

## **Microsoft Azure Text Analytics**

Since the start of Azure services, Microsoft has created many cloud services that have enabled on-prem usage of scalable services. Previously known as Windows Azure, Microsoft has grown the cloud computing platform for compute, analytics, storage and network for enterprise customers of all sizes. Its goal is to modernize and tackle business challenges for its users to offer support in commerce, finance, and other industries. With its growing applications, Azure Text Analytics is amongst one to be onboarded to support customers interested in text analysis and impact through NLP.

Azure Text Analytics contains a collection of features from Cognitive Service to extract, classify, and parse text within documents. It specifically mines insights from unstructured text using NLP to break down customer feedback. It utilizes strategies like sentiment analysis and terminology classification using domain-specific models. It extends its approach to various languages and is deployed through Azure Cognitive Services. Some of the recent applications of Azure Text Analytics is to extract and summarize documents, which is very important in the medical industry. It extracts and processes real-time and batch analysis of insights in unstructured medical text. For example, customers have been able to extract 100+ personally identifiable information (PII) like protected health information and leverage opinion mining to understand customer perception and generate better business decisions. Azure also emphasizes the importance of security in customer data. Currently the data that is ingested to train the models is kept from Microsoft and customers have the power to process their data

in Cognitive Services (using Azure infrastructure) and manage their data under security compliance and flexibility.

Azure Text Analytics is a popular alternative for medical companies and hospital to generate insights from patient data. Microsoft brands this new service as a pay-as-you-go tier meaning that customers get a preliminary \$200 Azure credit and 12 month free trial before payment. Text Analytics is a branch of Cognitive Services which thrives on bringing natural language processing services to customers around the world, specifically to break language barriers and power language models to extract meaningful insights through text content.

In terms of the usage, customers have the option to use Docker containers to deploy sentiment analysis on-premises. They can also enable containers inside Azure Portal, which is a platform where users can manage resources that they create for text analysis. A typical workflow involves an Azure Language resource to get access to Azure Cognitive Service for Language, creating an API request, sending a request with data (raw unstructured text), and storing the data locally on the user machine. You can explore instructions to create your own instance of Azure Text Analytics here:

<https://pypi.org/project/azure-ai-textanalytics/>.

## **References**

<https://techcommunity.microsoft.com/t5/ai-cognitive-services-blog/what-s-new-in-azure-cognitive-services-for-language-ignite-2022/ba-p/3643388>

<https://azure.microsoft.com/en-us/products/cognitive-services/text-analytics/#overview>

<https://www.techtarget.com/searchcloudcomputing/definition/Windows-Azure>

