

# AI & Executive Search - Killer, Game Changer or Magic Trick?



Artificial Intelligence (AI) has come a long way since Alan Turing cracked the Enigma code in a pre-fab hut in Bletchley Park in 1942. After its stellar role in deciphering encrypted signals in the Second World War, AI languished on the sidelines of the computing science field, waiting for the right advances in technology to take it to the next level. Fast-forward to the Internet of Things and AI's time has finally come. Except it's nothing that could have been predicted. No killer bots, no Ex Machina, no Stepford wives. Instead it's quietly and quickly become an integral and indispensable part of our lives, changing the way we live, work, and play. AI is indeed all around us, protecting us from spam, selecting our movies, choosing our partners, filtering our ads, monitoring our spending habits, and determining our insurance premiums. As a result, industries and experiences are being re-invented for consumers and businesses in all sectors, forcing everyone who wants to stay relevant to get their digital game on.

## BUT IS IT REALLY AI?

Purists will argue that what we're calling AI is, in fact, machine learning on steroids. In very simple terms, machine learning is a technique that layers algorithms to create an artificial neural network that is continuously learning by comparing results and auto-correcting mistakes based on feedback. The big advance is in the capacity of algorithms to go deep, i.e. beyond the first layer of information, and mine different data sets - hence the term Deep Learning. It's this ability that allows IBM Watson to work with unstructured data such as photos, videos, and audio files to continuously refine its output and alert engineers before machinery fails.

Deep learning, or machine learning, belongs to a subset of AI called Narrow (also known as weak) Artificial Intelligence (NAI). But it's weak only when compared to the lofty goals set by Artificial General Intelligence (AGI), which is the ambitious and controversial attempt to create AI that can act independently of the algorithm. And while a fierce debate rages around whether this is ever likely to happen, the fact is that NAI already outperforms human in very specific tasks involving the analysis of very large amounts of information and making predictions based on disparate, and seemingly random, sets of data. Whenever we ask Google, Siri, Alexa, or Bixby a question, it's deep learning that spits out the answers to What's the population of Cairo, or Where's the best place to see the Aurora Borealis?


It's also why a casual enquiry as to the population of Cairo will ensure - in quick order - that you receive ads on your Facebook feed for Airbnb apartments on the Nile, low-cost flights to Egypt, and reports selling population stats.


## AI IN NUMBERS:

 **US\$600 million** - the amount of venture capital invested into recruiting software start-ups in 2018 (Crunchbase).

 **2.5 quintillion** - the number of bytes of data we currently produce every day.

 **90%** of all data in the world was produced in the last two years.

 **\$13 trillion** - the additional global economic output as a result of AI by 2030, per year (McKinsey).

 **2.3 million**: The number of jobs AI will create by 2020 while eliminating 1.8 million, accounting for a net two million new jobs by 2025 (Gartner).

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Every time we click, close, or comment, we're contributing to the 2.5 quintillion bytes of data created each day – data which is fodder for algorithms designed to connect us with people, places, products, and experiences in new and unprecedented ways. Welcome to the Fourth Industrial Revolution.

### COMING SOON TO A BOARDROOM NEAR YOU

It's this ability of algorithms to join the dots and reveal new and unexpected connections - and make predictions based on probabilities rather than intuition - that has earned AI a seat at some boardroom tables. Deep Knowledge Ventures was the first venture capital fund to publicly credit their algorithm for pulling the fund back from the brink of financial disaster by helping to identify more than 50 parameters that were critical for assessing risk factors. As the digitisation of business gathers pace, this is a trend we'll be seeing a lot more of, with AI increasingly being used to support management decisions. Smart people running smart machines will be the next big differentiator for companies, giving rise to intelligent corporations which will have a significant advantage over competitors. So, if AI can make better buy and sell decisions, then why not teach it to make better hires?

### WE'RE NOT IN KANSAS ANYMORE

The recruitment industry has historically been behind the curve when it comes to digitalisation, and executive search - as a highly specialised niche sub-set of recruitment - even more so. This is because traditionally recruitment is viewed as a human function; relying on intuition and gut feel of the "look-you-in-the-eye-and-test-your-handshake" variety, rather than cold, hard data. Is this set to change? And if so, how? There are already a number of software products designed to aid all aspects of the recruitment process, from job aggregators (which include databases such as LinkedIn, Indeed, CareerBuilder, and Google For Jobs), through to testing and assessment, interview scheduling platforms, recruitment CRMS, video interviewing, and human capital management software. The game changer is the overlaying of this software with AI to draw information from a variety of data subsets. The trick, of course, is where does the data come from, how clean is it, and who decides what's important, says **Hansjörg Meine of AltoPartners Germany**, a computer scientist and member of the AltoPartners alliance's Global Technology and Innovation team.

"The fact is that currently, the data being used by most AI software is not clean. Apart from the danger of programmers writing their own biases into the algorithm, basing it on accumulated data often means perpetuating historical injustices. For example, if your algorithm draws on data provided by previously successful applicants, and they were largely men, who played lacrosse and went to Ivy League schools, it's not difficult to see how this will not only severely limit your candidate pool but might bake in the prejudices you're trying to weed out. The big innovations will come now that developers are aware of the dangers of unconscious bias and are working out ways to clean the data and sense-check whether the algorithm is discriminating unfairly against certain groups of people."

### COMPUTER SAYS NO

Finding the perfect match in the shortest possible time is the holy grail of recruitment software; using machine learning to review applicants' resumes is a major time saver, although it's far from perfect, as Amazon discovered to its

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cost when it was obliged to abandon an AI recruitment experiment that showed a preference for male candidates, says **Hugo Fueglein, Managing Director, Innovation and Transformation Practice, Diversified Search / AltoPartners USA**. "Current AI tools tend to focus on the internal talent acquisition organisations for Fortune 500 companies, but we have yet to come across a silver bullet for the retained search industry, and that's simply because there isn't one: any solution is only as good as the data it taps into. So, while we actively demo AI products, it's with a view to adding to a larger toolset that can reduce cycle time in the front end of the research and candidate development process, and improve candidate outreach and candidate interview scheduling."

Proponents of augmented search counter that the highly publicised failures are simply teething problems and that, in fact, AI is the best chance of presenting clients with the most diverse candidate pool possible. But not everyone is convinced. AI's ability to mine data sets from a vast range of sources means that in addition to standard résumé items such as age, nationality, and gender, candidates now have to worry about whether they'll be judged on the shape or colour of their face, sexual-orientation, zip code, place of worship, credit history, predilection for country music, or that time they took an on-line quiz to reveal which *Eddie Murphy: Raw* character they were.

And the main problem is that neither the candidate nor the recruiter will know which of those criteria was used to exclude them, leading to concerns over a lack of transparency.

An algorithm is a closely guarded commercial secret, and there is no legal requirement for a software company to divulge the basis for its algorithm in any meaningful detail.

It's this lack of transparency that has given many sceptics pause for thought, especially in the face of new legislation around the world detailing the use and storage of personal data. The EU General Data Protection Regulation (GDPR), which came into force last year, is designed to protect how people's data is stored and used, and specifically provides for a 'right to explanation' of all decisions made by automated or artificially intelligent algorithmic systems and gives them the 'right not to be subject to automated decision-making'.

However, critics say it doesn't go far enough, and have called for a trusted third-party body that can investigate AI decisions for people who believe they have been discriminated against. It's a threat not lost on industry role players who have elected to voluntarily police themselves through the establishment of forums such as The Partnership on AI. This non-profit initiative's mission is to get all the role-players around the virtual table with the aim of ensuring that AI-based technologies serve humanity in responsible and beneficial ways, before governments feel the need to intervene or consumers push back.

### LOOK INTO THE CAMERA

But while ethics may yet ruin the AI party, right now it's a race to develop the most sophisticated solutions designed to not only speed up the recruitment process but – more importantly from an executive search perspective - take the art and science of identifying the perfect match to the next level. Munich-based **Dr Thomas Heyn of AltoPartners Germany** believes that this is where the really big breakthroughs lie; with the development of video and audio tools

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that can analyse facial expressions, the choice of words and the timbre of a voice to give an eerily accurate assessment of a candidate's values, character, and personality, based simply on a description of their Sunday morning routine. Unlike normal interview situations, where candidates can be coached to make the right impression, these software tools cut to the heart of personality traits that are so deeply ingrained that there is very little chance of manipulating the interview situation.

This intersection of neuroscience, psychology, and technology is undoubtedly a game-changer, agrees **Hansjörg Meine**, whose Darmstadt practice is certified to use specialist tools that analyse biometric and psychometric feedback to predict how candidates will react in certain situations. "The real value to our clients though, lies in the training and developmental insights that flow from these tools, both for themselves and prospective new hires."

### TOO SOON TO PANIC

Biofeedback sensors and video cameras are only some of the shiny new tools that have been added to the recruitment toolbox in the last few years, nestling comfortably alongside gaming consoles (an online selection tool aimed at Gen Z candidates, and used to great effect by Unilever), chatbots, aggregation algorithms, and sophisticated CRM software.

"When I saw the first AI demos I wondered if I had not made a terrible mistake by going into an industry in which software would effectively render me redundant," says **Petter Fafalios, Managing Partner of Kingbird / AltoPartners Norway**. His concerns proved short-lived however, and he and his business partners now make use of AI to get a clearer sense of potential candidates by using Crystalknows, a software programme that hoovers up the crumbs we routinely scatter in cyberspace, scouring the likes of LinkedIn, Twitter, Facebook, Pinterest, and Quora to construct a personality profile. This it offers for a fee to anyone keen to understand what is likely to motivate a candidate, client, or colleague, and how best to approach them – for an additional sum it will even compose an email calculated to appeal to their personal style of communication.

On the face of it, these tools appear ground-breaking, but the proof is in the disclaimer that cautions that the results are simply a "best guess" about a person's behavioural tendencies, communication preferences, and work style. Petter concurs: "Our experience shows that it is abundantly clear that no algorithm can ever replace a robust reference and assessment process, and therefore should never be used in isolation."

For **Murat Kaan Güneri of MKG Partners / AltoPartners Turkey**, one of the most challenging things about AI is managing clients' expectations that there is software out there that can miraculously speed up the process and deliver a preternaturally perfect match in record time.

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**Elizabeth Falcon, Managing Partner of Leaders Trust / AltoPartners in Mexico City**, agrees. "Emotional intelligence is probably our biggest advantage and the one thing that AI has not yet been able to replicate. Nor can AI deep dive into a client's culture, negotiate packages and tell a compelling enough story to persuade the right candidate to take on a new challenge and guide them through the next chapter in their career. Also, let's not forget that some of these tools are geared toward high-volume, entry level jobs. Executive search requires a more nuanced approach by consultants, based on very specific criteria to find, select, and attract the best talent. These candidates are generally not looking for new opportunities as they are successful people who tend to be happy in their job".

### DIGITISE OR DIE

Says **Stephen Dallamore, Global Chairman of AltoPartners**: "At the end of the day we are strategic advisors. Our value lies in understanding not only the candidate, but the market. AI can help source candidates that say they have experience in transforming and leading companies, but it's up to the executive search consultant to verify it and make sure their leadership style is appropriate for the role and the company. AI is also no match for corporate story-telling and providing a differentiated candidate experience, which is increasingly important to our clients."

"Which is not to say that the challenge of digitisation is not a baton the industry needs to grasp firmly," adds **Dr Thomas Heyn**. "We are all sitting on massive amounts of data of our own. The challenge is how to capture and mine that data to provide an even more accurate and on-point client and candidate experience to allow us to do all sort of interesting and clever things such as forecast when roles are likely to become vacant, and join the dots between candidate and client universes more effectively. That's the real game changer."

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