![Microsoft logo] Microsoft

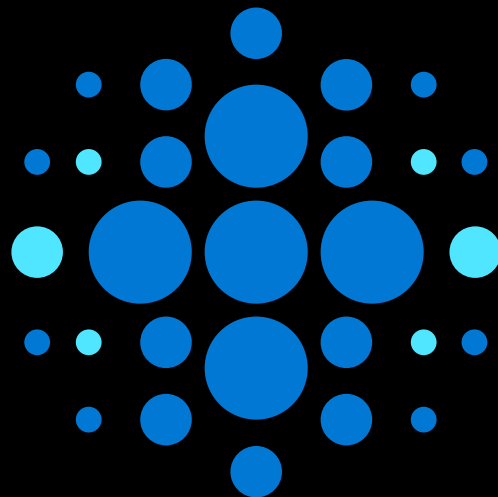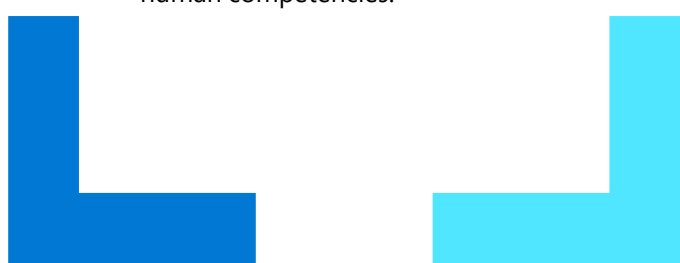# Develop AI with Azure Machine Learning

## Industry trends

From self-driving cars to emotion detection, AI and machine learning enable human ingenuity, augment human experiences, and enrich human competencies.

### $19.4 billion

The global machine learning market will reach $19.4 billion by 2023.[1]
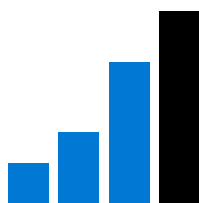
### 48.3%

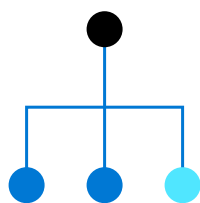Machine learning will grow 48.3% annually from 2018–2023.[1]

## Business pains

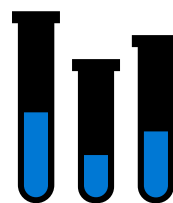Barriers to building intelligent applications include:

**Cost**
As massive amounts of enterprise data continue to surge, the cost of tools, talent, and infrastructure increases.

**Explosion of models**
Organizations struggle to manage and analyze data and are now struggling to manage their models.

**Inaccessible AI**
The short supply of data scientists has forced developers to integrate AI into their applications to meet global demand.
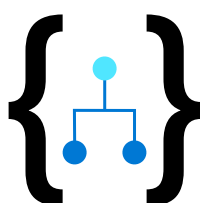
## Why choose Azure Machine Learning?

Azure Machine Learning provides the enterprise-leading platform, tools, and services to build the next AI application that will change the world.
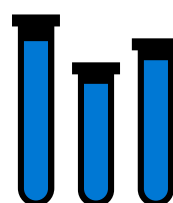
**Cost**
Azure Machine Learning is a cost-effective solution that leverages the cloud to give you power and capacity when you need it. Pay only for the computation you use and the models you manage and deploy.
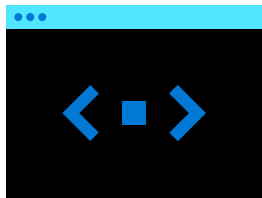
**Explosion of models**
Azure Machine Learning allows you to know which of your models to put into production and which perform best, allowing data-driven management of your code and training data to help you manage your inventory of models intelligently.
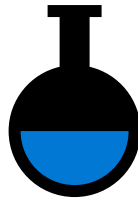
**Inaccessible AI**
Azure Machine Learning lets data science and AI development teams collaborate to boost productivity.
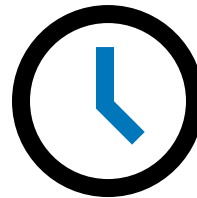
## Proof points

**Build, deploy, and manage models everywhere**—Create and manage your model packages to put them into production faster in the cloud, on-premises, or at the edge.
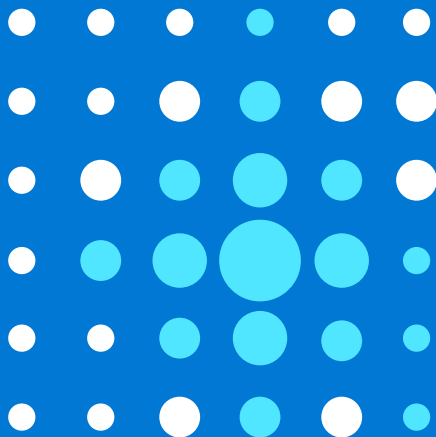
**Increase your rate of experimentation**—Manage all your experiments in the cloud, allowing rapid desktop prototyping, then easily scale up on virtual machines or out using Spark clusters.

**Spend more time modeling and less time preparing**—Built-in data preparation capabilities allow you to rapidly sample, understand, and prepare your data, both structured or unstructured.

## Why Microsoft AI?

Microsoft meets you where you are—Choose between a browser-based, visual drag-and-drop authoring environment where no coding is necessary or use a code-first approach that leverages the cloud, on-premises, and edge assets to provide power and flexibility.

Azure Machine Learning is an open, flexible, and extensible platform where developers and data scientists can author models in Python, PySpark, and Scala. Leverage the most popular data science libraries and toolkits such as TensorFlow, Microsoft Cognitive Toolkit, Spark ML, scikit-learn, and many more.

Use your favorite IDE such as Jupyter notebooks, PyCharm, or Visual Studio. Azure Machine Learning will make it easier to develop deep learning and allow you to call its services straight from your favorite IDE.

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