

Top Benefits of Using Azure Machine Learning

Sep 16, 2021 By Sanjit Debroy, General Manager at AgreeYa Solutions



Last year, organizations around the world, across all industries, were forced to leverage new technologies on multiple fronts to accommodate a new normal. The adoption of AI and machine learning saw exponential growth to bring about the changes needed to keep up with the shift to remote working. AI and ML technologies found their way into everything from advanced medical diagnostic systems to quantum computing systems, and from virtual assistants to smart homes. According to <u>Algorithmia's 2021 Enterprise Trends in Machine Learning report</u>, 50% of enterprises plan to spend more on AI and ML in 2021, with 20% saying they will be significantly increasing their budgets.

Why Machine Learning Matters

While AI and ML are often used interchangeably, and sometimes ambiguously, they both serve slightly different purposes. ML is a pervasive and powerful sub-field of AI that enables machines to self-learn and imitate intelligent human behavior. Today, ML is the intelligence behind predictive texts, chatbots, Netflix show suggestions, predictive social media feeds and more. It is also the technology that powers autonomous vehicles and enables medical diagnosis based on images.

A <u>Deloitte survey</u> found that 67% of organizations were already using ML in 2020, and 30% are planning to begin using it in 2021. Successful adoption of ML can enable organizations to make sense of valuable business data, automate human-intensive business processes,

increase productivity and deliver business growth. And while most organizations are keen on adopting this transformative technology, they often find themselves struggling to begin. Some of the impediments faced by organizations include high set-up costs, need for special coding skills and expensive hardware.

Fortunately, Microsoft's Azure Machine Learning empowers organizations to overcome these challenges when deploying and using ML. It delivers comprehensive, simple, robust and responsible services enabling partners to build impactful data driven apps quickly and securely using built-in, drag-and-drop configurations.

6 Benefits of Azure Machine Learning

Apart from being a simple to deploy service, Azure ML possesses various exceptional features too. It allows data scientists to pull data from a range of different sources. The service also allows experts to build ML models using simple scripting and human understandable coding practices. Here's a look at some of the discernable benefits of choosing Azure ML as your ML service.

#1: Leverage ML as a Service

Microsoft offers Azure ML as a pay-as-you-go service. Azure ML services enable businesses to save on costs and the hassles that go into the purchasing and implementation of big hardware or complex software. With this flexible pricing model, organizations can purchase only the services they need and start building ML apps immediately.

#2: Benefit from MLOps

Azure ML delivers MLOps, or DevOps for machine learning, which helps organizations build, test and deploy ML innovations rapidly. With Azure ML services, organizations can streamline their ML lifecycle – from developing models to the deployment and management of ML apps. Additionally, users can leverage Azure DevOps or GitHub Actions to schedule, manage and automate their machine learning pipelines and perform advanced data-drift analysis to improve a model's performance.

#3: Accelerate ML with Best-of-Breed Algorithms

Azure ML provides organizations access to valuable algorithms developed by Microsoft Research. Such algorithms are based on regression, clustering and predictive scenarios, and can be configured simply by drag and drop configuration. Azure ML also delivers algorithms such as logistic regression and decision tree, which enable users to devise real-time predictions or forecasts. The presence of such algorithms ensures that apps can be built without the in-depth knowledge of data science or expertise in algorithms. Moreover, there is no set data limit to import data from Azure storage. It reduces costs and enables developers to fine-tune the data easily.

#4: Support Remote Working with Cloud-based Services

In this era of remote and hybrid working, organizations must choose technologies that deliver anytime, anywhere access from any device to access business information. The adoption of Azure ML services can help organizations simplify remote working, promote flexible working arrangements and enable employees to access business data and reports remotely. Solutions created with Azure ML can deliver an interactive view of essential business data to stakeholders, on any device and irrespective of location, through captivating data visualizations.

#5: Compliant & Secure ML Apps

According to a <u>Deloitte survey</u>, 62% of AI and ML adopters see cybersecurity risks as a major or extreme concern. Similar to software apps, ML apps need to be secure as well. If a ML model is designed to analyze sensitive information, malicious hackers could use attacks to access this information. Azure ML allows organizations to build secure ML apps with capabilities such as custom machine learning roles, role-based access, virtual networks and private links. Organizations can also manage governance efficiently with policies, quotas, audit trails and cost management. The service streamlines compliance for organizations across industries with its comprehensive portfolio consisting of 60 certifications. **#6: Catalyze Business Growth**

Azure ML equips organizations with services to rapidly create intelligent and data-driven apps. It offers businesses a great opportunity to make smarter, more precise and timely decisions. With Azure ML, organizations can establish a data-driven culture wherein employees don't have to work on guesses or intuition. It enables the employees to dig deeper into business or process data and uncover key insights that will improve business decision-making and propel business growth.

Azure Machine Learning removes various roadblocks and makes machine learning simple with its plethora of friendly and robust features. The best part is that organizations can reap the benefits of ML without requiring in-house expertise.