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jobs
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By Shelly Palmer CEO at The Palmer Group

Oxford University researchers have estimated that 47 percent of U.S. jobs could be automated within the next two decades. But which white-collar jobs will robots take first?

First, we should define “robots” (for this article only) as technologies, such as machine learning algorithms running on purpose-built computer platforms, that have been trained to perform tasks that currently require humans to perform. With this in mind, let’s think about what you’ll do after white-collar work. Oh, and I do have a solution for the short term that will make you the last to lose your job to a robot, but I’m saving it for the end of the article.

Middle Management

If your main job function is taking a number from one box in Excel and putting it in another box in Excel and writing a narrative about how the number got from place to place, robots are knocking at your door. Any job where your “special and unique” knowledge of the industry is applied to divine a causal relationship between numbers in a matrix is going to be replaced first. Be ready.

Commodity Salespeople (Ad Sales, Supplies, etc.)

Unless you sell dreams or magic or negotiate using special perks, bribes or other valuable add-ons that have nothing to do with specifications, price and availability, start thinking about your next gig. Machines can take so much cost out of any sales process (request for proposal, quotation, order and fulfillment system), it is the fiduciary responsibility of your CEO and the board to hire robots. You’re fighting gravity... get out!

Report Writers, Journalists, Authors & Announcers

Writing is tough. But not report writing. Machines can be taught to read data, pattern match images or video, or analyze almost any kind of research materials and create a very readable (or announceable) writing. Text-to-speech systems are evolving so quickly and sound so realistic, I expect both play-by-play and color commentators to be put out of work relatively soon – to say nothing about the numbered days of sports or financial writers. You know that great American novel you’ve been planning to write? Start now, before the machines take a creative writing class.

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Accountants & Bookkeepers

Data processing probably created more jobs than it eliminated, but machine learning–based accountants and bookkeepers will be so much better than their human counterparts, you’re going to want to use the machines. Robo-accounting is in its infancy, but it’s awesome at dealing with accounts payable and receivable, inventory control, auditing and several other accounting functions that humans used to be needed to do. Big Four auditing is in for a big shake-up, very soon.

Doctors

This may be one of the only guaranteed positive outcomes of robots’ taking human jobs. The current world population of 7.3 billion is expected to reach 8.5 billion by 2030, 9.7 billion in 2050 and 11.2 billion in 2100, according to a new UN DESA (United Nations Department of Economic and Social Affairs) report. In practice, if everyone who ever wanted to be a doctor became one, we still would not have enough doctors.

The good news is that robots make amazing doctors, diagnosticians and surgeons. According to Memorial Sloan Kettering Cancer Center¹, IBM’s Watson is teaming up with a dozen us hospitals to offer advice on the best treatments for a range of cancer, and also helping to spot early-stage skin cancers. And ultra-precise robo-surgeons are currently used² for everything from knee replacement surgery to vision correction. This trend is continuing at an incredible pace. I’m not sure how robodoc bedside manner will be, but you could program a “Be warm and fuzzy” algorithm and the robodoc would act warm and fuzzy. (Maybe I can get someone to program my human doctors with a warm and fuzzy algorithm?)

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But Very Few Jobs Are Safe

During the Obama administration, a report of the president was published (it is no longer available at whitehouse.gov³) that included a very dire prediction: “There is an 83% chance that workers who earn \$20 an hour or less could have their jobs replaced by robots in the next five years. Those in the \$40 an hour pay range face a 31% chance of having their jobs taken over by the machines.” Clearly, the robots are coming.

What to Do About It

In “What Will You Do After White-Collar Work?”⁴, I propose, “First, technological progress is neither good nor bad; it just is. There’s no point in worrying about it, and there is certainly no point trying to add some narrative about the “good ol’ days.” It won’t help anyone. The good news is that we know what’s coming. All we have to do is adapt.

Adapting to this change is going to require us to understand how man-machine partnerships are going to evolve. This is tricky, but not impossible. We know that machine learning is going to be used to automate many, if not most, low-level cognitive tasks. Our goal is to use our high-level cognitive ability to anticipate what parts of our work will be fully automated and what parts of our work will be so hard for machines to do that man-machine partnership is the most practical approach.

With that strategy, we can work on adapting our skills to become better than our peers at leveraging man-machine partnerships. We’ve always been tool-users; now we will become tool-partners.”

Becoming a great man-machine partner team will not save every job, but it is a clear pathway to prolonging your current career while you figure out what your job must evolve into in order to continue to transfer the value of your personal intellectual property into wealth.

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About Shelly Palmer

Named one of LinkedIn’s Top 10 Voices in Technology, Shelly Palmer is CEO of The Palmer Group, a strategic advisory, technology solutions and business development practice focused at the nexus of media and marketing with a special emphasis on machine learning and data-driven decision-making. He is Fox 5 New York’s on-air tech and digital media expert, writes a weekly column for AdAge, and is a regular commentator on CNBC and CNN. Follow @shellypalmer or visit shellypalmer.com or subscribe to our daily email <http://ow.ly/WsHcb>

ANNOTATIONS:

1. <http://www.mskcc.org/about/innovative-collaborations/watson-oncology>
2. <http://www.msn.com/en-us/money/careersandeducation/21-jobs-where-robots-are-already-replacing-humans/ss-BBv6yiU?pfr=1>
3. http://www.whitehouse.gov/sites/default/files/docs/ERP_2016_Book_Complete%20JA.pdf
4. <http://www.shellypalmer.com/2015/08/what-will-you-do-after-white-collar-work/>