

TABLE 106

Motivation for specialized equipment technology adoption and utilization for companies using the technology, by industry: 2016–18

(Number and percent)

Industry	NAICS code	Companies (number)	To automate tasks performed by labor		To upgrade outdated processes or methods		To improve quality or reliability of processes or methods		To expand the range of goods or services		To adopt standards and accreditation		Some other reason	
All industries	11, 21–23, 31–33, 42–81	853,259	20.5		38.6		51.1		25.7		11.0		17.8	
Manufacturing industries	31–33	84,450	32.9		47.2		59.6		29.6		8.4		11.9	
Food	311	5,235	37.2		45.9		56.0		24.0		9.1		10.5	
Beverage and tobacco products	312	3,427	33.1		36.7		63.1		23.4		7.3		12.8	
Textile, apparel, and leather products	313–16	3,095	21.4		39.9		46.2		23.1		4.5		24.1	
Wood products	321	3,323	41.0		44.9		56.5		23.1		3.1		11.4	
Paper	322	745	42.8		53.3		56.2		25.2		5.8	r	10.3	r
Printing and related support activities	323	8,083	27.5		48.0		54.0		33.8		4.9		13.3	
Petroleum and coal products	324	251	12.0	r	52.2		39.4	r	36.7	r	13.9	r	3.2	r
Chemicals	325	2,945	35.0		42.9		64.1		28.5		12.6		10.8	
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	213	42.7		50.7		68.5		41.3	r	24.9	r	4.2	r
Pharmaceuticals and medicines	3254	632	37.3		44.5		69.0		30.1		26.6		10.3	
Soap, cleaning compound, and toilet preparation manufacturing	3256	586	43.3		44.2		59.4		25.3		6.8		13.8	
Other chemicals	other 325	1,514	29.7		40.6		63.3		27.3		7.5		11.0	
Plastics and rubber products	326	3,851	34.3		50.6		61.8		27.7		12.3		13.3	
Nonmetallic mineral products	327	2,310	26.4		50.0		54.6		23.8		9.6		11.0	
Primary metals	331	1,110	33.5		51.0		60.0		23.3		6.3		17.2	
Fabricated metal products	332	20,142	32.5		50.1		59.9		31.5		9.2		8.9	
Machinery	333	8,503	35.9		48.2		66.8		34.1		11.4		11.3	
Computer and electronic products	334	4,354	29.7		38.1		63.2		31.5		9.3		15.3	
Communications equipment	3342	488	26.0		33.2		69.5		27.7		8.0	r	8.4	
Semiconductor and other electronic components	3344	1,443	36.9		44.7		64.0		28.8		10.0		11.1	
Navigational, measuring, electromedical, and control instruments	3345	1,930	25.9		35.0		63.0		35.4		10.3		19.2	
Other computer and electronic products	other 334	494	26.9		35.2		55.3		28.1		4.3		18.4	
Electrical equipment, appliances, and components	335	1,814	31.0		40.8		65.0		29.3		5.8		15.5	
Transportation equipment	336	2,777	34.9		52.3		63.1		25.2		10.9		14.5	
Automobiles, bodies, trailers, and parts	3361–63	1,842	38.0		56.6		63.5		25.4		9.2		13.8	
Aerospace products and parts	3364	468	34.0		45.1		66.7		30.8		15.6		19.2	
Other transportation	other 336	466	23.2		42.7		58.2		18.9		12.9	r	12.4	
Furniture and related products	337	4,416	41.9		50.7		65.4		23.3		7.0		7.3	
Miscellaneous	339	8,067	31.1		47.7		56.3		35.0		7.4		13.3	
Medical equipment and supplies	3391	3,432	31.7		53.9		60.2		40.4		10.7		13.8	
Other miscellaneous manufacturing	3399	4,635	30.7		43.0		53.4		31.0		4.9		12.9	
Nonmanufacturing industries	11, 21–23, 42–81	768,809	19.1		37.6		50.2		25.3		11.2		18.4	
Agriculture, forestry, fishing, and hunting	11	4,266	23.4		41.0		51.2		15.6		6.0		18.6	
Mining, extraction, and support activities	21	2,511	18.8		37.6		51.1		15.5		2.2		16.8	
Utilities	22	684	18.6		35.2		52.3		13.3		10.4	r	26.0	
Construction	23	105,445	22.6		35.6		48.5		22.4		7.5		18.4	
Wholesale trade	42	38,117	24.1		39.7		47.5		25.0		8.6		18.4	

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Retail trade	44–45	82,447	21.4	40.4	49.6	23.7	9.0	17.4
Transportation and warehousing	48–49	21,161	16.2	35.0	41.3	20.3	11.8	23.8
Information	51	13,835	15.9	40.7	50.6	27.7	10.6	18.6
Publishing	511	2,147	17.7	48.4	48.0	30.8	7.8	20.4
Newspaper, periodical, book, and directory publishers	5111	1,029	19.9	53.3	45.0	27.3	5.5 r	18.4
Software publishers	5112	1,119	15.7	44.0	50.8	34.0	9.7 r	22.3
Telecommunications	517	1,650	17.2	44.0	48.5	32.7	12.8	12.8
Data processing, hosting, and related services	518	1,673	24.4	45.7	56.1	35.6	12.0	19.4
Other information	other 51	8,364	13.5	37.1	50.6	24.3	10.7	19.1
Finance and insurance	52	12,468	21.7	46.8	54.4	21.1	13.8	17.2
Real estate and rental and leasing	53	16,228	20.3	40.1	45.3	21.4	10.4	18.2
Lessors of nonfinancial intangible assets (except copyrighted works)	533	127 r	D	D	D	D	D	D
Other real estate and rental and leasing	other 53	16,100	20.4	40.4	45.6	21.5	10.4	17.6
Professional, scientific, and technical services	54	105,874	20.4	39.5	54.2	29.2	11.4	17.8
Legal services	5411	8,791	27.3	44.3	55.2	11.3	7.6	20.1
Accounting, tax preparation, bookkeeping, and payroll services	5412	9,401	22.0	43.0	54.4	14.6	13.5	17.9
Architectural, engineering, and related services	5413	28,964	23.4	39.8	54.1	27.9	11.0	16.0
Specialized design services	5414	4,237	24.5	43.9	58.0	28.2	10.2	17.1
Computer systems design and related services	5415	14,332	21.1	38.2	49.6	40.6	12.9	20.9
Management, scientific, and technical consulting services	5416	12,934	18.4	34.9	52.0	27.9	10.7	22.1
Scientific research and development services	5417	3,892	25.0	31.6	64.1	28.1	13.8	20.6
Advertising, public relations, and related services	5418	3,993	18.7	42.7	52.6	32.9	5.1	13.9
Other professional, scientific, and technical services	5419	19,328	11.4	39.2	56.0	38.4	13.1	14.4
Management of companies and enterprises	55	394	37.3	52.0	89.3	27.4 r	D	0.0
Administrative and support and waste management and remediation services	56	46,344	25.5	36.7	48.8	27.3	8.7	18.3
Educational services	61	6,368	13.3	28.4	46.1	28.0	11.3	23.0
Health care and social assistance	62	162,430	12.8	36.2	52.8	26.7	17.9	18.7
Health care services	621–23	158,942	12.7	36.2	52.9	26.9	18.0	18.5
Social assistance	624	3,488	15.7	33.7	47.0	19.5	16.5	26.3
Arts, entertainment, and recreation	71	13,917	11.9	28.7	46.1	31.2	7.8	24.8
Accommodation and food services	72	50,999	22.7	39.3	47.9	20.6	8.3	18.1
Other services	81	85,324	17.3	36.6	49.4	26.5	10.0	17.7

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 that reported a low, moderate, or high use of the technology (see Table 92).

Source(s):

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