



The future automated workforce

A GUIDE TO AI AND AUTOMATION



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The situation today



Robots will transform your job. They may have started by taking on the routine work and the tasks we don't want to do, but as artificial intelligence (AI) gets cleverer no role will be safe. From lawyers to doctors to HR professionals, a whole host of traditional white collar jobs may soon change.


The pace of this change can seem overwhelming and employees are becoming increasingly anxious about their future. All this gives HR teams a critical role in managing these developments effectively. They should be encouraging their organisations to think big and embrace the transformational possibilities AI offers. They also need to make sure the debate is not just about the technology, but about people and how they can use that technology to enhance what they do.

This needs to start with helping both employers and employees understand what work will look like in the 21st century. Many are still fixed on outdated assumptions about nine-to-five working days, a set retirement point and a single career for life. Leaders should challenge those assumptions and develop an understanding of how AI and automation, alongside other established and emerging technologies and wider socioeconomic trends, demand a change.

But embracing change is hard and often uncomfortable. We tend to cling to old structures, even when they're not working and are not what many employees want. Even businesses that are exploring the possibilities of AI and automation tend to assume they can just add it into their business without making any wider changes.

That means they risk missing out on the lower costs and improved efficiency AI and automation can bring. Securing the full benefits of these technologies needs organisations to take a long hard look at the impact they will have on their people and culture.

HR teams should be leading the debate on what work is done, by whom, when and where, including looking at how HR itself can modernise.



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Things to consider

The workforce will need to change and adapt to maximise the business benefits of AI and automation.

AI and automation will eliminate the need for some entire roles, parts of existing roles, and many individual tasks. That means businesses will have to work out the detail of what activities people will still do, how they can create meaningful and stimulating work for those people, and how they can work effectively alongside the machines.

- **You will need different skills**

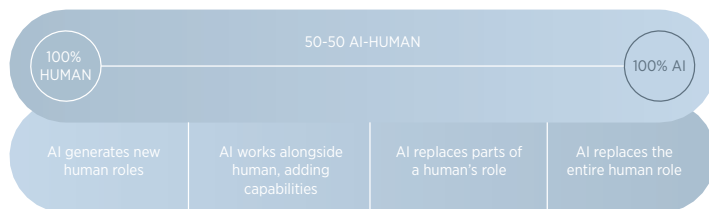
Some skills will become obsolete, others will change, and new ones will be needed. If a routine task is automated, such as data entry, then analysis of the data will shift from being a small part of the human role to its primary focus. Current employees will need retraining or upskilling, or new people will have to be recruited to deal with the change. All this means there are real opportunities to make better use of employees' time, letting them focus on more innovative, strategic and impactful work.

- **Machines versus humans isn't a zero-sum game**

We can develop future working patterns where the mix of people and machines make both more effective. Advances in the use of AI in medicine are already giving us examples of how effective that can be. A recent computer-assisted diagnostic system for colon cancer has been highly effective in determining whether abnormalities are malignant. The skills of the doctors are still needed but are enhanced by AI, and patients benefit.

Figure 1: AI-Human talent spectrum

AI-HUMAN TALENT SPECTRUM



WORK SCENARIOS

- **You will need new ways to acquire capabilities**

AI and automation mean full-time workers will be just one part of the mix. Employers should look to create structures where people can be borrowed from, or shared with, other organisations. That will let them source and deploy the appropriate skills when they're needed. These new ways of working will, however, create additional practical challenges in managing people and talent, including:

- how to retain control of intellectual property in a fluid environment where people are constantly moving between organisations
- how to maintain business sustainability and career development paths when some rungs of the traditional career ladder are changed or eliminated. There are risks in becoming reliant on other suppliers of skills and you might need to poach junior staff to fill mid-career roles
- how to help employees plan a career path when the route taken by their mentors and advisors no longer exists. When the job landscape is changing fast, the key jobs and career experiences of senior role models will no longer be relevant.

- **It's not just about the technology**

Although AI and automation are major drivers of workforce change, they're not the only ones. Other factors will have an impact, such as the rise of the gig economy, a greater emphasis on entrepreneurship, and the greater use of social media. These will radically change the kind of contracts you have with your employees and demand much more creative and flexible approaches.

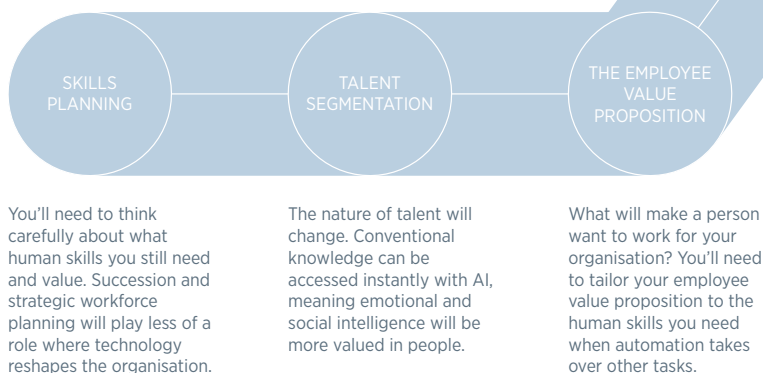
- **This creates a new role for HR**

HR will need to move beyond its traditional territory of leadership development, recruitment and employee departures. There will be a clear opportunity to help develop a bold vision for the future of the organisation. HR can then take on the leadership of change programmes and communicate that vision in an inspirational and creative way. They can also help ensure a company's external messages about AI are supported by the right internal messages about the effect on jobs.

Figure 2 shows how AI and automation will transform the whole employee experience, and how HR will need to motivate and engage people on that journey.

Figure 2: AI and automation's impact on the employee journey

1. PLANNING YOUR TALENT




2. MANAGING YOUR TALENT



3. DEVELOPING YOUR TALENT



Where do you go from here?




Co-ordinating a response to all the opportunities and challenges presented by AI and automation can seem overwhelming, which could lead to organisational paralysis. Limited budgets can also result in procrastination and a tendency to kick the can down the road. But that's a dangerous approach. The most important thing is to do something now. The first step is the hardest, and if you can't decide where to start, choose the area that most excites you or the issue that's causing the most frustration for employees. That means:

- **Thinking big**

When creating your HR strategy for the coming year or two, build disruptive future thinking into your planning to embrace bold possibilities. Look beyond individual projects or technologies to how the whole organisation and its business model might be reimaged through the use of AI. Be willing to think about how you can disrupt your own organisation, to take on the mind-set of your competitors or a new challenger. But don't underestimate how difficult it will be to persuade your organisation to abandon established business models that may have served them well for many years.

- **Doing something future focused**

Take some time to think about how the future might unfold using scenario planning and other foresight tools and techniques. This will help you create a vision and uncover new opportunities for innovation. Leaders can then focus on creating and explaining that vision for a redesigned organisation.



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- **Changing your culture, not just your policies**

An organisation where human skills are enhanced by technology and people work alongside machines will have a very different culture. Employees might have to learn how to talk to machines as colleagues but not lose the value of their human interactions. The organisation will also have to trust AI systems to deal with huge data sets that defy human comprehension. And AI-enabled businesses will be faster and more dynamic, requiring a culture that supports such pace. None of this will happen without a powerful, positive vision that addresses peoples' fears and concerns about how change will affect them.

- **Exploring how AI can be used in your existing HR processes**

Many HR services are already being reimaged with AI and automation at the core, for example:

- recruitment is using 'interview on demand' via video that's analysed by AI for both role and social skills. Many organisations are already using algorithms for CV screening and automated candidate sourcing
- AI can improve on-boarding by blending recruitment and learning. For example, chatbots can answer new employees' questions and reduce the burden on staff
- AI and automation can shift employee learning from traditional courses and online modules to an on-demand model. Employees can now learn in the moment as they're doing a task, using apps with checklists and other resources to ensure proficiency
- AI and automation can help embed learning and change behaviours through 'nudging' and prompting. For example, a line manager might be automatically prompted to conduct a review or schedule a face-to-face meeting at the end of a piece of work.



- **Avoiding bias**

There are risks in using AI in the recruitment process. You need to ensure your algorithms really are helping you source the skills you need. Both automated recruitment and face-to-face recruitment are prone to bias around factors such as age and gender. It's important, therefore, that any AI is designed to focus on the value of the individual rather than their circumstance.

- **Defining new models for career progression**

Traditional linear models of career progression are unlikely to survive the rise of AI and automation. A model where employees progress through multiple routes, equipping themselves with skills that let them adapt to many different types of work will become the norm. There will be no standard career paths and individuals will take increasing responsibility for their own ongoing learning. HR will need to put in place learning programmes to support and nurture talent in this new world. There are many different ways to approach this but they will need to be underpinned by an understanding of how people will grow and change during their careers.



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PA. Bringing Ingenuity to Life.

This report was authored by PA's AI&A experts with major contributions from Rob Gear, PA's futurist.

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