

TABLE 55

Product or process 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	1,218,460	365,864	852,596	30.0	70.0
Manufacturing industries	31–33	99,847	55,404	44,444	55.5	44.5
Food	311	8,303	4,300	4,003	51.8	48.2
Beverage and tobacco products	312	4,037	2,439	1,598	60.4	39.6
Textile, apparel, and leather products	313–16	4,237	1,946	2,292	45.9	54.1
Wood products	321	3,903	1,420	2,483	36.4	63.6
Paper	322	1,063	548	515	51.5	48.5
Printing and related support activities	323	8,673	2,806	5,866	32.4	67.6
Petroleum and coal products	324	254	194	60	76.2	23.8
Chemicals	325	4,361	3,416	946	78.3	21.7
Pesticide, fertilizer, and other agricultural chemicals	3253	267	139	128	52.1	47.9
Pharmaceuticals and medicines	3254	800	686	114	85.8	14.2
Soap, cleaning compound, and toilet preparation	3256	936	697	239	74.5	25.5
Other chemicals	other 325	2,358	1,893	465	80.3	19.7
Plastics and rubber products	326	4,141	2,707	1,434	65.4	34.6
Nonmetallic mineral products	327	2,984	1,364	1,620	45.7	54.3
Primary metals	331	1,177	718	460	61.0	39.0
Fabricated metal products	332	19,460	10,036	9,424	51.6	48.4
Machinery	333	9,521	6,915	2,605	72.6	27.4
Computer and electronic products	334	5,849	4,786	1,064	81.8	18.2
Communications equipment	3342	605	501	105	82.7	17.3
Semiconductor and other electronic components	3344	1,779	1,295	483	72.8	27.2
Navigational, measuring, electromedical, and control instruments	3345	2,528	2,268	261	89.7	10.3
Other computer and electronic products	other 334	937	722	215	77.1	22.9
Electrical equipment, appliances, and components	335	2,280	1,701	579	74.6	25.4
Transportation equipment	336	4,112	2,798	1,314	68.0	32.0
Automobiles, bodies, trailers, and parts	3361–63	2,617	1,775	842	67.8	32.2
Aerospace products and parts	3364	593	374	220	63.0	37.0
Other transportation	other 336	901	649	252	72.0	28.0
Furniture and related products	337	5,021	1,972	3,049	39.3	60.7
Miscellaneous	339	10,456	5,325	5,131	50.9	49.1
Medical equipment and supplies	3391	3,712	1,670	2,042	45.0	55.0
Other miscellaneous manufacturing	3399	6,743	3,655	3,089	54.2	45.8
Nonmanufacturing industries	11, 21–23, 42–81	1,118,613	310,460	808,153	27.8	72.2
Agriculture, forestry, fishing, and hunting	11	3,816	1,055	2,761	27.6	72.4
Mining, extraction, and support activities	21	2,375	870	1,506	36.6	63.4
Utilities	22	582	155	427	26.6	73.4
Construction	23	112,877	24,307	88,570	21.5	78.5
Wholesale trade	42	91,960	33,098	58,862	36.0	64.0
Retail trade	44–45	152,920	31,606	121,314	20.7	79.3
Transportation and warehousing	48–49	43,007	6,939	36,068	16.1	83.9
Information	51	24,979	14,334	10,646	57.4	42.6
Publishing	511	8,522	5,594	2,928	65.6	34.4
Newspaper, periodical, book, and directory publishers	5111	3,653	1,222	2,431	33.5	66.5
Software publishers	5112	4,868	4,371	497	89.8	10.2
Telecommunications	517	2,555	1,020	1,536	39.9	60.1
Data processing, hosting, and related services	518	4,716	3,295	1,421	69.9	30.1
Other information	other 51	9,187	4,425	4,761	48.2	51.8

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Finance and insurance	52	54,344	13,218	41,126	24.3	75.7
Real estate and rental and leasing	53	40,451	9,951	30,500	24.6	75.4
Lessors of nonfinancial intangible assets (except copyrighted works)	533	466	264	202	56.7	43.3
Other real estate and rental and leasing	other 53	39,985	9,687	30,298	24.2	75.8
Professional, scientific, and technical services	54	198,235	82,260	115,975	41.5	58.5
Legal services	5411	24,968	5,465	19,503	21.9	78.1
Accounting, tax preparation, bookkeeping, and payroll services	5412	24,284	4,187	20,098	17.2	82.8
Architectural, engineering, and related services	5413	26,410	14,491	11,919	54.9	45.1
Specialized design services	5414	8,363	3,378	4,985	40.4	59.6
Computer systems design and related services	5415	44,351	27,621	16,730	62.3	37.7
Management, scientific, and technical consulting services	5416	40,458	16,138	24,320	39.9	60.1
Scientific research and development services	5417	3,929	3,437	492	87.5	12.5
Advertising, public relations, and related services	5418	8,627	2,976	5,651	34.5	65.5
Other professional, scientific, and technical services	5419	16,843	4,565	12,277	27.1	72.9
Management of companies and enterprises	55	324	140	184	43.3	56.7
Administrative and support and waste management and remediation services	56	66,303	15,699	50,604	23.7	76.3
Educational services	61	20,079	6,980	13,100	34.8	65.2
Health care and social assistance	62	125,904	28,237	97,667	22.4	77.6
Health care services	621–23	111,310	25,015	86,295	22.5	77.5
Social assistance	624	14,595	3,222	11,372	22.1	77.9
Arts, entertainment, and recreation	71	20,632	5,702	14,931	27.6	72.4
Accommodation and food services	72	86,227	20,505	65,722	23.8	76.2
Other services	81	73,598	15,407	58,191	20.9	79.1

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.