When the ground beneath your feet is shifting, do you stand still or leap forward?

Making the future of work work

Innovation matters: insights on the latest disruptive technologies

The better the question. The better the answer. The better the world works.
How and why is technology changing the way we work?

As the world adjusts to the digital age, workers will increasingly be freed up from repetitive tasks and can explore the attributes that make us human. These human attributes, including lateral thinking, creativity, decision-making, innovation, intuition and empathy, will become more important as the balance of machines and humans in the workplace shift. As this shift occurs, whereby machines take on more, we should also see the creation of new roles, tasks and responsibilities that are yet to be defined.

The change in the way we work has accelerated dramatically for two main reasons:

- The well-publicized explosion of available data
- The exponential improvement in the price per unit of performance technology

For the first time ever, today’s workforce includes four generations working together: traditionalists, boomers, Gen X and millennials. Technology invades our lives, both at work and at home, employees are focused more on work-life integration over balance.

Technology, coupled with demographics and globalization, is also changing the definition and composition of our workforce. We are already seeing the workforce shift from a preponderance of full-time employees to include higher percentages of part-time, contract, freelance and offshore workers – all of which are working alongside each other and robots.

One way EY is adopting and further supporting this blended workforce is through GigNow, a new innovative approach to developing a network of top contractor talent. With GigNow’s advanced technology platform and experienced recruiters, EY is able to tap into the best talent around the world, build a more agile and flexible workforce model, and scale global talent base faster and more effectively than ever.

Which technologies are driving this change?

Robotic process automation (RPA) and artificial intelligence (AI) are already making a huge impact in the workplace. Many jobs and business processes have previously been constrained by the capacity and speed of human decision-making and coordination — what we refer to as the human processing unit (HPU). Automation is dramatically increasing the return on the HPU by leveraging machines to consume data and execute certain elements of a process at a scale that was hard to imagine just a few years ago.

Examples of these technologies at work include the EY Organization and Talent Hub (OTH) and EY Lease Reviewer. OTH is a powerful tool that provides analytics, and organizational design and optimization, when a company undergoes a major transformation, such as a large merger and acquisition or divestiture transactions. EY Lease Reviewer is a solution that improves speed and accuracy by using AI and advanced language models. It reviews time-consuming lease contracts and automatically labels passages in contracts against proper accounting treatment. Both of these are powerful applications that are used to optimize the machine-human balance that generates the best business outcomes.

“Change must begin with a business problem or opportunity. It is then that technologies can be combined to create transformational solutions that improve the way work gets done.”

Chris Mazzei, EY Global Innovation Technologies Leader | EY Global Chief Analytics Officer

How is the workplace changing and what should employers do to lead their people through this continual change?

The workplace is rapidly changing. Each generation in the new blended workforce requires a different style of working. Millennials expect to have their social and customer experiences replicated in the workplace: on their phones, on the go, responsive and agile. If this doesn’t happen, the probability is high that they will move on. Companies that are “best in class” at helping their teams through this continually changing workplace will unlock employee insights, enhance employee engagement and will ultimately lead to enhanced growth.

Additionally, to make changes stick, the old ways, focused solely on key performance indicators (KPIs), no longer work. Tomorrow’s workforce prioritizes a sense of “capital P Purpose.” A recent EY survey found that 73% of business leaders think that having the right Purpose will help their company navigate disruption. Companies that are planning to implement a large-scale transformation should strongly consider bringing their larger employee base, not just leadership, into the beginning stages of the journey so that the larger employee base have input into the “why” (the Purpose), not just the “what” and the “how.”

This interface between technology and worker will look differently in different jobs. For example, in health care, a robot won’t replace a human doctor, but everyone else who drives to work will suddenly have an extra hour or two in a day that can be used to create, produce or relax.

Consider the following example of the HPU. It’s impossible for a doctor to keep up with all the information from various sources (e.g., journals, white papers, blogs and social media). Previously, their productivity was based on the amount of information they could consume but that will be defined by technology now amplifies that exponentially, and they get the benefit of all relevant knowledge that can be accumulated and curated.

To give another example, the area of tax continues to become more and more complicated. The US federal tax code in the mid-1960s had circa 10,000 pages; it’s now up to approximately 100,000. While it’s incredibly difficult for an individual to keep up with these changes, a machine can be trained to handle this level of complexity. Accordingly, technology can dramatically improve the HPU of tax professionals. In the instant that a regulation changes, the integration of human and machine will make the impact and potential actions that need to be taken.

How can technology augment the worker?

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Which skills will employees need to succeed in this new workplace?

“The timeframe for updating skills has dramatically collapsed; digital has made it necessary for workers to continuously learn as the digital environment is shifting at such a rapid pace.”

Michael Bertolino, EY Global People Advisory Services Leader

Key skills required in today’s workplace include complex problem-solving and critical thinking to interpret and act on analytics. Other skills that make us human — adaptability, creativity and emotional intelligence — are also more important than ever. Cyber skills continue to be very influential, as is the ability to manage a workforce made up of humans and robotic workers.

EY has just launched its own program, EY Badges, which helps our people to invest in their careers by earning digital credentials in skills that will differentiate them in today’s and tomorrow’s rapidly changing market, such as data analytics, AI, data transformation and information strategy.

Which jobs and industries will likely see the greatest changes?

Jobs that are routine and repetitive continue to be automated through technologies, such as RPA and AI, and will undoubtedly lead to the elimination of some job functions or tasks for roles including telemarketers, real estate agents and typists. The industries most likely to be affected are healthcare, transportation and financial services, but the impact will be felt across all sectors. The inevitable progress to autonomous vehicles will affect not just the transportation business, but everyone else who drives to work will suddenly have an extra hour or two in a day that can be used to create, produce or relax.

It’s worth noting that most of the time it’s not 100% of a job function that will be delivered by a machine; often, only some elements of a job are made redundant or the job might be adjusted so that the people who were doing that job or function will find different tasks to support the RPA. Conversely, some sectors will likely see new jobs being created.

Once Purpose has been inculcated into the workforce, successful change management depends upon the capability of employees and related incentives. Capabilities will have to continuously evolve. This means not just bringing new talent in, but retaining the existing workforce as well. Concurrently, companies have to make sure that the actions they want individuals to take and how they use the new technology are aligned in terms of rewards.

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How should businesses make the future of work, work?

Technology should be used to enable organizations to re-humanize work, rather than dehumanize it. Business leaders will need to experiment around the interface between a machine and a human. It’s not always easy to find the right balance. Companies tend to focus significantly more of their time and investment on the technology and less time asking, “How are we making this work within our workforce?”

“To be successful, organizations need to embrace the concepts of empowerment, and design the ‘interface’ between technology and the individual.”

Chris Mazzei, EY Global Innovation Technologies Leader | EY Global Chief Analytics Officer

Most business leaders equate innovation with technology. As EY Global Chief Innovation Officer Jeff Wong recently discussed with Forbes, technology is driving a lot of the change, but process and people are a critical component to innovation. Wong provides some practical advice in helping companies future-proof their workforce:

- Invoke a mindset of continuous learning across the organization
- Teach people how to embrace new technologies
- Reframe what automation means for employees
- Don’t just train in a skill set but evolve the way people learn

Views expressed are opinions of authors Chris Mazzei and Michael Bertolino.

About the authors

Chris Mazzei, EY Global Innovation Technologies Leader | Global Chief Analytics Officer

Chris is responsible for exploring a portfolio of emerging technologies, including blockchain, AI and robotic process automation. His focus is on determining how these technologies create opportunities for EY to incorporate into its own business operations, as well as considering the implications for EY clients. As EY Global Chief Analytics Officer, Chris leads the EY Global Analytics Center of Excellence, which aims to incorporate data and analytics into EY’s offerings across all business lines to help clients grow, optimize and protect value.

Michael Bertolino, EY Global People Advisory Services Leader

As the Global Leader for EY People Advisory Services, Michael leads a global force of some 10,400 practitioners who work with clients every day to help them harness their people agenda – getting the right people, with the right capabilities, in the right place, for the right cost, doing the right things. EY People Advisory Services works with clients on a range of assignments from helping them to transform their HR function to addressing their organizations’ most complex talent challenges in a global and highly regulated setting. In all cases, the teams connect the people strategy to the needs of the business, helping clients realize sustainable results from strategy to execution – it’s how we build a better working world.

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