

Al can turbo-charge your business

By <u>Sabine Dedering</u> 14 Jul 2020

Medium businesses are more likely to reap the benefits of the early-stage disrupters - for example, AI-led software companies tackling business problems - with more agility than their larger counterparts and more capital than smaller businesses. They want to benefit from AI and they want it now.



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But according to a survey from London venture capital firm MMC Ventures, 40% of European startups that are regarded as AI businesses don't actually use AI in a meaningful way. So, for smaller and medium businesses where investments can be business-critical, it is essential that AI is used to unleash its value.

At the heart of the AI buzz sits some rather juicy figures. The global market value is forecast to hit \$169.41bn by 2025 – that's up from \$4.06bn in 2016. The interest and desire for business innovation through AI applications is real. With the number of enterprises implementing some form of AI technology increasing by 270% between 2015 and 2019, it's fair to say that awareness is strong. But the term 'implementing AI technology' is quite general and could mean any number of things. To understand the true scale of adoption we need to go back to the basics.

Getting real with the Al basics

Artificial Intelligence refers to computer science that deals with algorithms and is inspired by natural intelligence. It encompasses a range of often repetitive tasks that might normally require natural or human intelligence, for example: pattern recognition, problem-solving, translation, speech recognition and visual perception.

We are already seeing the impact of AI across industries whether it's sourcing a new antibiotic, IoT, providing business insights or assisting us in our daily routines through applications on our mobile phones. It does not take the human form and is far from reaching the level of complexity needed to out-pace human intelligence – contrary to popular beliefs lifted from sci-fi classics.

Al can be separated into two categories. The first is most recognisable from sci-fi legends: Artificial General Intelligence (AGI), which is the hypothetical intelligence of a machine that has the capacity to understand or learn any intellectual task that a human being can – cognitive systems.

Then, there is Artificial Narrow Intelligence (ANI) which refers to specific aspects of human intelligence and perception like recognition of faces or voices. This is the type of AI we are seeing in action today. Lift the hood on AI and we will find the mechanics that give it meaning.

Machine Learning is a form of AI that uses algorithms to learn from data. Rather than being explicitly programmed, these algorithms build a model based on input and in turn uses the resulting insights to make decisions or predictions. This is the kind of mechanism used to recommend your next Netflix series, detect spam or credit card fraud. These machine learning models can be developed quickly and relatively effortlessly. However, it takes time to convey precise results while 'learning' – but if the data sets change, it will re-train. Machine learning models are only as good as the defining properties applied.

Deep Learning is a type of machine learning, that uses layers of neural networks to allow algorithms more freedom – there are no rules. Mapping inputs to classifications more accurately via layers of abstraction is reminiscent of how the human brain functions. Deep Learning defines its own criteria – it does not lean on predefined features or characteristics like machine learning – and learns if it was right or wrong based on its own exploration. Progress in this arena is fueling the leaps and bounds made in the development of computer vision and speech recognition – but it requires an incredible amount of data and compute power to sustain.

Getting your data Al-ready

Today, these technologies can be found in motion all around us through the automation of everything from targeted advertising to smart home devices. Deep learning is creating better futures in healthcare and machine learning is providing invaluable business insights. All is not any one thing.

For smaller and medium businesses, we are more likely to see machine learning used for document analysis, fraud detection, marketing activities or sales optimisations – practical, rather than sexy applications.

With the exponential growth in data, the business opportunity is ripe, to garner valuable insights and create new, innovative products and services. But one size does not fit all, not all data deserves this treatment – and most importantly of all, Al is only as good as the data it's fed. So, businesses must get their data in order first and then get to grips with the Al tools available to them.

Along with the AI basics, the right mindset is required in order to successfully implement. This means starting small and preparing to fail as a learning before achieving the desired goals. Like us, AI does not learn overnight. Cultivating trust in this technology within the business will also be key to its success, so allowing time for these learnings until the desired results are achieved and rolling out the application is also important. Having the talent to guide AI development is also essential – and in the Medium Business setting, retraining a colleague so that resources go as far as possible can be effective.

Today, there is little doubt that AI can turbo-charge business, from small to large. But navigating the hyperbole around this

complex technology isn't always easy. Implementing AI strategies is a collaborative process. Dell Technologies is available to support your infrastructure needs for AI.

Technological innovation means now is the time for AI to start realising its potential, with the promise of 5G to truly turbocharge its development. But cultural attitudes towards AI, along with a skills gap mean that businesses must first understand its value – and when it is truly a business need.

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