What Companies Tend to Get Wrong About AI

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In the stampede to build an AI strategy, executives fall into four main traps.

It's almost impossible to pick up a trade journal, hear a start-up pitch or listen to a quarterly earnings call without hearing the two magic letters: AI. Over the past few years, interest in artificial intelligence has rocketed with no sign of abating. But in the stampede to build an AI strategy, executives fall into the following four main traps.

1. Thinking that artificial intelligence is one single technology.

As boards and corporations are flush with AI fever, they tend to speak of AI as one all-encompassing technology. Even the question, "What is our AI strategy?" presumes that AI is one silver bullet. But on the contrary, the AI we see today is the result of many layered technologies (e.g. computer vision, natural language processing, generative adversarial networks, and more). There is no single AI technology – rather there is the application of AI *techniques* to train computers to solve problems so repetitive tasks are reduced. This can take forms ranging from computers recognising images

and voice commands, to decision trees built to deliver the best options for a customer, to driverless vehicles navigating the road.

As an enterprise endeavours to apply AI to its business, it's important to understand that to "do AI" requires a more focused approach. The key is to understand the business' core competencies, assess the customer and the gaps, as well as prioritise the processes that specific AI technologies can make more efficient.

If your business has a large loss component (such as in banking), then fraud detection using AI could be the investment yielding the highest return. An example would be Citibank's partnership with machine learning start-up **Feedzai**.

If your business has a large servicing component (such as in healthcare and hospitality), then customer service automation could be an area of first priority. KLM airlines receives thousands of customer queries a day on average – twice as many in times of weather disturbances. By automating its customer service operations through a partnership with **DigitalGenius**, KLM is able to answer the most common questions without the support of human service agents.

2. Missing the data link.

Artificial intelligence only functions with sufficient, high-quality data. However, data by itself is useless. What makes data meaningful is its ability to affect action through insight. To begin, ask yourself, how well is your company capturing data? Remember, at the heart of it, AI is about **finding patterns and making consequent *predictions*** based on large sets of structured or unstructured data (images, text, speech, etc.).

Here is a four-step checklist to evaluate your company's data health. Is it "COMA-tose"?

1. Is your data **compiled** in a central repository and **is it accessible**? Many industries suffer from antiquated IT systems. Others are burdened by legacy systems brought about by mergers and acquisitions – such that IT systems don't talk to each other. Of course, all this assumes you are collecting data to begin with: demographic data, transaction data, analytical data and so on.

2. Is your data **organised** in a meaningful way? Chronological, demographical, geographical, by product – whatever allows you to detect patterns and develop a profile or story for your customer and your business.

3. Is your data **mobile**? Can data move easily from one database to another? This again tends to be a challenge for antiquated IT systems, or legacy industries when no "bridge" exists between databases.

When social media began, capturing customers' tweets, Facebook posts and social activity became a challenge because technology didn't exist to capture it. Today, companies like Walmart and Lenovo use solutions like **Sprinklr** and **Brandwatch** to capture and act on social media data, as well as bring it into their data fold. The advent of the cloud has also boosted data mobility, allowing data to be moved in a near seamless fashion.

4. Are you able to **analyse** your data? This has a lot to do with data quality. The saying "garbage in, garbage out" illustrates how important it is to get quality data that you can analyse; if not, your output is questionable. Data cleansing can take a lot of time so ensure that your data input parameters are tight.

Many companies today, regardless of industry, encounter challenges with collecting and compiling data. It's common for companies that are not digitally native, i.e. not born in the past 10 years, to see data collection as peripheral. Certain industries lend themselves well to collecting data, such as in banking. A tier 1 bank I worked in had tonnes of data but was the product of many mergers, so compiling data amongst different databases was a challenge.

It's also critical to avoid data silos. This can happen when companies are organised by business units or geographies and those units build their own data strategies independent of each other. I saw this at an insurance company I worked in. Building a data collection strategy at the enterprise level is key.

3. Neglecting to build sufficient talent and an adequate organisational structure.

For all the **doom and gloom** AI amasses in the media related to job cannibalisation, it actually presents a golden opportunity for the labour market. Demand is great and talent is scarce. New career opportunities have and will continue to present themselves. As companies gear up to meet the age of data, non-digitally native companies need to invest in data-savvy professionals – those that know how to leverage the benefits of data (data strategists), construct them (data engineers), manipulate them (data scientists) and optimise them (data visualisers and modellers).

But don't just go out there and hire as many engineers and statisticians as you can find. Today I see companies rush to hire data scientists only to lay them off a year or two later. Training needs to take place and organisations need to be redesigned to accommodate a new data-centric way of working. This also requires nontechnical talent: strategists with an in-depth understanding of the business as well as AI are invaluable.

One approach to this new discipline is to create your "AI Marines", a task force and centre of excellence whose job is to rotate through the functions as internal consultants and evaluate opportunities. These will be highly trained, specialised experts with deep experience in strategy, data engineering and data science. While on rotation in various functions, they will also train the in-house talent for the work to be done post-assessment.

4. Forgetting to build a "police force".

Data is an ever-evolving organism. The sources and content of data change constantly. Companies must remain vigilant in sourcing, capturing and revalidating data and their corresponding models. Each model that we would roll out at the tier 1 bank had to go through a rigorous model-validation committee comprised of legal, risk, compliance and data executives to ensure **bias didn't creep in** and that we were using variables appropriately. We also evaluated our models annually to prevent adverse effects and ensure performance and reliability.

From insight to action

The power of AI lies in its ability to take any repetitive task and make it more efficient, freeing us to deliver more creative output and better customer experiences. AI also has the ability to move businesses from insight to action and monetise data to improve ROI.

For organisations that can **harness the power of AI**, the pay-off can be significant. The company that understands that AI is more than one technology, ensures its data is COMA-tose, aligns its organisation and manages these AI efforts well, wins a competitive advantage and builds a defensible business ready for the AI age.

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