

TABLE 130

Motivations for companies producing specialized software or goods or services with specialized software, by industry: 2016–18

(Number and percent)

Industry	NAICS code	Companies (number)	To upgrade goods or services	To expand the range of goods or services	To enter new markets or adapt existing products to new markets	To increase or maintain market share	To adopt standards and accreditation	Some other reason
All industries	11, 21–23, 31–33, 42–81	185,211	50.8	39.2	24.3	29.8	16.9	22.9
Manufacturing industries	31–33	9,294	59.4	44.6	31.6	33.9	14.0	17.4
Food	311	297	45.5	30.0	10.1 r	11.1	24.6 r	18.5
Beverage and tobacco products	312	60	25.0	18.3 r	16.7 r	50.0	16.7 r	43.3
Textile, apparel, and leather products	313–16	198	58.6	33.8	16.2 r	8.1 r	15.7 r	19.7
Wood products	321	239	78.2	37.2 r	13.0 r	25.1	10.0 r	13.0 r
Paper	322	35	68.6 r	62.9 r	65.7 r	65.7 r	57.1 r	14.3
Printing and related support activities	323	997	56.3	34.9	31.3	31.2	6.4	21.2
Petroleum and coal products	324	D	D	0.0	0.0	0.0	D	0.0
Chemicals	325	187	45.5	28.3	19.8	40.6	10.7	21.4 r
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	D	0.0	0.0	0.0	0.0	0.0	D
Pharmaceuticals and medicines	3254	46	52.2	26.1 r	28.3 r	52.2	D	D
Soap, cleaning compound, and toilet preparation manufacturing	3256	31	45.2 r	54.8	22.6 r	29.0 r	32.3	0.0
Other chemicals	other 325	108	41.7	24.1	13.9 r	41.7	D	32.4 r
Plastics and rubber products	326	290	57.6	18.3	19.0 r	9.7	7.9 r	29.7 r
Nonmetallic mineral products	327	79	53.2	21.5 r	16.5 r	38.0 r	15.2 r	31.6 r
Primary metals	331	80 r	31.3 r	10.0 r	7.5 r	7.5	68.8 r	D
Fabricated metal products	332	1,482	60.6	37.7	16.6	22.8	14.0	25.7
Machinery	333	1,631	58.7	42.1	33.8	40.0	8.5	19.7
Computer and electronic products	334	1,603	60.6	57.3	50.1	44.2	13.3	13.4
Communications equipment	3342	229	55.9	73.8	61.6	64.6	12.2 r	6.6 r
Semiconductor and other electronic components	3344	265	63.4	49.4	44.2	39.2	4.2	11.3
Navigational, measuring, electromedical, and control instruments	3345	889	61.5	60.1	51.3	41.1	16.6 r	14.6
Other computer and electronic products	other 334	220	59.1	39.5	40.5	40.9	13.2 r	17.7 r
Electrical equipment, appliances, and components	335	382	63.6	41.6	51.8	53.1	9.9	8.4
Transportation equipment	336	359	57.7	52.1	16.2	31.8	24.2 r	14.5 r
Automobiles, bodies, trailers, and parts	3361–63	280	57.1	51.4	11.8	27.9 r	25.4 r	13.2 r
Aerospace products and parts	3364	59	57.6 r	62.7	37.3 r	44.1 r	13.6 r	18.6 r
Other transportation	other 336	21	66.7 r	D	D	47.6 r	28.6 r	D
Furniture and related products	337	355	75.2	57.5	35.8	28.7	8.2 r	12.1 r
Miscellaneous	339	1,003	60.4	66.3	39.8	41.5	24.6	6.0
Medical equipment and supplies	3391	466	70.8	71.9	49.8	60.3	20.2	3.0 r
Other miscellaneous manufacturing	3399	536	51.1	61.6	31.3 r	25.0	28.7 r	8.4
Nonmanufacturing industries	11, 21–23, 42–81	175,917	50.3	38.9	23.9	29.5	17.1	23.2
Agriculture, forestry, fishing, and hunting	11	163 r	49.7	D	D	D	0.0	D
Mining, extraction, and support activities	21	279	64.5	14.3 r	3.2 r	14.7 r	7.5 r	26.5 r
Utilities	22	43	81.4	44.2	32.6 r	37.2	D	0.0
Construction	23	9,371	51.8	36.5	15.4	19.4	16.9	26.7
Wholesale trade	42	11,153	44.6	38.4	26.9	38.3	9.3	25.6

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Retail trade	44–45	13,364	53.6	33.3	22.6	27.1	13.1	22.7
Transportation and warehousing	48–49	2,373	50.2	23.5	13.7	16.1	16.2	31.3
Information	51	9,206	52.9	55.9	42.5	50.9	13.8	14.9
Publishing	511	4,068	50.8	53.3	43.9	55.8	12.3	14.1
Newspaper, periodical, book, and directory publishers	5111	321	61.7	31.8	43.6	21.8	D	23.1
Software publishers	5112	3,746	49.8	55.1	43.9	58.8	13.2	13.3
Telecommunications	517	740	42.6	58.2	30.3	33.1	8.0	30.3
Data processing, hosting, and related services	518	2,958	55.5	60.5	45.5	51.9	13.9	11.4
Other information	other 51	1,441	59.1	52.4	39.2	44.3	20.5	16.2
Finance and insurance	52	9,632	43.9	31.1	22.7	31.9	14.0	26.8
Real estate and rental and leasing	53	6,609	46.0	25.6	13.3	22.2	18.3	28.7
Lessors of nonfinancial intangible assets (except copyrighted works)	533	113	r	D	D	D	0.0	0.0
Other real estate and rental and leasing	other 53	6,495	45.1	25.2	13.5	21.7	18.6	29.2
Professional, scientific, and technical services	54	66,529	52.5	47.7	29.8	36.4	17.5	18.6
Legal services	5411	4,486	51.6	21.9	8.9	22.3	16.9	28.7
Accounting, tax preparation, bookkeeping, and payroll services	5412	9,085	47.2	31.0	15.1	31.1	25.2	24.5
Architectural, engineering, and related services	5413	8,588	54.2	39.2	20.4	32.7	16.3	23.2
Specialized design services	5414	1,196	49.5	42.6	18.8	31.3	15.4	25.6
Computer systems design and related services	5415	30,073	55.2	58.3	38.5	39.9	16.0	14.7
Management, scientific, and technical consulting services	5416	8,304	49.2	53.0	35.4	39.6	18.6	15.3
Scientific research and development services	5417	979	48.5	48.3	52.5	34.8	18.9	14.4
Advertising, public relations, and related services	5418	1,320	46.7	52.3	38.2	37.0	17.3	15.0
Other professional, scientific, and technical services	5419	2,500	52.5	38.9	21.4	42.8	10.0	20.5
Management of companies and enterprises	55	88	r	0.0	0.0	D	D	0.0
Administrative and support and waste management and remediation services	56	8,611	54.6	41.5	26.2	29.8	15.2	25.4
Educational services	61	2,634	58.4	44.4	35.2	27.8	21.4	20.1
Health care and social assistance	62	18,351	45.9	23.3	8.2	12.4	31.1	27.2
Health care services	621–23	17,018	46.2	23.3	7.9	11.8	32.5	26.4
Social assistance	624	1,333	42.7	22.8	12.2	r	20.6	37.6
Arts, entertainment, and recreation	71	2,164	50.0	32.8	20.6	16.5	9.8	26.9
Accommodation and food services	72	6,864	45.8	16.7	11.9	16.2	15.7	37.0
Other services	81	8,474	47.8	38.2	17.2	15.2	10.5	29.1

D = withheld to avoid disclosing data for individual companies; data are included in higher-level totals. r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding. Detail may exceed total because companies could select more than one response. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.