

TABLE 126

Impact of producing artificial intelligence or goods or services with artificial intelligence on worker types, by industry: 2016–18

(Number and percent)

Industry	NAICS code	Companies (number)	Production workers				Nonproduction workers				Supervisory workers				Nonsupervisory workers			
			Increased	Decreased	Did not change	Did not employ	Increased	Decreased	Did not change	Did not employ	Increased	Decreased	Did not change	Did not employ	Increased	Decreased	Did not change	Did not employ
Fabricated metal products	332	153	43.8 r	D	38.6 r	D	D	D	96.7	D	D	D	96.7	D	D	0.0	62.7 r	D
Machinery	333	231	34.2 r	0.0	60.6	5.2 r	26.5 r	0.0	68.3	5.2 r	9.1 r	0.0	87.4	D	24.2 r	0.0	72.3	D
Computer and electronic products	334	145	23.4 r	D	66.9	6.9 r	27.6 r	D	62.1	5.5 r	18.6 r	D	68.3	D	20.7 r	D	64.1	9.0 r
Communications equipment	3342	9	D	0.0	88.9	0.0	D	0.0	88.9	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0
Semiconductor and other electronic components	3344	10	0.0	0.0	100.0 r	D	0.0	0.0	100.0 r	D	D	0.0	90.0 r	0.0	0.0	0.0	90.0 r	D
Navigational, measuring, electromedical, and control instruments	3345	93	34.4 r	D	54.8 r	D	37.6 r	D	51.6 r	D	23.7 r	D	55.9 r	D	28.0 r	D	51.6 r	D
Other computer and electronic products	other 334	30	0.0	0.0	96.7	D	D	0.0	83.3	D	D	0.0	96.7	0.0	16.2	0.0	83.8	0.0
Electrical equipment, appliances, and components	335	80	D	0.0	85.0	D	10.0 r	0.0	83.8	D	D	0.0	81.3	8.8 r	D	0.0	81.3	8.8 r
Transportation equipment	336	17	D	D	76.5 r	D	D	0.0	82.4 r	D	D	0.0	70.6	D	D	0.0	76.5 r	D
Automobiles, bodies, trailers, and parts	3361–63	11	D	D	54.5 r	D	D	0.0	72.7 r	D	D	0.0	54.5	D	D	0.0	72.7 r	D
Aerospace products and parts	3364	D	0.0	0.0	D	0.0	0.0	0.0	D	0.0	0.0	0.0	D	0.0	0.0	0.0	D	0.0
Other transportation	other 336	D	0.0	0.0	D	0.0	0.0	0.0	D	0.0	0.0	0.0	D	0.0	D	0.0	D	0.0
Furniture and related products	337	9 r	D	D	D	0.0	D	0.0	D	0.0	0.0	0.0	100.0 r	0.0	D	0.0	D	0.0
Miscellaneous	339	46	15.2 r	0.0	71.7	D	D	0.0	52.2 r	D	D	D	87.0	D	D	D	52.2 r	D
Medical equipment and supplies	3391	38	D	0.0	78.9	D	D	0.0	47.4 r	D	D	0.0	89.5	D	D	0.0	47.4 r	D
Other miscellaneous manufacturing	3399	6 r	D	0.0	D	0.0	D	0.0	D	0.0	0.0	D	D	0.0	0.0	D	D	0.0

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Other real estate and rental and leasing	other 53	295	D	0.0	47.8	r D	D	0.0	67.1	D	D	0.0	100.0	0.0	D	0.0	62.0	D	
Professional, scientific, and technical services	54	8,045	12.8	0.9	r 50.9	35.4	9.5	1.3	r 63.2	26.0	7.3	0.5	67.2	25.0	10.6	1.3	r 63.1	25.0	
Legal services	5411	425	0.0	0.0	21.0	r 79.0	0.0	D	38.8	47.5	D	0.0	37.2	49.2	0.0	D	30.1	r 56.2	r
Accounting, tax preparation, bookkeeping, and payroll services	5412	449	D	0.0	61.9	29.2	r 8.7	r D	54.6	36.1	D	0.0	70.8	28.3	17.1	r D	57.2	24.9	r
Architectural, engineering, and related services	5413	598	5.7	r D	63.7	30.4	11.5	r D	70.7	16.1	r 2.0	r D	82.9	14.7	3.5	D	79.4	16.7	r
Specialized design services	5414	148	0.0	0.0	74.3	D	0.0	0.0	49.3	r D	0.0	0.0	49.3	r D	0.0	0.0	49.3	r D	
Computer systems design and related services	5415	4,470	15.0	1.3	r 52.0	31.7	10.6	0.5	65.9	23.0	6.4	0.6	r 71.8	21.2	10.8	0.7	r 68.0	20.5	
Management, scientific, and technical consulting services	5416	1,184	15.5	r D	47.7	36.4	7.6	r D	68.2	23.8	10.8	r D	56.8	32.0	11.4	r D	56.8	31.3	
Scientific research and development services	5417	274	23.0	r D	35.8	40.1	18.2	D	47.1	33.6	24.1	r D	56.6	17.5	33.2	D	49.6	16.4	
Advertising, public relations, and related services	5418	182	4.9	D	44.5	49.5	6.0	r D	71.4	20.9	r 6.0	r D	61.0	31.9	6.0	r D	73.1	19.8	r
Other professional, scientific, and technical services	5419	320	11.6	r 0.0	50.8	37.6	9.4	r D	53.1	36.6	9.1	r D	64.4	25.0	r 9.7	r 0.0	53.3	37.0	
Management of companies and enterprises	55	D	D	0.0	0.0	0.0	0.0	0.0	D	0.0	0.0	0.0	D	0.0	0.0	0.0	D	0.0	
Administrative and support and waste management and remediation services	56	959	13.9	r 8.6	r 51.9	25.6	10.4	r D	70.3	10.9	r 4.7	r D	71.7	15.1	r 19.3	r D	57.2	15.0	r

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Educational services	61	88	r	0.0	0.0	51.1	r	D	0.0	0.0	51.1	r	D	0.0	0.0	51.1	r	D	0.0	0.0	51.1	r	D	
Health care and social assistance	62	1,570		22.0	6.4	r	48.9	22.8	26.6	8.8	r	46.2	18.4	22.0	D	48.3	23.6	17.1	D	53.2	23.5			
Health care services	621–23	1,570		22.0	6.4	r	48.9	22.8	26.6	8.8	r	46.2	18.4	22.0	D	48.3	23.6	17.1	D	53.2	23.5			
Social assistance	624	0		0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arts, entertainment, and recreation	71	D		0.0	0.0		D	D	0.0	0.0		D	D	0.0	0.0	D	0.0	0.0	0.0	0.0	D	D		
Accommodation and food services	72	749		34.8	D		29.4	28.3	27.9	D		30.4	35.0	27.9	D	28.4	r	28.3	27.9	D	36.2	28.3		
Other services	81	637		0.0	0.0		54.9	45.1	D	0.0		62.0	37.5	D	0.0	54.9	44.7	D	0.0	62.0	37.5			

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 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.

Source(s):

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