please give a brief description of your company's industry.

B. FINANCIAL INFORMATION

10. What were your company's 2014 revenues, including income from grants? Please round to the nearest one thousand dollars. Your best estimate is fine.

\$,000 2014 revenues and grants

11. Approximately what share of your company's 2014 revenues and grants came from the following? *If none, enter zero; total should equal 100%.*

a. Selling <u>goods</u> to customers, including other companies	<input style="width: 80px;" type="text"/> %
b. Selling <u>services</u> to customers, including other companies	<input style="width: 80px;" type="text"/> %
c. Income from grants	<input style="width: 80px;" type="text"/> %
d. Other (specify): <input style="width: 150px;" type="text"/>	<input style="width: 80px;" type="text"/> %
TOTAL	100%

12. Approximately what percent of your revenues for 2014, excluding grants, were from customers in the United States and its territories? *If none, enter zero.*

% Percent of revenues

13. In 2014, did your company earn any revenue from customers in the following locations?

	Yes	No
a. Within your state	<input type="checkbox"/>	<input type="checkbox"/>
b. Other states or U.S. territories	<input type="checkbox"/>	<input type="checkbox"/>
c. Canada or Mexico	<input type="checkbox"/>	<input type="checkbox"/>
d. Other countries	<input type="checkbox"/>	<input type="checkbox"/>

14. During 2014, did you use any of your personal funds (e.g., credit cards, home equity loan, personal savings) for your company?

- Yes
 No

15. During 2014, did your company try to get funding (e.g., loans, investments, or gifts) from the sources in the list below?

	Yes, got funding	Yes, tried but did not get funding	No, did not try
a. Banks or credit unions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Other companies as investors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Family and friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Angel or venture capital funding (financial support in return for equity or stock in your company)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Federal government's Small Business Technology Transfer Program (STTR) or Small Business Innovation Research Program (SBIR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. During the last three years, did your company do each of the following regarding the goods or services your company offers? *Do not include adaptation or customization of your company's goods or services for a specific client's needs.*

	Yes	No	Does not apply
a. Offered a new good or service that no company has ever offered before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Offered a new good or service that your company has never offered before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Improved good's performance by making changes in materials, equipment, components, or software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Developed a new use for one of your goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Added a new feature to one of your goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Made it easier for customers to use one of your goods or services (e.g., easier access, more user friendly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. During the last three years, did your company do each of the following regarding the goods or services your company offers?

	Yes	No	Does not apply
a. Used a new way of purchasing, accounting, computing, maintenance, inventory control, or other support activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Reduced costs by changing the way you distribute one of your goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Upgraded techniques, equipment, or software to significantly improve the goods or services you offer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Made significant improvements in techniques or processes by increasing automation, decreasing energy consumption, or using software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Decreased production costs by improving the materials, components, or software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Changed methods to deliver your company's goods or services faster or more reliably	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. INNOVATION

16. Did your company sell any goods or offer any services during the last three years?

- Yes → Continue with Question 17 in the next column.
 No → Go to Question 20.

19. During the last three years, did your company do each of the following related to marketing or design?

	Yes	No	Does not apply
a. Made significant changes to the design or packaging of a good or service other than changes that alter how it is used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Promoted your company's goods or services in a new way (e.g., the first time use of a new type of advertising, a new brand image, introduction of loyalty cards)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Used new ways to sell your company's goods or services (e.g., first time use of franchising or distribution licenses, direct selling, exclusive retailing, new concepts for presentation of your goods or services)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Used new pricing methods (e.g., first-time use of pricing by demand, discount system)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Created or opened up a new market for your company's goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Told customers about a new way they can use your company's goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. During the last three years, did your company do each of the following related to your organization?

	Yes	No	Does not apply
a. Implemented new methods to improve internal processes or deliver goods or services (e.g., introduce supply chain management systems or business re-engineering, lean production and quality management systems)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Applied new methods or processes to improve workplace organization (e.g., education and training systems to improve learning and sharing, implement changes in workplace responsibilities or authority of managers and employees)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Started a new way of interacting with other firms or organizations (e.g., alliances, partnerships, outsourcing, subcontracting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D. INTELLECTUAL PROPERTY

21. How many U.S. patent applications, if any, does your company currently have pending? *If none, enter zero.*

Number of patent applications currently pending

22. How many U.S. patents does your company currently own? *If none, enter zero.*

Number of patents owned

23. Please indicate whether or not your company did each of the following during the last three years.

	Yes	No	Does not apply
a. Transferred intellectual property (IP) to others not owned by your company through participation in technical assistance or "know how" agreements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Received IP from others not owned by your company through participation in technical assistance or "know how" agreements	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>
d. Allowed free use of patents or other IP owned by your company (e.g., allowing free use of software patents by the open source community)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Made use of open source patents or other freely available IP not owned by your company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. During the last three years, how important were the following for protecting your company's intellectual property? *Mark one for each row.*

	Very important	Moderately important	A little important	Not at all important	Does not apply
a. Utility patents (patents for inventions)	<input type="checkbox"/>				
b. Design patents (patents for appearance)	<input type="checkbox"/>				
c. Trademarks	<input type="checkbox"/>				
d. Copyrights	<input type="checkbox"/>				
e. Trade secrets	<input type="checkbox"/>				
f. Nondisclosure agreements	<input type="checkbox"/>				
g. Other (specify): <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

E. SCIENTIFIC AND ENGINEERING RESEARCH AND DEVELOPMENT (R&D)

25. During 2014, did your company do any of the following R&D activities? *Include activities that:*

- *Your company performed*
- *Others paid your company to do*
- *Your company paid others to do*

	Yes	No	Does not apply
a. Conducted work that might lead to a patent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Developed and tested prototypes that were derived from scientific research or technical findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Produced findings that could be published in academic journals or presented at scientific conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Applied scientific or technical knowledge in a way that has never been done before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Created new scientific or technical solutions that can be generalized to other situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conducted work to discover previously unknown scientific facts, structures, or relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. 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"/>	<input type="checkbox"/>

26. Did you answer "Yes" to any activities in Question 25?

- Yes → Continue with Question 27 in the next column.
- No → Go to Question 33.

27. What was the total cost in thousands in 2014 for all the R&D activities you answered "Yes" to in Question 25? Your best estimate is fine. *Please include all costs:*

- *Salaries, wages, fringe benefits*
- *Equipment, materials, supplies, software*
- *Rent, utilities*
- *Consultants, contractors*

\$,000 Total cost for R&D activities reported in Question 25 for 2014

28. How much of the amount in Question 27 was for purchasing R&D services from others? Your best estimate is fine.

\$,000 Costs of R&D services purchased from others

29. To calculate the costs of R&D services you performed, please subtract Question 28 from Question 27 and enter the amount here.

\$,000 Costs of R&D services you performed

30. Of the total R&D amount you reported in Question 29, what percent was for each of the following types of costs?

- | | |
|---|------------------------|
| a. Salaries, wages, and fringe benefits for company's employees | <input type="text"/> % |
| b. Equipment | <input type="text"/> % |
| c. Software purchases and licenses | <input type="text"/> % |
| d. Other costs (e.g., consultants, contractors, travel, rent) | <input type="text"/> % |

TOTAL 100%

31. Of the total R&D amount you reported in Question 29, how much was paid for by the following sources?

a. Your company	<input type="text"/>	%
b. Another U.S. company	<input type="text"/>	%
c. U.S. university or college	<input type="text"/>	%
d. U.S. non-profit organization	<input type="text"/>	%
e. U.S. Federal government (including R&D grants)	<input type="text"/>	%
f. U.S. state or local government (not including state universities)	<input type="text"/>	%
g. Other (specify):	<input type="text"/>	%
TOTAL		100%

32. How many people worked on the R&D activities you reported in Question 25 for the pay period that included March 12, 2014?

	Number of people
a. Owners	<input type="text"/>
b. Employees who received a W-2 issued by your company for salary or wages	<input type="text"/>
c. Other paid workers (e.g., contractors, consultants, temporary workers)	<input type="text"/>
d. Unpaid workers	<input type="text"/>
<hr/>	
e. Total	<input type="text"/>

F. YOUR COMPANY STRATEGIES

33. How important is each of the following in how your company seeks a competitive advantage?

	Very important	Moderately important	A little important	Not at all important	Does not apply
a. Your low prices	<input type="checkbox"/>				
b. The quality of your goods/services	<input type="checkbox"/>				
c. Your unique goods/services	<input type="checkbox"/>				
d. The convenience you offer	<input type="checkbox"/>				
e. Your reputation	<input type="checkbox"/>				
f. Other (specify):	<input type="checkbox"/>				

34. How important is each of the following to your company's strategy?

	Very important	Moderately important	A little important	Not at all important	Does not apply
a. Updating or improving an existing good or service	<input type="checkbox"/>				
b. Developing a good or service that will save customers' money	<input type="checkbox"/>				
c. Developing a good or service that will improve current customers' experience	<input type="checkbox"/>				
d. Having a formal business strategic plan in writing	<input type="checkbox"/>				
e. Partnerships with other businesses	<input type="checkbox"/>				
f. Partnerships with one or more universities	<input type="checkbox"/>				
g. Providing individualized goods or services	<input type="checkbox"/>				

35. During 2014, how important was each of the following in moving your company forward?

	Very important	Moderately important	A little important	Not at all important	Does not apply
a. Cutting costs enough to make a profit	<input type="checkbox"/>				
b. Keeping up with demands for your goods or services	<input type="checkbox"/>				
c. Finding new customers	<input type="checkbox"/>				
d. Keeping current customers	<input type="checkbox"/>				
e. Finding people with the right job skills	<input type="checkbox"/>				
f. Getting access to funds	<input type="checkbox"/>				
g. Getting access to facilities and equipment	<input type="checkbox"/>				

36. Where would you like your company to be in five years? Check all that apply.

- Company will have a larger number of employees
- Company will have about the same number of employees as it has currently
- Company will be purchased by another company
- Uncertain
- Other (specify):

G. ABOUT THE OWNER

If your company has more than one owner, answer for the owner with the most responsibility for the direction of the company.

37. Approximately, how many hours each week do you work at this company? Include all hours whether paid or unpaid.

Number of hours

38. Is this the first company you started?

- Not applicable: I did not start this company → **Go to Question 40.**
- Yes
- No → **Continue with Question 39.**

39. Not including the company discussed in this questionnaire, what is the status of the company you started most recently?

	Yes	No
a. Company is still in business and I still own it	<input type="checkbox"/>	<input type="checkbox"/>
b. Company is no longer in business	<input type="checkbox"/>	<input type="checkbox"/>
c. Company was purchased by another company	<input type="checkbox"/>	<input type="checkbox"/>
d. Company was purchased by another individual	<input type="checkbox"/>	<input type="checkbox"/>
e. Other (specify): <input style="width: 250px; height: 20px;" type="text"/>		

40. What is the highest level of education you completed?

- Less than high school
- High school graduate
- Some college
- Bachelor's degree
- Master's degree
- Professional degree (e.g., JD, LLB, MD, DDS, DVN)
- Research doctorate (e.g., PhD, DSc, EdD)
- Other (specify):

41. What was the major field of study for your highest degree?

- Business management/administration
- Communication
- Computer science
- Education (includes research and administration, and teaching)
- Engineering
- Humanities (includes history, foreign languages and literature, and letters)
- Life sciences (includes agricultural sciences/natural resources, biological/biomedical sciences and health sciences)
- Mathematics
- Physical sciences (includes astronomy, atmospheric science and meteorology, chemistry, geological and earth sciences, ocean/marine sciences, and physics)
- Psychology
- Social sciences
- Other (specify):

42. Are you Hispanic or Latino?

- Yes
- No

43. What is your race? Please select one or more.

- American Indian or Alaska Native
- Native Hawaiian or other Pacific Islander
- Asian
- Black or African-American
- White

44. Are you male or female?

- Male
- Female

45. Where were you born?

- Inside the U.S.
- Outside the U.S.

46. Are you a U.S. citizen?

- Yes
- No

H. CONTACT INFORMATION

47. Please provide the following information for the person we may contact regarding the answers to this survey.

Name

Title

Name of business

Telephone

Extension

Fax

Extension

E-mail address

48. Enter any comments below.

Thank you for your participation in this survey.

Please return your completed questionnaire to:

National Science Foundation
c/o Westat, Room TA 2133
1600 Research Blvd.
Rockville, MD 20850.