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Jobs of the Future

The current landscape of work is rapidly changing, shifting with the ever-evolving tide of technology. What can we expect the job landscape to look like by 2030? There will be a number of jobs that might be created under different scenarios by 2030 and there also will be a number of jobs lost to automation, according to a McKinsey Global Institute report. The key finding in a workforce transitions report is "that while there may be enough work to maintain full employment to 2030 under most scenarios, the transitions will be very challenging — matching or even exceeding the scale of shifts out of agriculture and manufacturing we have seen in the past."

It's estimated that automation and artificial intelligence (A.I.) will indeed lift productivity and economic growth, but millions of people worldwide may need to switch occupations or upgrade skills. About 50 percent of current work activities are technically automatable by adapting currently demonstrated technologies and six out of 10 occupations have more than 30 percent of activities that are technically automatable. By 2030, McKinsey reports the number of jobs that could be potentially displaced by automation ranges from 10 million in the slowest adoption scenario to 800 million jobs – or 30 percent of full-time equivalent (FTE) workers – in the fastest adoption scenario. The midpoint could be 400 million jobs, or 15 percent of FTE workers. In the case of the fastest adoption scenario, 375 million workers in the workforce, or 14 percent of FTE workers, could need to change their occupational category by 2030. The midpoint would be 75 million workers (or 3 percent of FTE workers) or less than 10 million workers for the slowest adoption scenario.

Further, McKinsey found the potential impact on employment varies by occupation and sector. The most susceptible to automation include jobs in predictable environments, such as operating machinery and preparing fast food, and jobs involving the collection and processing of data, leading to displacement of large amounts of jobs in fields such as mortgage origination, paralegal work and account and back-office transaction processing. Jobs that should be less impacted by automation include those involving managing people, applying expertise and social interactions, along with jobs in unpredictable environments such as gardeners, plumbers or providers of child- and eldercare. Jobs in the latter category are technically difficult to automate and often command relatively lower wages, making automation a less attractive business proposition.

U.S. Employment GROWTH by Occupation by 2030	
(% change labor demand, midpoint automation)	
Builders : includes building engineers, architects, surveyors, construction workers, installation &	35%
repair workers (buildings & infrastructure), crane & tower operators	
Technology Professionals: includes computer engineers, computer specialists	34%

¹ McKinsey Global Institute, "What the future of work will mean for jobs, skills and wages," available here



Care Providers: includes doctors, nurses, physician assistants, pharmacists, therapists, health	30%
aides & health support, childcare workers, health technicians, community & social workers	
Managers & Executives	15%
Professionals : includes account managers, engineers, business & financial specialists, lawyers &	11%
judges, legal-industry support staff, math specialists, scientists & academics	
Teachers: includes school teachers, postsecondary teachers, other education professionals,	9%
education support workers	
Creatives: includes artists, designers, entertainers, media workers	8%
Unpredictable Physical Work: includes specialized mechanics & repair, emergency first	6%
responders, material movers & loaders, machinery installation & repair workers, agricultural field	
workers, transportation maintenance, building and grounds cleaners	
U.S. Employment DECLINE by Occupation by 2030	
(% change labor demand, midpoint automation)	
Predictable Physical Work: includes fine-equipment installation & repair workers, protective	-31%
services, gaming-industry workers, dishwashers, cleaning- equipment operators, food-	
preparation workers, general mechanics	
Office Support: includes IT workers, information & record clerks, office-support workers, financial	-20%
workers (procurement, payroll, etc.), administrative assistants	
Customer Interaction: includes food-service workers, sales workers (retail & online), therapeutic	-1%
workers (personal trainers), entertainment attendants, personal-appearance workers, hotel &	
travel workers	

Cognizant, a professional services company, along with the Center for the Future of Work, released a report on the jobs of the future that concurs with McKinsey's findings.² They proposed 23 jobs that will emerge over the next 10 years and will become cornerstones of the future of work. "We believe these jobs will create mass employment, providing work for the many people in offices, stores and factory floors displaced or disrupted by technology," they said. The jobs range in technical level, and while some experts believe all jobs will be tech jobs in the future, Cognizant disagrees. However, some of the jobs — such as A.-Assisted Healthcare Technician, Man-Machine Teaming Manager and Al Business Development Manager —will require high technical skills paired with Artificial Intelligence. The following diagram shows the 21 jobs according to their tech-centricity and the time horizon.

The future of work is changing at a rapid pace along with the technology that is impacting it. Although there is much trepidation about the future of work, Cognizant's view is different and optimistic. They remind us that work has always changed and that a lot of current work is "dull, dirty or dangerous." In addition, machines need man and technology will upgrade all aspects of society while solving — and creating — problems. Finally, they implore us to not underestimate human imagination or ingenuity.

² Cognizant, "21 Jobs of the Future: A Guide to Getting – And Staying – Employed Over the Next 10 Years," http://www.futureofwork.com/whitepaper/21-jobs-of-the-future-a-guide-to-getting-and-staying-employed-over-the-next-10-years



"Our greatest quality is our curiosity. ... In an age of intelligent machines, man will continue to want to explore – and make – what's next. Doing so will be the source of new work ad infinitum."

21 Jobs: The Road to 2028

