



VRIZE

Data Analytics

tools available
in Microsoft

Azure Intelligent Cloud



In 2015, [Eugenia Kuyda](#) lost her best friend, Mazurenko. She was devastated by this loss and found herself reading old conversations between her and her dearly departed friend. At this point, Kuyda was creating a virtual assistant for her company Luka.

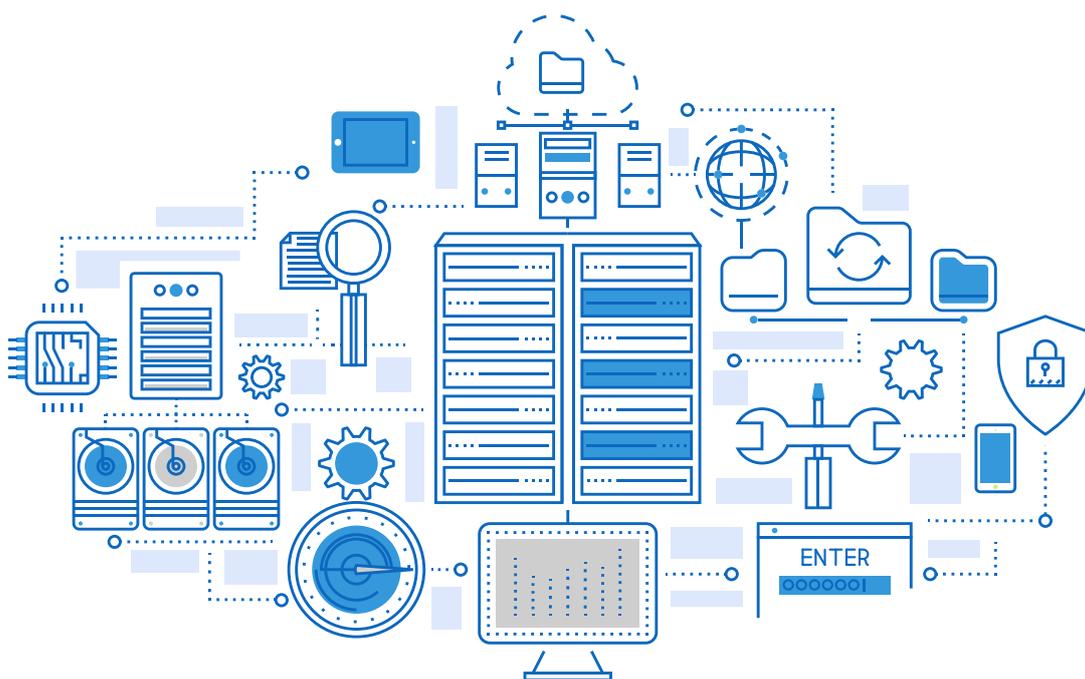
After the reality of a deceased best friend hit her, she created a chatbot to keep his memory alive. Or at least the semblance of it. She poured all his messages, photos, and idiosyncrasies into the chatbot structure she was designing for Luka, to make a bot that would let her talk to her best friend.

As word got out, more and more people started asking for bots that could replace a hole in their lives by talking to a digital version of the person they had lost. Thus came into existence, [Replika](#), a chatbot that learns to become you through their interactions with you.



It's safe to say that digital technology has taken the last decade by a storm. While we are yet to reach a point where humans can have real-time interaction with machines, there have been some remarkable advances like Replika - the one we mention above. These creations have been made possible by emerging fields like Data Science, Machine Learning, and Artificial Intelligence (AI).

One such area where AI is fusing with Cloud Computing to create unparalleled analytical models is Big Data Analytics (a.k.a. Advanced Analytics). In this article, our goal is to highlight the AI driven components of Microsoft Azure (Azure) that can add pace to your Advanced Analytics journey.





Azure Synapse Analytics

[Azure Synapse Analytics](#) is an upgrade to the Azure SQL Data Warehouse. With Azure Synapse Analytics, you can store both relational and non-relational databases in the Cloud. The main function of the Azure Synapse Analytics is that it allows you to view all your data in one place. This data is then processed using the SQL language.

Furthermore, this product lets you build a unique workhouse which can be used for data interpretation, big data analytics, complex machine learning jobs, etc. Azure Synapse Analytics gives its users the freedom to run code in different computer languages such as T-SQL, Python, Scala, Spark SQL, and .Net.

The best part about Synapse is that in addition to an enhanced workflow, it gives the users a chance to use the Azure Synapse Studio. The studio can be used for critical business tasks such as big data analysis and the creative visualizations of data that make it ready for interpretation.



Azure Databricks

The [Azure Databricks](#) is built on the premise of giving users access to data as and whenever it gets recorded. Much like Synapse, Databricks also runs on several languages such as Python, Scala, Java, etc. Databricks is a high-tech analytical product that's established with Apache Spark.

Apache Spark allows data analysis to take place smoothly. The fast interface of Azure Databricks is perfect for real-time analytics. Furthermore, Apache Spark makes it possible for users to accommodate open source libraries.

Azure Databricks promotes an excellent workflow. It's perfect for data scientists, data analysts, and data engineers. The Azure Databricks comes integrated with Azure Machine Learning, which enables users to expand machine learning models effectively. With Azure Machine Learning, you can easily manage your machine learning models across the cloud and the edge.



Azure AI

Azure AI is integrated with Azure Machine Learning, ONNX Runtime, Azure Cognitive Search, and several other cloud services. Azure Cognitive Search allows users to identify potential insight across all their content. It's the only cloud-based search service at this time. Azure Cognitive Search can be used for face detection, locations, scanning keywords, and much more. With Cognitive Search, you can discover inconsistencies in your content across various platforms.

Last but not the least, it helps service providers build applications with in-built chatbots with its Bot Service.



Azure Purview

[Azure Purview](#) is designed with businesses in mind. It's an effective cloud tool that helps users map their data from multiple cloud sources in one place. Azure Purview can be used to enhance data classification with a built-in Microsoft Information Protection application.

Purview uses Apache Atlas APIs to carry out smooth integration of your data systems across the Cloud. Furthermore, it has a built-in semantic search program that makes it easy for you to find what you're looking for with business or technical phrases. With Azure Purview, you can access your data with just a few clicks. Purview allows users to see exactly where their data is being derived from.





Azure Data Factory

The [Azure Data Factory](#), an ELT (Extract Transform Load) product, is specifically curated for fast processing of large-scale data. The main application of this product is to scale large amounts of data and optimize it for easy analysis. Data Factory is also used for building ELT strategies without access to any code or configuration.

An excellent feature of this product is that it enables you to use more than 90 data sources. Some of these data sources are Amazon S3, Google BigQuery, and various sources located on the Azure intelligent cloud itself.



Azure Analysis Services

[Azure Analysis Services](#) can be set up with the help of Azure Resource Manager. You can use this cloud service to turn complicated data into helpful insights. Azure Analysis Services allows you to conduct all your data in a dedicated space, converting it into a readable Business Intelligence (BI) program.



Hope this list encourages you to delve deeper and ultimately leverage the Azure Analytics capabilities. No matter where you are in your analytics journey, Azure intelligent cloud components should be able to add wings to your flight! Bon Voyage!!

We are happy to assist should you have a question on Azure! Contact us @ VRIZE!!

Contact Us

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