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Technology And Analytics

The Future of Human Work Is Imagination, Creativity, and Strategy

by Joseph Pistrui

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Summary. It seems beyond debate: Technology is going to replace jobs, or, more precisely, the people holding those jobs. Few industries, if any, will be untouched. It is easy to find reports that predict the loss of 5 to 10 million jobs by 2020. Leaders must resist the... [more](#)

It seems beyond debate: Technology is going to replace jobs, or, more precisely, the *people* holding those jobs. Few industries, if any, will be untouched.

Knowledge workers will not escape. Recently, the CEO of Deutsche Bank [predicted](#) that half of its 97,000 employees could be replaced by robots. One [survey](#) revealed that “39% of jobs in the legal sector could be automated in the next 10 years. Separate research has concluded that accountants have a 95% chance of losing their jobs to automation in the future.”



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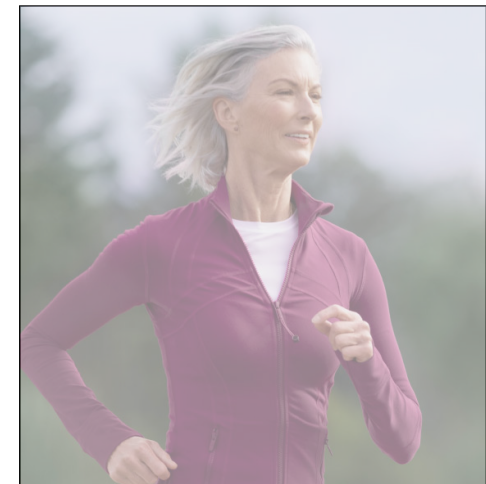
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And for those in manufacturing or production companies, the future may arrive even sooner. That same report mentioned the advent of “robotic bricklayers.” Machine learning algorithms are also predicted to replace people responsible for “optical part sorting, automated quality control, failure detection, and improved productivity and efficiency.” Quite simply, machines are better at the job: The National Institute of Standards predicts that “machine learning can improve production capacity by up to 20%” and reduce raw materials waste by 4%.

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The Risks and Rewards of AI

Assessing the opportunities and the potential pitfalls.

It is easy to find reports that predict the loss of between 5 and 10 million jobs by 2020. Recently, space and automotive titan Elon Musk said the machine-over-mankind threat was humanity’s “biggest existential

threat.” Perhaps that is too dire a reading of the future, but what is important for corporate leaders right now is to avoid the catastrophic mistake of ignoring how people will be affected. Here are four ways to think about the people left behind after the trucks bring in all the new technology.

The Wizard of Oz Is the Wrong Model

In Oz, the wizard is shown to run the kingdom through some complex machine hidden behind a curtain. Many executives may think themselves the wizard; enthralled by the idea that AI technology will allow them to shed millions of dollars in labor costs, they could come to believe that the best company is the one with the fewest people aside from the CEO.

Yet the CEO and founder of Fetch Robotics, Melonee Wise, cautions against that way of thinking: “For every robot we put in the world, you

have to have someone maintaining it or servicing it or taking care of it.” The point of technology, she argues, is to boost productivity, not cut the workforce.

Humans Are Strategic; Machines Are Tactical

McKinsey has been studying what kind of work is most adaptable to automation. Their findings so far seem to conclude that the more technical the work, the more technology can accomplish it. In other words, machines skew toward *tactical* applications.

On the other hand, work that requires a high degree of imagination, creative analysis, and strategic thinking is harder to automate. As McKinsey put it in a recent report: “The hardest activities to automate with currently available technologies are those that involve managing and developing people (9 percent automation potential) or that apply expertise to decision making, planning, or creative work (18 percent).” Computers are great at optimizing, but not so great at goal-setting. Or even using common sense.

Integrating New Technology Is About Emotions

When technology comes in, and some workers go away, there is a residual fear among those still in place at the company. It’s only natural for them to ask, “Am I next? How many more days will I be employed here?” Venture capitalist Bruce Gibney explains it this way: “Jobs may not seem like ‘existential’ problems, but they are: When people cannot support themselves with work at all — let alone with work they find meaningful — they clamor for sharp changes. Not every revolution is a good revolution, as Europe has discovered several times. Jobs provide both material comfort and psychological gratification, and when these goods disappear, people understandably become very upset.”

The wise corporate leader will realize that post-technology trauma falls along two lines: (1) how to integrate the new technology into the work flow, and (2) how to cope with feelings that the new technology is somehow “the enemy.” Without dealing with both, even the most automated workplace could easily have undercurrents of anxiety, if not anger.

Rethink What Your Workforce Can Do

Technology will replace some work, but it doesn’t have to replace the *people* who have done that work. Economist James Bessen [notes](#), “The problem is people are losing jobs and we’re not doing a good job of getting them the skills and knowledge they need to work for the new jobs.”

For example, a [study](#) in Australia found a silver lining in the automation of bank tellers’ work: “While ATMs took over a lot of the tasks these tellers were doing, it gave existing workers the opportunity to upskill and sell a wider ranges of financial services.”

Moreover, the report found that there is a growing range of [new job opportunities](#) in the fields of big data analysis, decision support analysts, remote-control vehicle operators, customer experience experts, personalized preventative health helpers, and online chaperones (“managing online risks such as identify theft, reputational damage, social media bullying and harassment, and internet fraud”). Such jobs may not be in your current industrial domain. But there may be other ways for you to view this moment as the perfect time to rethink the shape and character of your workforce. Such new thinking will generate a whole new human resource development agenda, one quite probably emphasizing those innate human capacities that can provide a renewed strategy for success that is both technological and human.

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As Wise, the roboticist, emphasized, the technology itself is just a tool, one that leaders can use how they see fit. We can choose to use AI and other emerging technologies to replace human work, or we can choose to use them to augment it. “Your computer doesn’t unemploy you, your robot doesn’t unemploy you,” she said. “The companies that have those technologies make the social policies and set those social policies that change the workforce.”

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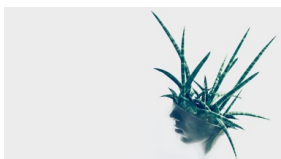


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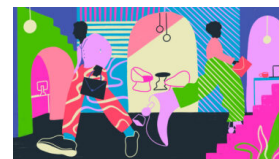
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