

TABLE 47

Product innovation in companies, by industry and R&D activity: 2015–17

(Number and percent)

Industry	NAICS code	Companies (number)	In-house or external R&D			
			Number		Percent	
			Yes	No	Yes	No
All industries	11, 21–23, 31–33, 42–81	821,671	272,342	549,329	33.1	66.9
Manufacturing industries	31–33	62,446	40,568	21,878	65.0	35.0
Food	311	5,891	3,303	2,588	56.1	43.9
Beverage and tobacco products	312	3,228	2,046	1,182	63.4	36.6
Textile, apparel, and leather products	313–16	2,800	1,477	1,323	52.8	47.2
Wood products	321	2,016	908	1,108	45.1	54.9
Paper	322	618	369	249	59.7	40.3
Printing and related support activities	323	4,932	1,933	2,999	39.2	60.8
Petroleum and coal products	324	167	137	29	82.5	17.5
Chemicals	325	3,290	2,756	533	83.8	16.2
Pesticide, fertilizer, and other agricultural chemicals	3253	196	116	80	59.2	40.8
Pharmaceuticals and medicines	3254	591	533	57	90.3	9.7
Soap, cleaning compound, and toilet preparation	3256	744	589	155	79.1	20.9
Other chemicals	other 325	1,759	1,518	241	86.3	13.7
Plastics and rubber products	326	2,639	1,935	704	73.3	26.7
Nonmetallic mineral products	327	1,666	879	787	52.7	47.3
Primary metals	331	577	401	175	69.6	30.4
Fabricated metal products	332	9,316	6,039	3,277	64.8	35.2
Machinery	333	6,330	5,170	1,160	81.7	18.3
Computer and electronic products	334	4,571	4,057	514	88.8	11.2
Communications equipment	3342	510	437	72	85.8	14.2
Semiconductor and other electronic components	3344	1,178	1,022	156	86.7	13.3
Navigational, measuring, electromedical, and control instruments	3345	2,101	1,955	146	93.0	7.0
Other computer and electronic products	other 334	782	643	139	82.3	17.7
Electrical equipment, appliances, and components	335	1,714	1,380	334	80.5	19.5
Transportation equipment	336	2,851	2,169	682	76.1	23.9
Automobiles, bodies, trailers, and parts	3361–63	1,793	1,334	459	74.4	25.6
Aerospace products and parts	3364	348	260	88	74.8	25.2
Other transportation	other 336	710	574	136	80.9	19.1
Furniture and related products	337	2,767	1,264	1,502	45.7	54.3
Miscellaneous	339	7,060	4,329	2,731	61.3	38.7
Medical equipment and supplies	3391	2,432	1,337	1,096	55.0	45.0
Other miscellaneous manufacturing	3399	4,627	2,992	1,635	64.7	35.3
Nonmanufacturing industries	11, 21–23, 42–81	759,225	231,774	527,451	30.5	69.5
Agriculture, forestry, fishing, and hunting	11	1,883	558	1,325	29.6	70.4
Mining, extraction, and support activities	21	1,119	468	651	41.8	58.2
Utilities	22	287	109	178	37.9	62.1
Construction	23	64,453	14,917	49,535	23.1	76.9
Wholesale trade	42	63,426	25,659	37,767	40.5	59.5
Retail trade	44–45	114,735	24,875	89,860	21.7	78.3
Transportation and warehousing	48–49	13,973	3,665	10,308	26.2	73.8
Information	51	20,395	12,302	8,093	60.3	39.7
Publishing	511	7,062	4,948	2,115	70.1	29.9
Newspaper, periodical, book, and directory publishers	5111	2,653	956	1,696	36.1	63.9
Software publishers	5112	4,410	3,991	419	90.5	9.5
Telecommunications	517	2,007	869	1,138	43.3	56.7
Data processing, hosting, and related services	518	3,997	2,912	1,085	72.8	27.2
Other information	other 51	7,328	3,573	3,755	48.8	51.2

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			Yes	No	Yes	No
Finance and insurance	52	38,092	9,372	28,720	24.6	75.4
Real estate and rental and leasing	53	24,163	6,411	17,752	26.5	73.5
Lessors of nonfinancial intangible assets (except copyrighted works)	533	355	207	147	58.5	41.5
Other real estate and rental and leasing	other 53	23,808	6,204	17,604	26.1	73.9
Professional, scientific, and technical services	54	137,653	64,666	72,987	47.0	53.0
Legal services	5411	14,014	3,463	10,551	24.7	75.3
Accounting, tax preparation, bookkeeping, and payroll services	5412	11,155	2,431	8,724	21.8	78.2
Architectural, engineering, and related services	5413	19,119	11,392	7,727	59.6	40.4
Specialized design services	5414	6,347	2,754	3,593	43.4	56.6
Computer systems design and related services	5415	32,559	22,457	10,102	69.0	31.0
Management, scientific, and technical consulting services	5416	31,006	13,282	17,725	42.8	57.2
Scientific research and development services	5417	3,323	2,971	351	89.4	10.6
Advertising, public relations, and related services	5418	6,518	2,326	4,192	35.7	64.3
Other professional, scientific, and technical services	5419	13,610	3,588	10,022	26.4	73.6
Management of companies and enterprises	55	229	115	115	50.0	50.0
Administrative and support and waste management and remediation services	56	41,914	11,085	30,829	26.4	73.6
Educational services	61	16,968	6,063	10,905	35.7	64.3
Health care and social assistance	62	93,660	21,150	72,510	22.6	77.4
Health care services	621–23	82,181	18,671	63,510	22.7	77.3
Social assistance	624	11,479	2,479	9,000	21.6	78.4
Arts, entertainment, and recreation	71	16,684	4,646	12,037	27.8	72.2
Accommodation and food services	72	58,621	14,844	43,777	25.3	74.7
Other services	81	50,971	10,870	40,102	21.3	78.7

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant establishment payroll. R&D activity is based on unedited company responses to innovation questions, not R&D expenditures. Statistics are representative of companies located in the United States.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Annual Business Survey, 2017.