



# Advanced analytics and AI - no longer optional for business success



"The artificial intelligence revolution has finally arrived," says Mohamed Khan, Associate Director at KPMG South Africa and a member of the firm's Emerging Technologies division. "Indeed, for C-suite leaders, the question is no longer whether AI will fit into their business, but rather how they can realign their organisations to fully capitalise on its transformational value, and in doing so become an AI-first enterprise."

Khan explains that transforming into an AI-first enterprise requires organisations to think like leaders. "It means thinking bigger and embedding data-driven technology broadly throughout the entire enterprise," he says. "In today's environment, AI is key to automating, accelerating and enhancing key business processes to help transform at scale and drive value."



## Making meaning from all the data

AI is at its most effective when combined with data visualisation. "The role of visualisation is to communicate data meaning through stories and images," says Khan. "Companies spend a lot of time and money developing KPIs and generating reports. But is anyone actually reading these reports or is that time and money just going to waste?"

Dashboarding and data visualisation is not about presenting data in an attractive manner. "It's about making sure that your business processes are visualised and measured in a clear and concise way, providing actionable insights," says Khan.

KPMG uses the term Smart Analytics to refer to its proprietary approach of combining emerging technologies with data analytics and visualisation.

"Smart Analytics is a KPMG methodology and approach that refers to the combination predictive analytics, and robotics, AI and machine learning," says Khan. "We've put all of these things together to package it as Smart Analytics, which is a departure from the way that others have been approaching these components in a segmented fashion."

As an example of the difference, Khan says that simple analytics can show many hours overtime are paid in a month to employees. "While it is a useful number to have, by itself it doesn't give you very much information. If you combine that with robotics process automation (RPA) or some other clever data method to link it to the operational activities of the employee, we then can correlate the overtime paid to an employee against the actual outputs achieved by that employee," he says.

In other words, smart analytics can start to show you in this instance whether the cost of overtime makes financial sense in terms of the value of the work achieved in that period.

Data visualisation can be built in a layered approach that caters for different information requirements. For example, the CEO may just wish to understand the top-level numbers. "Overtime is 20,000 hours and productivity is 80%. If the overtime number was let's say 20,000 hours and productivity is at 10%, he can raise an alert," says Khan. "For the operations manager, however, it's important to then be able to drill down into the specifics of what makes up that number to best understand how to drive productivity. He needs to be able to keep going down until he finds a root cause for low productivity."



## Trends in analytics

Khan says there are several trends worth noting. “The biggest one that everybody is adopting or moving towards is the use of AI agents,” he says. “In South Africa natural language programming (NLP) has been very quickly adopted into call centres, as well as chatbots for customer service applications.”

Khan says it’s important for businesses to understand the limitations of this type of technology, and to think about how to use it sustainably. “AI is not going to be a replacement for a client’s workforce,” he says. “The AI chatbot is not going to handle every single type of client query and every single type of conversation. The chatbot needs human supervision, and humans need to deal with outliers and exceptions. It’s also important when using machine learning to feed the AI the right type of information.”

Another mega trend is the use of predictive technology. For example, the algorithms online retailers use to suggest products to individual customers. This type of tech has huge potential for applications in gauging risk and thus medical aid and insurance industries. “The data can tell the insurer that people who normally do X are also likely to do Y,” says Khan.

Data mining will allow banks and insurers to price policies more accurately per person. For example, medical aids will use information like step tracking, grocery purchases and pharmacy script fulfilments to get a holistic idea of a person’s health, and adjust their risk profile accordingly.



## KPMG positioning

KPMG is currently focused on partnering with businesses in the retail, telecommunication, insurance and banking sectors, as the firm sees immediate room to add value with Smart Analytics.

“We’re trying to help clients get to informed, real-time business decisions,” says Khan. “To do that, we may use a variety of technologies, but we also look at the company through a business lens to ensure that we’re solving real problems.”

While a challenge may look at first like a technology issue, the root might be people, process or culture related. KPMG’s consulting and technology experience allow the firm to take a holistic approach.

“We collaborate with the client to co-develop intelligent solutions that enable key decision making,” says Khan. “We also have access to the knowledge and expertise in our global network, as well as our alliances and partnerships, and we believe we can make a tangible difference while managing costs and implementation lead times, to measurably improve clients’ businesses.”



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