

Reaping the benefits of being a Data-Driven Business

Real-time AI Operationalisation



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Artificial Intelligence (AI)? Deep Neural Networks? When we think of AI, many get images of computers taking over the world, enslaving us; they conjure up images of HAL from 2001 Space Odyssey, The Matrix, or The Terminator. Those with a more optimistic vision see AI as the answer to almost everything from curing cancer to accurately predicting future stock prices, autonomous transportation, and even the elimination of world hunger. The reality is that neither of these extreme views truly represent the AI reality; as Gartner analyst Erick Brethenoux notes:

Artificial Intelligence Superheated rhetoric surrounding the potential benefits of artificial intelligence is inflating related expectations. Data and analytics leaders must demystify AI, remove technology jargon and focus conversations on real business problems and achievable use cases.

Having said this, AI has a high potential to impact business and provide practical solutions to critical problems, whether these relate to the bottom line or to delivering better health outcomes.

So, what do we mean when we talk about a 'Data-Driven' business?

Put simply, it's making strategic decisions based on real-time data analysis. Naturally, we are talking lots of data, typically from multiple sources and in multiple formats. To handle this level of velocity, volume, and complexity, organizations need to leverage the prescriptive capabilities of AI machine learning models.

While many organizations we have talked to have attempted to develop AI capabilities in-house, most have found this a time-consuming and expensive exercise with poor or no ROI. While part of the problem relates to Brethenoux's observation above regarding having a practical focus on "achievable use cases," the primary challenge, even if they have been successful in building a suitable model, has been an inability to embed these models into the DNA of their business operations.

Model development is an iterative process ensuring any data bias is easily identified and eliminated, that the appropriate algorithms are selected, that model is training and tuned correctly for optimal accuracy even before the model is deployed. These steps are not soiled activities but are instead part of a cohesive process requiring an intuitive platform. Our Cortex, Cognitive AI Platform, has been explicitly architected as a data-intensive real-time cloud computing engine with a tightly coupled big data repository framework and Google's next-generation TensorFlow framework. It operates as a self-organizing collective of computing nodes with a high degree of linear scalability; its middle-tier application logic layer can be configured to run on as many computing hosts as needed. However, our platform goes beyond current Enterprise AI capabilities with its embedded machine intelligence, which accurately perceives, utilizes, and manages its environment independently of any manual intervention. That is, once a model has been developed and published, it runs autonomously, capable of leveraging real-time data feeds from IoT devices and alerting different users at different times with relevant information and recommendations for their specific roles.

For example, we have developed models that can accurately predict power grids' equipment failures, thus eliminating costly unscheduled outages. To achieve this, the model analyzes hundreds of data points from multiple internal and external data sources in real-time, then provides different users with different information and recommendations unique to their role within the organization.

If your organization wants to develop next-generation AI capabilities, you need to leverage a platform designed for non-technical stakeholders to rapidly create, deploy and operationalize models with zero programming efforts, reducing the current cost and time to deploy AI by a factor of ten.

Cortex not only understands "**what**" needs to be done but also handles the "**how**" and "by **whom**" all within the platform.

Like to know more? –

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