

TABLE 36

Companies with new or improved business processes, by type and industry: 2017–19

(Number and percent)

Industry	NAICS code	All companies	Any business process innovation	Innovating methods for producing goods or providing services	Innovating logistics, delivery, or distribution methods	Innovating marketing methods	Innovating information and communication systems	Innovating administration and management activities	Innovating product and business process development activities
All industries	11, 21–23, 31–33, 42–81	4,857,473	21.7	6.5	5.9	10.6	11.0	10.1	8.2
Manufacturing industries	31–33	217,058	29.3	17.1	8.1	13.2	12.0	11.6	14.6
Food	311	18,379	29.7	13.6	10.8	18.1	11.3	12.3	12.8
Beverage and tobacco products	312	8,381	36.3	19.3	16.6	23.4	15.5	15.1	17.3
Textile, apparel, and leather products	313–16	10,205	28.4	10.9	9.4	14.8	12.0	11.5	12.5
Wood products	321	10,340	22.5	11.2	6.1	9.8	8.9	8.8	11.7
Paper	322	1,795	25.2	15.1	6.2	12.3	9.0	8.0	10.5
Printing and related support activities	323	21,035	26.3	11.5	8.3	14.8	11.1	9.6	11.4
Petroleum and coal products	324	693	8.8	3.8	0.6	4.5	4.6	1.7	2.6
Chemicals	325	7,759	34.8	21.8	10.4	15.1	12.7	13.7	18.6
Pesticide, fertilizer, and other agricultural chemical	3253	555	32.6	11.2	18.9	22.9	10.1	11.7	15.3
Pharmaceuticals and medicines	3254	1,467	38.5	27.1	9.3	15.1	10.9	11.5	23.2
Soap, cleaning compound, and toilet preparation	3256	1,772	37.5	22.8	8.9	19.2	12.5	16.4	16.1
Other chemicals	other 325	3,966	32.5	20.8	10.4	12.2	13.8	13.5	18.7
Plastics and rubber products	326	7,811	32.1	20.9	9.8	12.4	12.0	16.0	19.2
Nonmetallic mineral products	327	7,758	26.9	14.4	6.4	11.4	10.8	10.7	10.4
Primary metals	331	2,437	29.7	21.7	5.0	6.3	10.1	10.0	14.8
Fabricated metal products	332	48,470	27.5	18.3	6.3	9.8	11.2	12.0	14.9
Machinery	333	18,350	35.5	23.3	8.1	14.3	14.3	13.3	18.8
Computer and electronic products	334	8,851	41.7	28.6	10.0	17.3	22.3	13.4	23.6
Communications equipment	3342	938	45.7	28.1	7.5	14.5	25.2	9.6	20.1
Semiconductor and other electronic components	3344	2,914	40.5	29.3	9.6	14.7	18.5	15.4	23.9
Navigational, measuring, electromedical, and control instruments	3345	3,649	40.9	28.2	10.2	18.5	24.0	12.9	24.6
Other computer and electronic products	other 334	1,349	43.7	28.5	12.0	21.7	24.5	13.0	23.0
Electrical equipment, appliances, and components	335	3,874	35.5	24.6	9.2	14.1	17.0	14.5	20.3
Transportation equipment	336	7,638	29.1	17.5	7.3	11.9	11.4	12.5	15.8
Automobiles, bodies, trailers, and parts	3361–63	4,728	27.2	16.3	7.6	13.1	12.3	11.3	16.5
Aerospace products and parts	3364	1,099	37.4	25.8	8.0	11.1	14.5	21.2	21.9
Other transportation	other 336	1,810	29.1	15.6	6.1	9.2	7.0	10.5	10.3
Furniture and related products	337	12,927	23.2	12.7	5.7	9.4	8.8	8.5	10.3
Miscellaneous	339	20,251	27.5	16.5	6.9	13.1	11.0	10.0	12.5

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Medical equipment and supplies	3391	8,014	27.3	17.7	6.9	10.9	9.4	7.3	11.5
Other miscellaneous manufacturing	3399	12,237	27.6	15.8	6.9	14.5	12.0	11.9	13.2
Nonmanufacturing industries	11, 21–23, 42–81	4,640,414	21.3	6.0	5.8	10.5	10.9	10.0	7.9
Agriculture, forestry, fishing, and hunting	11	22,732	14.9	6.2	5.9	4.7	6.7	7.6	5.3
Mining, extraction, and support activities	21	15,475	11.7	6.7	3.2	2.0	3.7	5.7	5.1
Utilities	22	2,615	18.8	4.7	7.8 r	5.0	7.4	6.4	5.0
Construction	23	627,340	15.4	5.1	3.5	6.2	7.1	8.9	5.9
Wholesale trade	42	253,680	28.7	9.0	11.7	16.7	12.8	11.2	11.5
Retail trade	44–45	554,596	22.7	4.7	7.5	15.2	10.8	9.3	7.6
Transportation and warehousing	48–49	157,728	24.7	3.3	18.3	5.4	10.0	9.9	5.0
Information	51	62,834	31.8	10.2	8.4	14.7	19.7	10.8	13.6
Publishing	511	18,521	39.1	12.2	11.0	19.0	25.1	11.7	17.2
Newspaper, periodical, book, and directory publishers	5111	9,824	30.3	7.4	11.3	19.1	15.2	8.4	11.2
Software publishers	5112	8,698	49.1	17.6	10.6	18.9	36.2	15.4	24.1
Telecommunications	517	6,907	27.2	9.0	9.4	13.9	19.8	12.6	9.9
Data processing, hosting, and related services	518	8,155	42.9	17.1	9.3	16.5	30.6	16.5	21.9
Other information	other 51	29,253	25.1	7.4	6.2	11.7	13.3	8.1	9.9
Finance and insurance	52	203,913	22.2	4.5	5.1	10.8	14.6	10.2	8.7
Real estate and rental and leasing	53	266,098	17.9	2.7	2.9	10.0	10.2	10.0	5.6
Lessors of nonfinancial intangible assets (except copyrighted works)	533	2,106	25.3	10.8 r	11.2	18.2	13.4	13.6	9.1 r
Other real estate and rental and leasing	other 53	263,991	17.9	2.7	2.8	10.0	10.1	9.9	5.6
Professional, scientific, and technical services	54	704,191	25.6	9.3	5.1	9.5	14.1	11.5	10.9
Legal services	5411	151,977	15.6	2.8	2.6	6.0	11.0	7.5	4.5
Accounting, tax preparation, bookkeeping, and payroll services	5412	106,233	18.9	3.9	4.8	4.4	11.8	11.4	5.2
Architectural, engineering, and related services	5413	87,739	26.6	15.9	4.9	7.6	13.5	10.8	11.7
Specialized design services	5414	27,355	27.9	7.7	7.0	16.7	9.3	11.3	11.7
Computer systems design and related services	5415	97,862	39.4	18.0	6.9	11.5	29.4	15.2	19.9
Management, scientific, and technical consulting services	5416	137,973	30.2	10.0	6.2	12.6	11.0	14.8	15.3
Scientific research and development services	5417	10,517	36.8	25.5	5.8	9.1	14.3	10.7	20.7
Advertising, public relations, and related services	5418	27,194	28.1	6.7	5.3	19.1	11.9	10.8	9.8

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Other professional, scientific, and technical services	5419	57,339	24.2	8.6	6.1	12.1	12.2	10.0	10.2
Management of companies and enterprises	55	2,391	17.6	5.4	4.4 r	6.0 r	6.3	15.2	9.1
Administrative and support and waste management and remediation services	56	285,195	18.9	5.2	4.7	8.7	8.8	10.1	7.2
Educational services	61	55,306	26.9	9.1	5.9	14.7	13.0	13.5	12.7
Health care and social assistance	62	526,683	20.7	6.1	3.9	8.1	12.8	10.8	7.5
Health care services	621–23	462,026	20.6	6.3	4.1	8.2	13.1	10.3	7.4
Social assistance	624	64,657	21.1	4.4	3.0	7.9	10.8	14.0	8.3
Arts, entertainment, and recreation	71	90,036	18.3	4.3	3.3	10.6	8.5	9.1	6.5
Accommodation and food services	72	464,061	21.4	4.9	7.8	14.2	9.7	9.7	7.2
Other services	81	345,543	18.0	6.4	3.3	9.9	8.9	8.1	6.6

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2020 Annual Business Survey: Data Year 2019.