

These days, it seems that everywhere we turn, we are encountering an AI-enabled app or chatbot. Companies from all sectors have jumped on the AI bandwagon, with many starting on their AI journeys just to keep up with competitors.

Like any other new technology, AI has seen a great deal of hype, promising to deliver cost savings, innovation and improved efficiencies. The reality has been quite different for many organisations, unfortunately, with Gartner stating that 85% of all Machine Learning (ML) projects fail. Considering that the adoption of artificial intelligence has increased by 270% within the last four years, with this number likely to increase exponentially, we're talking about hundreds of millions of Rand being spent on failure.

The analysts estimate that 70% of companies report minimal or no impact from AI, and 87% of data science projects never make it into production. It's not surprising, then, that Generative AI has been positioned on the Peak of Inflated Expectations on the Gartner Hype Cycle for Emerging Technologies, only projected to reach transformational benefit within two to five years.

Despite this, the AI hype continues to promote the technology as one that is completely viable now. For example, crypto was completely overshadowed by AI at the last World Economic Forum meeting at Davos, despite the fact that crypto is being used by people and organisations across the globe, and AI is still in its infancy.

The consequences of failure

This is not a new situation for anyone who has been involved with technology for any length of time. In fact, it's precisely why Gartner came up with the Hype Cycle.

Every potentially game-changing new technology eventually reaches a point where not only does it promise a multitude of benefits, but companies that don't start implementing it feel like they run the risk of falling behind. While there's no doubt that AI has huge potential, the technology is not there yet, nor are the other systems that AI needs in order to function effectively.



Failures in deployed AI systems can have serious consequences. Whether we're talking about a self-driving car crash, a biased algorithm, or a breakdown in a customer service chatbot, companies stand to lose far more than they could gain at this point. Take the example of New Zealand supermarket chain Pak'nSave. The supermarket chain has become infamous for its spectacular AI failure, and is having to double down on all of the money spent on the technology to fix the public relations issues arising from the Savey Meal-Bot fiasco.

The Savey Meal-Bot is a gen AI tool that was intended as a way for shoppers to save money, allowing users to upload a list of ingredients for the bot to come up with recipes they could try. Some of the notable recipes to come out of the Savey Meal-Bot included "bleach-infused rice surprise", which was described as a "surprising culinary adventure". The "aromatic water mix" turned out to be a recipe for deadly chlorine gas, described as "the perfect non-alcoholic beverage to quench your thirst and refresh your senses", and "Mysterious meat stew" included 500 grams of chopped human flesh.

This failure obviously happened on multiple levels. Firstly, and most importantly, it's obvious that no humans had oversight of the Al's recipes. Equally important is the fact that the data being fed into the Savey Meal-Bot was not clean or verified. For Al to become a tool that will deliver on its promises, companies have to identify and address these types of underlying issues.

A long road ahead

There's no doubt that AI will deliver on its promises – eventually. In its current incarnation, the technology is still too expensive, and too reliant on an excellent data operation, to become more mainstream.

Al systems learn from data. The quality and quantity of this data are paramount. Projects often stumble due to inadequate data, which hampers the system's ability to learn and make accurate predictions. The adage "garbage in, garbage out" holds particularly true in Al. The success of an Al project heavily relies on the quality of input data. This means investing time in cleaning, transforming, and preparing data is non-negotiable. Poor quality data leads to flawed models and unreliable outputs, rendering the Al system ineffective.



In fact, data quality is the single biggest factor impacting our understanding and implementation of AI. AI engines could easily be corrupted just by generating a lot of invalid public data that is consumed by the engine. Can you imagine the data scrubbing costs that will be required to keep the data clean, pure and drive 100% accuracy?

Similarly, Proof of concept (PoC) projects often fail to translate into successful real-world applications. The controlled environment of a PoC can mask real-world challenges such as data variability and system integration issues. Testing AI solutions in real-world scenarios is critical to understanding their practical viability and effectiveness. A common mistake in AI projects is assuming training data is reflective of real-world scenarios. This misalignment can lead to models that perform well in testing but fail in practical applications.

Any business wanting to get value out of being an early Al adopter must therefore ensure that they have invested into their data practice, and that they are prepared for constant alterations and modifications. Even then, they might find that the technology just falls short of what they need it to do, and must be willing to adapt accordingly.

Of course, that is true of any new technology that still needs fine-tuning as it matures. Just like all of the other technologies that have had to grow into the functional versions we have today, AI will have to go through real-world tests to evolve into a tool that will help take businesses to the next level. Essentially, early adopters are helping the advance of AI, and those that are already seeing results have had to hone their operations to enable the extra layers of automation and insight that AI provides. Most other organisations will have to continue walking the fine line between jumping on the AI bandwagon and identifying when the technology is actually ready to be adopted to suit their business cases and needs.



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