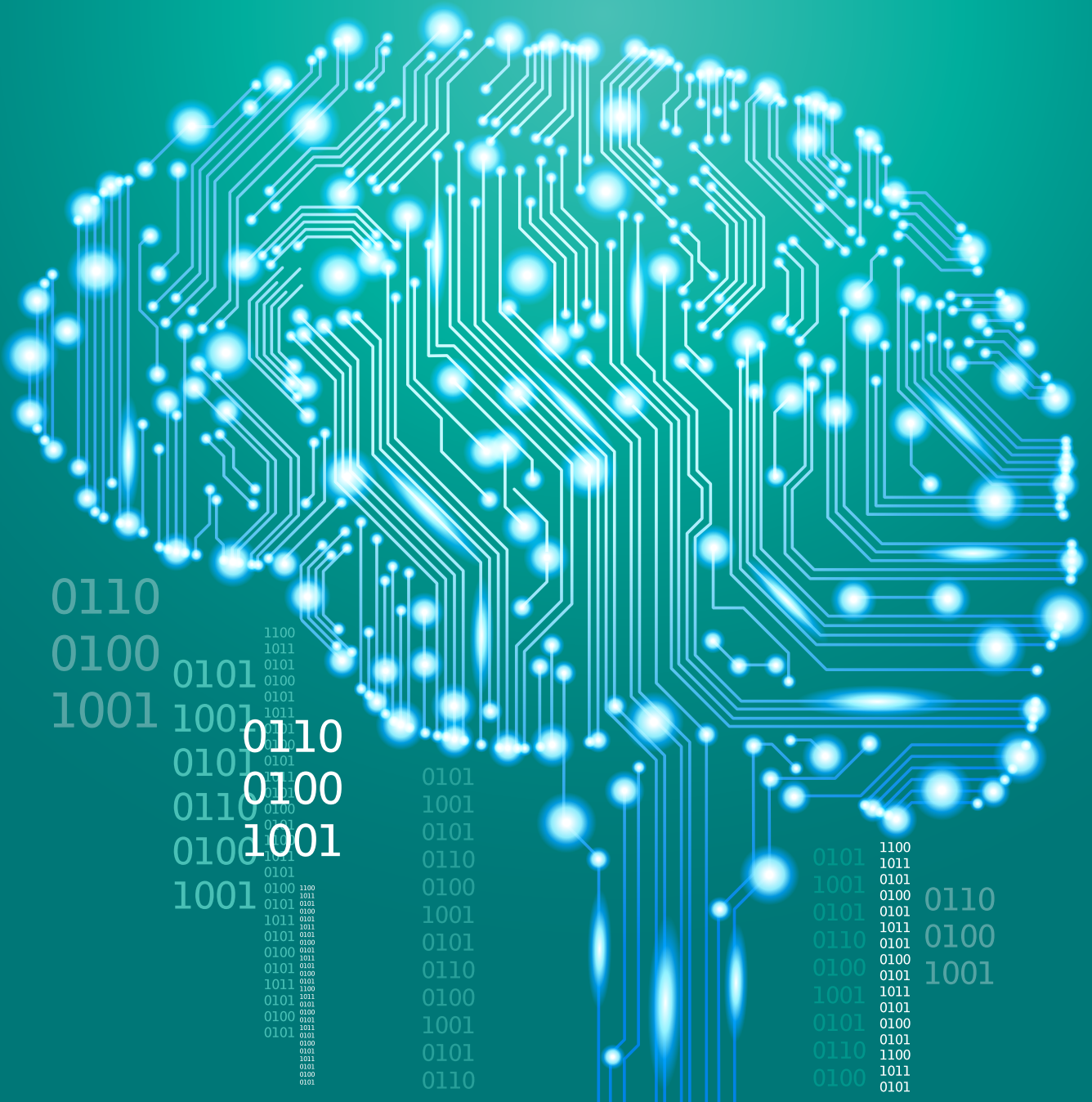# How Artificial Intelligence is Revolutionising HR

Criticaleye invited **Andi Britt**, Executive Partner for European Talent and Engagement Leader at IBM, to its Human Directors Retreat 2017 to find out what AI means for HR. **Mary-Anne Baldwin** reports

Artificial intelligence (AI) will revolutionise the type of work we do and the way we do it – yet no one knows exactly how. According to the World Economic Forum, 65 per cent of children entering primary school today will end up in jobs that currently don't exist; some roles will become extinct, others will be created. It's sending HRs hurtling down a road of blind corners while trying to steer their workforce through it.

IBM's Watson is the centrepiece of this transformation. The AI solution (which IBM refers to as a 'cognitive' platform because it works like the human brain) is already being employed in numerous roles that were previously held by trained, specialist people.

WATSON IN WIDER USE

- Watson is speeding up DNA analysis of cancer patients at three leading US hospitals and elsewhere uses vision recognition to read X-rays and MRIs. Its dermatology app, called Schema, also allows doctors to input patient data, which it then uses to identify symptoms and treatments.

- US company, Edge Up Sports, has a Watson-powered platform that analyses NFL data, including news and tweets about the teams, to help fantasy football fans in their gaming choices.

- Florian Pinel, a senior software engineer with IBM, is working on a cooking app that analyses and compares the molecular makeup of food to provide unique recipes. The user makes a few simple choices and the algorithm selects the right ingredients, proportions and cooking method.

Among its many titles, Watson is now an oncologist, a designer and a paralegal. This January, it replaced 34 insurance staff at Japan's Fukoku Mutual Life, reportedly saving the company over $1 million a year. That's just the tip of the iceberg *(See box: 'Watson in Wider Use')*.

"The sobering thought is that a lot of roles today, particularly those involving repetitive or routine tasks, may soon be considered ripe for automation," admitted **Andi Britt**, Executive Partner and European Talent and Engagement Leader at IBM.

"Machine learning will have massive societal consequences, but it will only be positive if we think about the human equation and ensure it works for our people. We believe the purpose of cognitive technology is to enhance and augment human decision making."

AI will inevitably fill an increasing number of roles and get progressively better at them. With this in mind, IBM is looking at how Watson can help HRDs during this seismic change.

Watson in The Workplace

Criticaleye invited **Andi** to the stage of its Human Resources Director Retreat 2017 to discuss Watson in the workplace. We started by asking him to explain exactly what AI is.

"Cognitive applications think and work like the human brain. They have the ability to understand vast amounts of data in any form, including natural human speech, text, numbers and images – and formulate judgements or recommendations from them," **Andi** explained.

"Because they can learn, cognitive applications can refine the advice they give after seeing the outcome of their judgements and receiving feedback from users."

In the context of HR, this self-learning technology can analyse the business from the individual employee through to the collective workforce, from all angles and in real time.

"We're looking at the entire employee lifecycle from recruiting, to learning and development, through to retention. We're also examining how to use cognitive in a way that allows our employees to make better decisions, receive personalised recommendations and to have a more intuitive experience of technology," said **Andi**.

IBM already applies Watson to its own workforce of 380,000 employees spread across 173 countries. It analyses pressure points such as the average tenure, diversity, pay rates, performance, skills and engagement, revealing hidden relationships and insights from correlations so that its HR professionals can improve them.

"We also have an engagement dashboard that can scan, in real time, what all of our IBMers are posting on our online collaboration sites, it then immediately throws up alerts if there is negative sentiment. Through it we can determine whether, for example, an HR policy or strategy doesn't chime with the culture or work for our people," he explained.

Applied generally, these insights can both direct HRs in their decision-making and deliver the numerical analysis needed to push their >

agenda at board level. The shape and range of what AI can do is really only limited by our imagination and market demand.

At the moment, IBM is developing about 20 Watson-based prototypes built on its own needs and those of its clients. One of them is an app that can scan job applicants' CVs, extract information about their skills and experience, and then recommend roles that might suit them.

Another is an AI-fuelled chat bot that answers numerous employee questions, such as 'What's my holiday entitlement?' or 'How do I record my expenses?' The chat bot is on call 24/7, freeing up HRs to work on more complex tasks.

Gary Kildare, Chief HR Officer at IBM explained: "We changed our entire performance management system and you can imagine how many questions that generated across our global workforce. To have an AI chat bot that was able to answer all of those questions in a very easy fashion was a fantastic resource."

He believes that AI-based technologies will dramatically change the business landscape. "This is a movement that will hit every part of every industry, so there is no point sitting on your hands hoping tomorrow will be the same as today," he warned.

As change is a given, HR must prepare their workforce for an era in which some of the roles performed today will no longer be required. To do this, **Andi** believes people must keep up with progress. "Both employees and employers will have to take greater responsibility for their career by re-inventing themselves through life-long education," he says.

His message applies to both the young and old. "The shelf life of a degree nowadays is about 18 months – all that studying and yet your skillset may very soon be out of date. Employees in today's workforce need to commit themselves to continuous learning."

The imperative is for HRDs to not only make the most of AI, but to nurture their staff within its context.

"In our organisation cognitive applications are already mainstream. In many others AI will be mainstream in the next two to three years. I think you have to act quickly because in the age of disruption, speed is the new business competence." ∎

Watch our video interview with IBM's Andi Britt to find out more about the role of AI in HR.

This article was taken from a panel interview with Andi during Criticaleye's Human Resources Director Retreat 2017, which was held in association with LGIM.

SPEAKING MY LANGUAGE

IBM's Watson can not only understand natural human language but the emotion within it. As sci-fi as this sounds, Watson already goes further.

Within seconds, one of its Application Programming Interfaces (API) can produce a psychological profile of an individual by applying neurolinguistic analysis to their choice of words – such as in a report, speech or series of emails.

The corporate applications of sentiment analysis could be many and varied. One could apply it to ensure leadership communication (such as a town hall speech) portrays a sentiment that reflects or creates the desired culture. It could also be used to coach a new manager in writing emails or prepare team wide communications.

While such experimental technologies have great potential, they must be applied alongside a clear code of ethical conduct governing privacy, data and wellbeing, which is another area in which HR must pay due attention.

Learn more about the Ethical Implications of AI during our Criticaleye Global Conference call.

Andi Britt
Executive Partner for European Talent & Engagement Leader, IBM

Andi leads IBM's European Talent & Engagement Practice, providing human capital management, HR, recruitment outsourcing and organisational change management services to clients.

He specialises in IT-led enterprise transformation as well as HR and learning. He is a regular speaker and presenter on IBM's HR research, change management, and mobile, social and cognitive innovation.

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