
Graeme Grovum

The dawning of a new era: How Amazon is 'democratising' AI

By Graeme Grovum – Head of Innovation, Corrs Chambers Westgarth

2017 was an outstanding year for Artificial Intelligence (AI). In the legal domain specifically, AI-based applications have proliferated at an amazing pace, offering bold claims of new and better ways to eradicate the inefficiencies attached to manual processes. And more widely, big players such as Amazon are gearing up to make huge new AI moves. But what effect will this have on the future of legal AI? As the legal AI market grows, the applications on offer are becoming very domain-specific, offering precise solutions to discrete problems. There is both an up-side and a down-side to this...

On the up-side, these applications are becoming very good at performing specific tasks. On the down-side, however, the limited domain expertise of these products mean they are not very good at performing in areas outside of their niche.

So what does this mean for the future of legal AI?

In order for the implementation of legal AI applications to be successful, customers need to have both an in-depth understanding of

the problem to be solved and an awareness of the core strengths of the many different AI applications already on offer.

Unfortunately, in many recent instances this hasn't been the case, leading to an 'over-promise and under-deliver' outcome. One of the most notable examples firmly in this camp is the IBM Watson project that MD Anderson spent $60 million on – a massive increase on the original $2.4 million budget – before terminating the project as "not ready for human investigational or clinical use..." (per the University of Texas' Internal Audit Report). Examples such as this – not to mention all the hype and other growing pains at this stage of the legal AI industry growth cycle – make it very easy to fall into the trap of questioning whether AI will, in fact, deliver on the promises that are being made. In my view, however, this line of questioning conflates technology and product, when they must remain separated.

To confirm the legitimacy of AI as a technology, we need look no further than the giants of the tech industry. A move is underway by this group to 'democratise' access to AI, with very robust platforms that require minimal coding and data science expertise. For the purposes of this article, I'm focusing on the steps currently being taken by Amazon in this space, but Google, Apple, Microsoft, Facebook, and many other big players are also making the same moves.

Amazon's 'democratisation' of AI: A case study.

Until recently, Amazon seemed to have been focusing its AI efforts on voice, speech and image recognition technologies, leaving the analysis of business-related unstructured data to others, like IBM and the many start-ups that have launched in this space over the last few years.

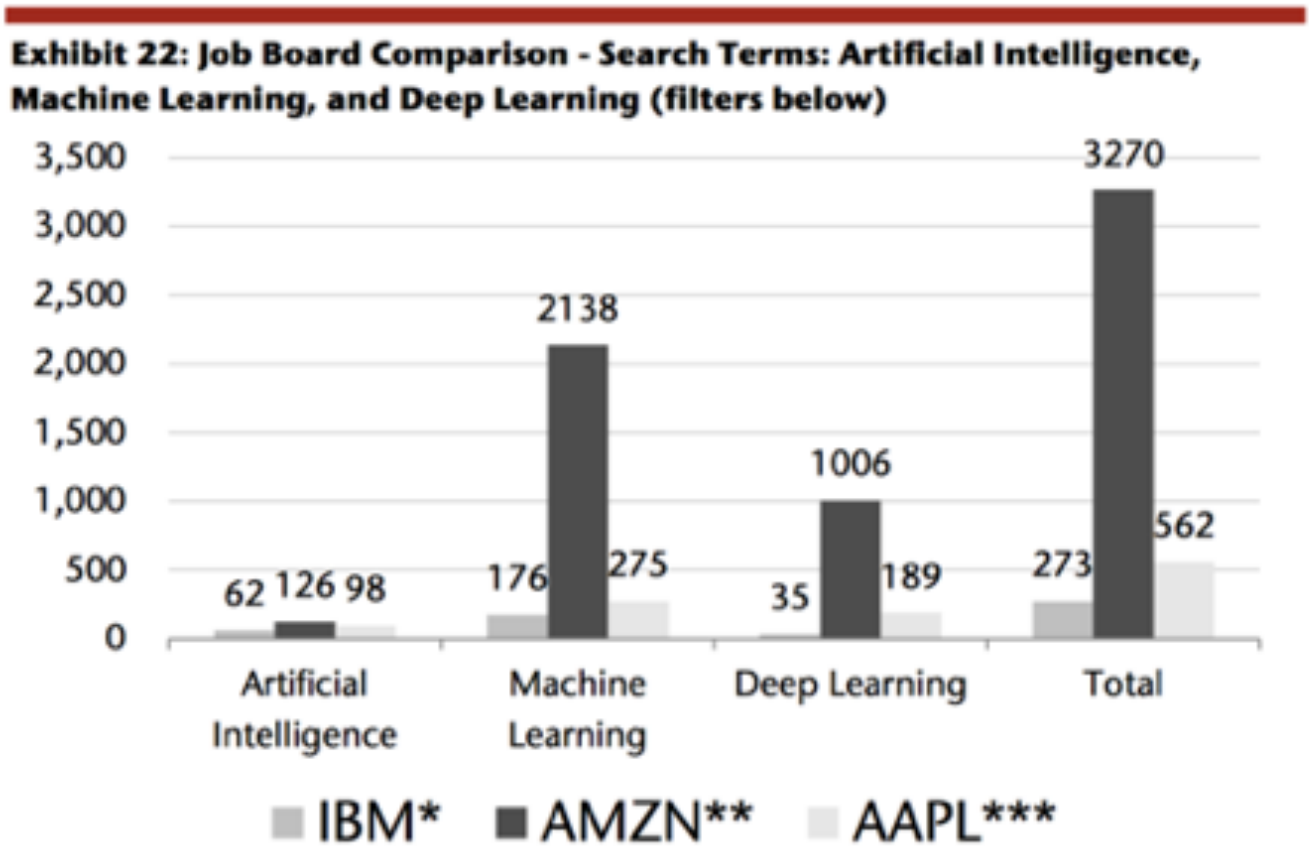
While the legal AI industry segment that is targeting enterprise (contract analysis, DD, etc) focuses on the dominance of IBM's Watson, and measures itself against that metric, Amazon has been applying its expertise in AI to creating a robust AI platform that is available to anyone who wants to use it through its Amazon Web Services (AWS) platform.

Amazon is doing so by:

- amassing what may be the largest group of AI experts in the world, hiring at 12 times the rate of IBM, the 'leading' AI services provider (see chart below);
- creating a platform that is native AWS, meaning it is integrated directly into the unstructured data stores on AWS that more and more big businesses are moving to (S3, EC2, EFS, etc.); and
- focusing its expertise on winning the speech / consumer interface AI war (so Alexa vs Google Home vs Siri vs Cortana).

These moves by Amazon set the stage for a massive surge of robust AI applications being created by companies that come up with novel use cases and no longer have to 'figure out' AI for themselves.

The recent launch of AWS' AI suite indicates that a significant proportion of the work Amazon is doing in AI directly relates to analysis of unstructured business data. Does this indicate that Amazon is likely to, at some stage in the



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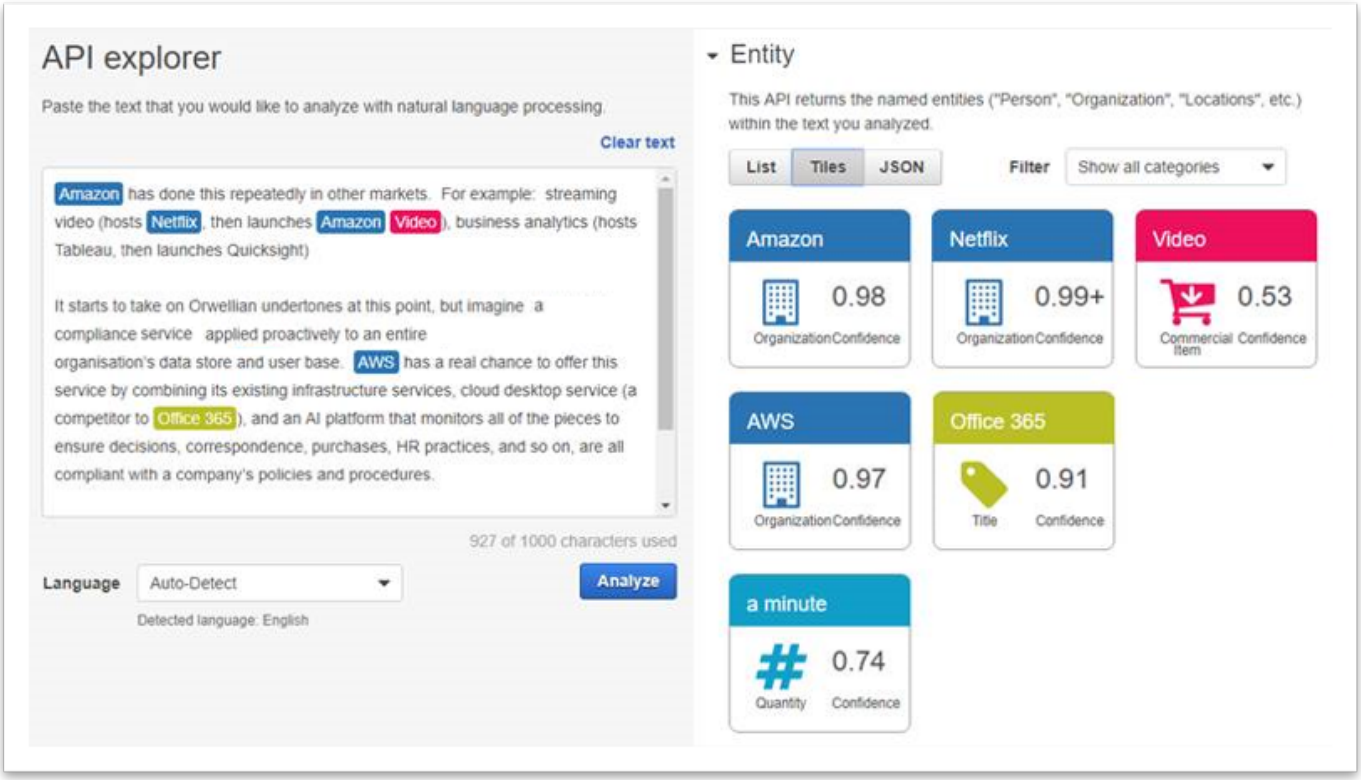
not-too-distant future, launch a product targeting enterprise that leaves the majority of today's AI obsolete?

I believe it's already happening and will unfold in two stages:

1. **By launching a platform that democratises access to high quality AI algorithms, letting customers integrate AWS AI into their own products and/or processes.** This is already underway – as mentioned above, an entire suite of AI technologies was launched at AWS' Re:Invent in late 2017. It will then spend time monitoring market use and identifying the best integration strategies.

This newly-launched suite is likely to have a massive and beneficial impact on accessibility – barriers to entry, including the two most important, cost and ease of use – are demolished.

As an example of how easy it is to start using these technologies, I signed up to AWS' Comprehend and had the analysis on the next page within 30 seconds; no setup, integration or training needed:



2. **By launching a service that rivals or surpasses best-in-market once that market is sufficiently mature.** It is this pause to assess the market that I most admire. Instead of rushing to 'make the market' with first-to-launch B2C products, Amazon realises that a different approach will deliver far greater returns. While this might seem a bit far-fetched, keep in mind that Amazon has created the following three-step business model and done it repeatedly in other markets:

   - Create an eco-system;
   - Monitor the products that flourish in that eco-system; and then
   - Enter the mature market with a service that is best-in-market.

   This three stage process has worked exceedingly well for Amazon in other markets, for example: streaming video (hosts Netflix, then launches Amazon Video), business analytics (hosts Tableau, launches Quicksight) and music (hosts Spotify, launches Amazon Music).

Although the looming impact of Amazon and other tech giants on legal AI might give pause to the many start-ups that have recently emerged in this space, the benefits to users are immense. Ready and affordable access to robust AI algorithms like this can only be delivered from a company the size of an Amazon, Google or Microsoft; A company that is playing the long game and can afford to do so.

If Amazon does create a legal AI application, what might this look like? Imagine a real time compliance system applied proactively to an entire organisation's data store and user base.

cloud desktop service (a competitor to Office 365), and an AI platform that monitors all of the pieces to ensure decisions, correspondence, purchases and HR practices etc. are all compliant with a company's policies and procedures.

Easily dismissed as fantasy? Maybe. But don't forget, Amazon has been using AI to drive sales on its marketplace for more than a decade, and is at the forefront of the industry in this space. (Jon Nordmark's awesome and insanely detailed article on Amazon's long-game approach is a must read: 'Tech-Enabled Private Label ... Amazon's $20 billion business ... a menacing new formula').

About the only thing missing from this ecosystem is a robust blockchain that can be used to ensure that outcomes aren't being 'shaped' by a service provider. Oh, wait a minute ... AWS is working on blockchain too.

About the Author

Graeme is a legal technologist with 15 years of experience in the legal and financial services industries.

Graeme leverages his deep understanding of legal processes and love of new technologies to deliver exceptional results in unexpected ways. Graeme's understanding of how technology can improve legal practice has led to the release of CaseFolio, Corrs' award-winning iPad app; launching Beagle Asia Pacific, an AI-based process improvement methodology; collaborating with Elevate Services to create Cael Verify, a verification application for legal and compliance teams; and creating JustOCR, a cloud-based OCR service with patented analysis technology.

Internally, Graeme has also spent time identifying a pathway to AWS cloud migration for the firm, extracting insights from legal data using visual analysis, launching an incubator, developing products to streamline legal workflows and acting as an agent for change within Corrs.