

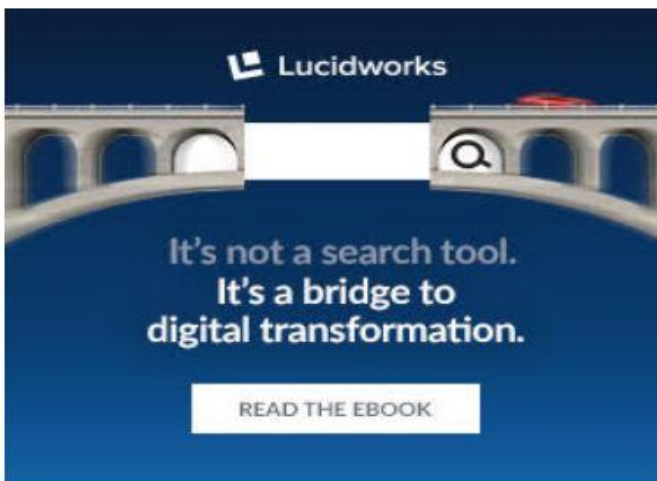


Microsoft Announcements on Azure Artificial Intelligence

Modern organizations have been utilizing Artificial Intelligence (AI) in a variety of ways to successfully create personalized customer experiences while simultaneously digitizing core business processes. Platforms such as Azure AI help organizations innovate by providing secure, productive and enterprise-grade solutions. Naturally, there was an air of anticipation around the Azure AI-centered announcements at Ignite 2019. As expected, Microsoft did not disappoint with the announcement of many significant updates to the products that will help organizations build robust, intelligent, and conversational solutions. After analyzing the major Ignite 2019 announcements, this article shares the new and exciting Azure AI developments.

Azure Artificial Intelligence

Through AI, machines can interact in natural ways, analyze images, make predictions utilizing data and comprehend speech. With the effective utilization of Azure Machine Learning, Azure Databricks and ONNX, organizations can build, train and deploy their machine learning models efficiently and seamlessly.



Azure for Machine Learning

- **Open and Interoperable:** Your favorite open source framework or open source developer tools are integrated directly into Azure Machine Learning.
- **Industry-leading MLOps** Equivalent to DevOps, this simplifies the creation of automated pipelines, monitors feedback and automates workflow.
- **Easy Adaptation:** Effective for all skill levels, there is no code approach through Designer and adaptation is

powered by automated Machine Learning (ML) to help create a model or use code-first experience through Jupiter Notebook.

- **Trusted:** Secure data management.

New Azure Machine Learning Capabilities

- **AI Agents and Apps:** Cognitive Services and Bot Service help organizations deliver updated experiences in their breakthrough apps. These access industry-leading AI models are being used today by millions of products, including Office 365, Xbox and Bing. Organizations can now customize these models with their data and deploy them anywhere.
- **ONNX Runtime 1.0:** A high-performance, machine-learning model engine. For organizations, this open-source model format and runtime for machine learning allows users to easily move between the frameworks and hardware platforms of choice.
- **R Support:** The updated [azuremlsdk](#) provides the interface to the Azure Machine Learning service. R functions can now provision new computing clusters in Azure, using those to train models with R and deploy them as prediction endpoints.
- **Enterprise Edition:** Ideal single, low code, drag-and-drop interface to create models and automate machine learning to get automatic feature selection.
- **Unified Data Science Experience:** Provides a simple and unified experience in one place.

Updated Azure Cognitive Services Features

- **Decision-making:** Helps businesses make smarter decisions and create personalized experiences for users.
- **Language:** Sentiment Analysis capability utilizing deep learning and industry-leading Natural Language Processing capabilities.
- **Vision:** Identify and analyze text within images, videos or any digital link.
- **Speech:** Updates in apps, such as custom speech with Office 365 data and custom neural voice capability.

New of Azure Bot Service Capabilities

- A low code experience while creating a Bot with the new Composer feature.
- Build with popular open-source tools.
- Deploy and manage across multiple channels.
- All of the above features combined to Power Virtual Agent.

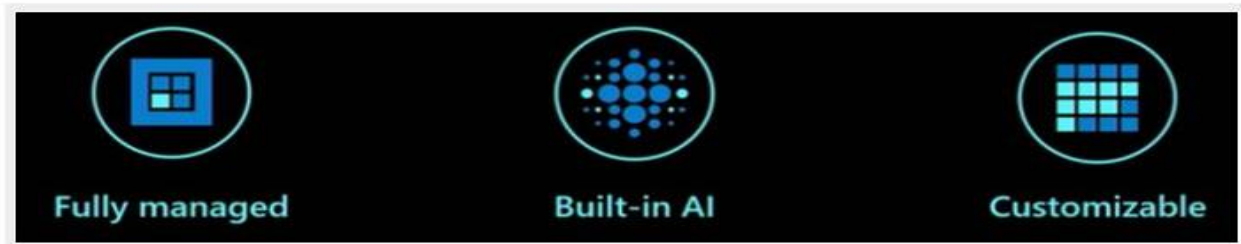
Knowledge Mining

The process of extracting meaningful information after analyzing all data and documents owned by an organization is known as knowledge mining. Azure Cognitive Search helps organizations discover patterns and relationships in all existing content, understand the sentiment, extract key phrases and more.

Azure Cognitive Search

Keyword Search -> Contextual Search -> Cognitive Search

Using a search-as-a-service cloud solution powered with industry-leading AI capabilities, users can easily extract insights from all content.



Form Recognizer

Employs an AI-powered extraction service that transforms your documents into usable data at a fraction of the time and cost.



Showcase of Azure Cognitive Search

The Atlantic has been utilizing the Azure AI to catalog and preserve 160 years of published history. Leveraging the features of Azure Cognitive Search, the publication is transitioning from hard copies to a digital system, enabling the public to explore its archives and allowing writers to use these resources to build connections between stories and enrich their content. View details here:



autoTRADER.ca, a popular name in the new or used car market that serves more than 5 million Canadians monthly, has used Azure Cognitive Search to tap into new growth opportunities. This has allowed them to build a dealer-to-dealer auction site and plan to replace their old search engine with a more cost-effective, improved and scalable search experience for consumers.

Archive360 has enabled their customers to ask complex questions of petabyte-sized archive data sets, using Azure Cognitive Search, both quickly and cost-effectively.

About the Author



Arindam Ray Chaudhuri is the COO at [AgreeYa](#) and has meticulously contributed to consulting, outsourcing and technology services within the organization. He has more than 25 years of rich experience in the technology domain. His key areas involve integrating a global team, defining the technology and business vision of products and services, business development, establishing large scale client engagement, leading time, cost and quality driven value via project governance and solution engineering.