Microsoft Azure

Azure Machine Learning

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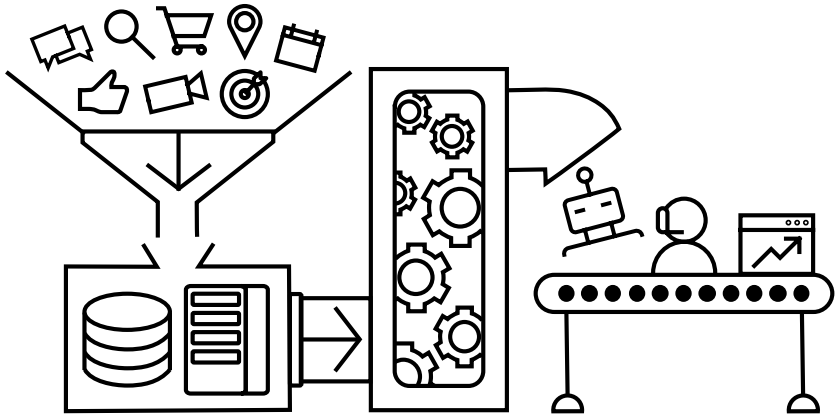
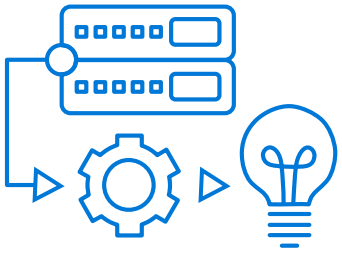


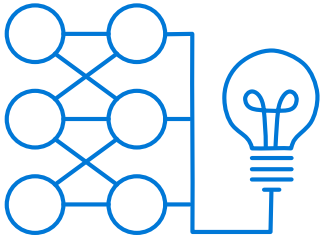
Advanced analytics

An intelligent examination of data or content to unlock deeper insights, make predictions, and generate recommendations using sophisticated techniques such as **machine learning** and **artificial intelligence.**



Machine learning (ML)

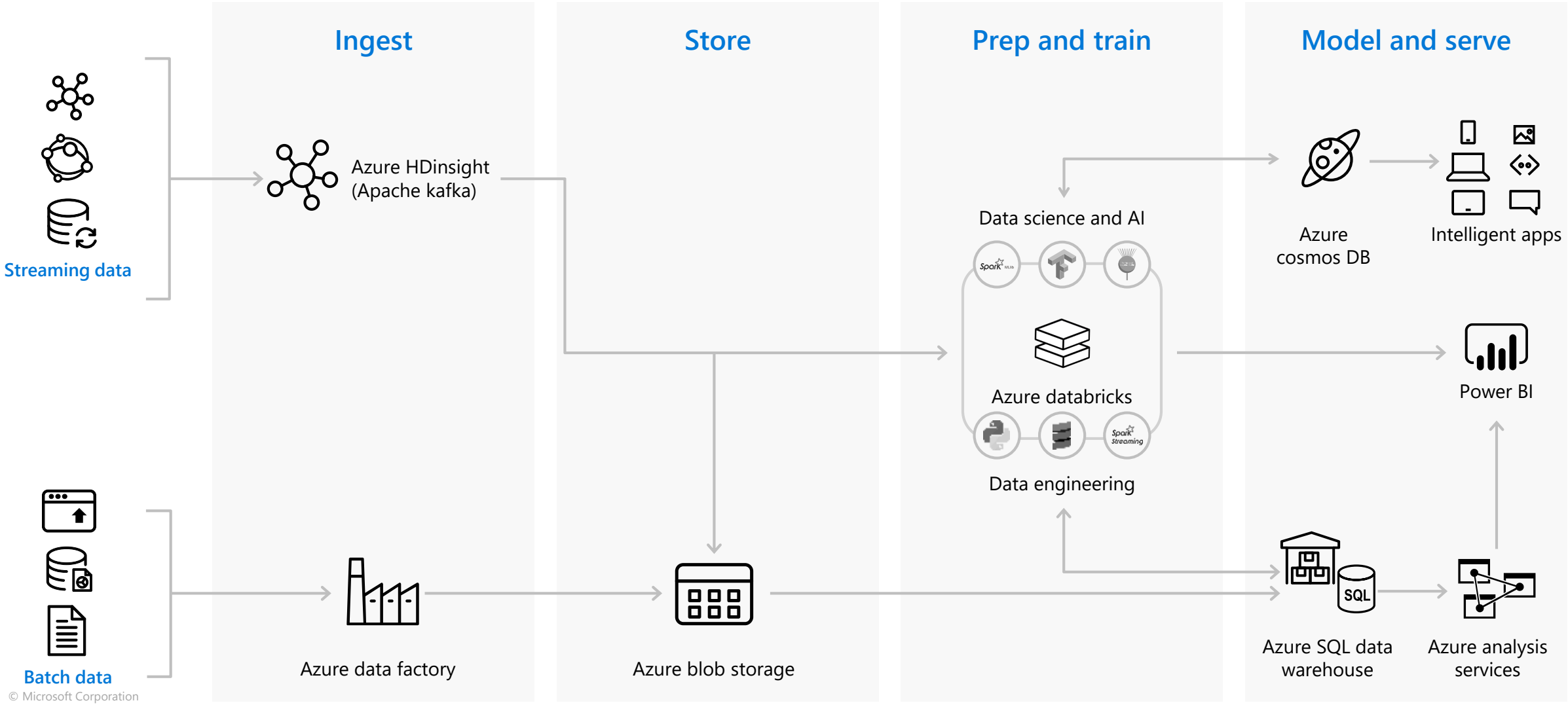
A method of data analysis that automates analytical model building



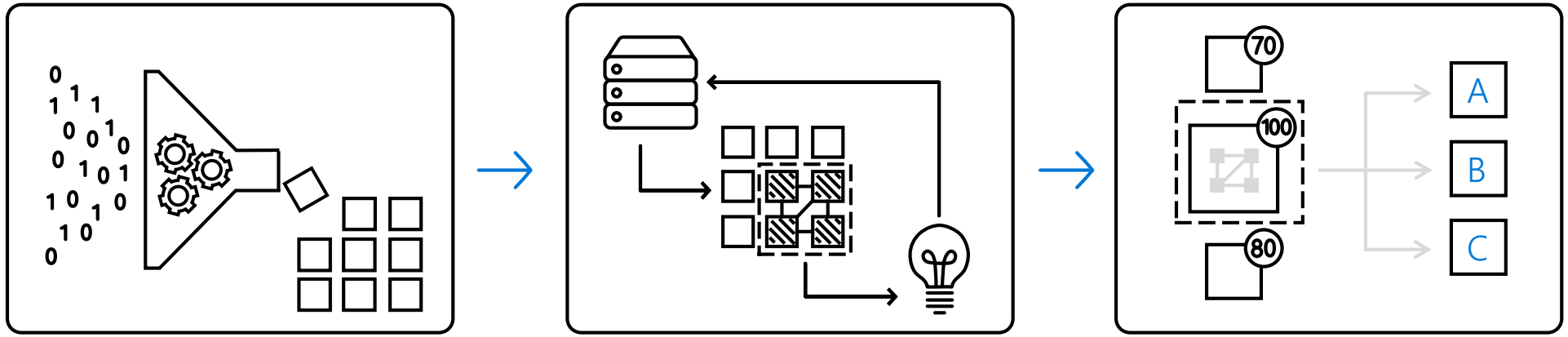
Artificial intelligence (AI)

The development of computer systems able to perform tasks that traditionally require human intelligence

Microsoft has a recommended reference architecture



Prep and train



Collect and prepare data

- Azure data factory
- Azure databricks

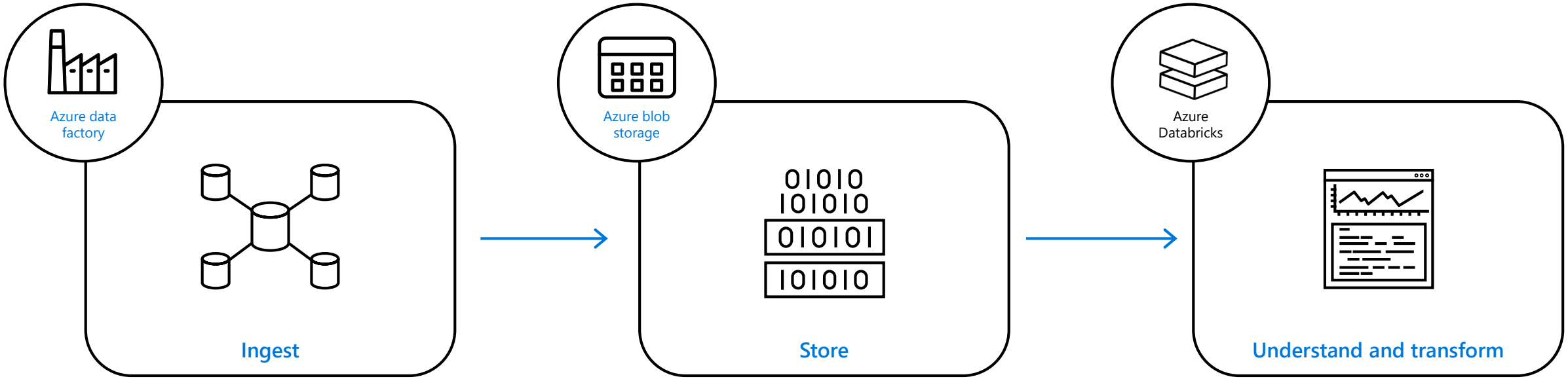
Train and evaluate model

- Azure databricks

Operationalize and manage

- Azure ML services
- Azure databricks

Collect and prepare all of your data at scale



Connect to data from any source

Integrate with all of your data sources

Create hybrid pipelines

Orchestrate in a code-free environment

Leverage best-in-class analytics capabilities

Leverage open source technologies

Collaborate within teams

Use ML (machine learning) on batch streams

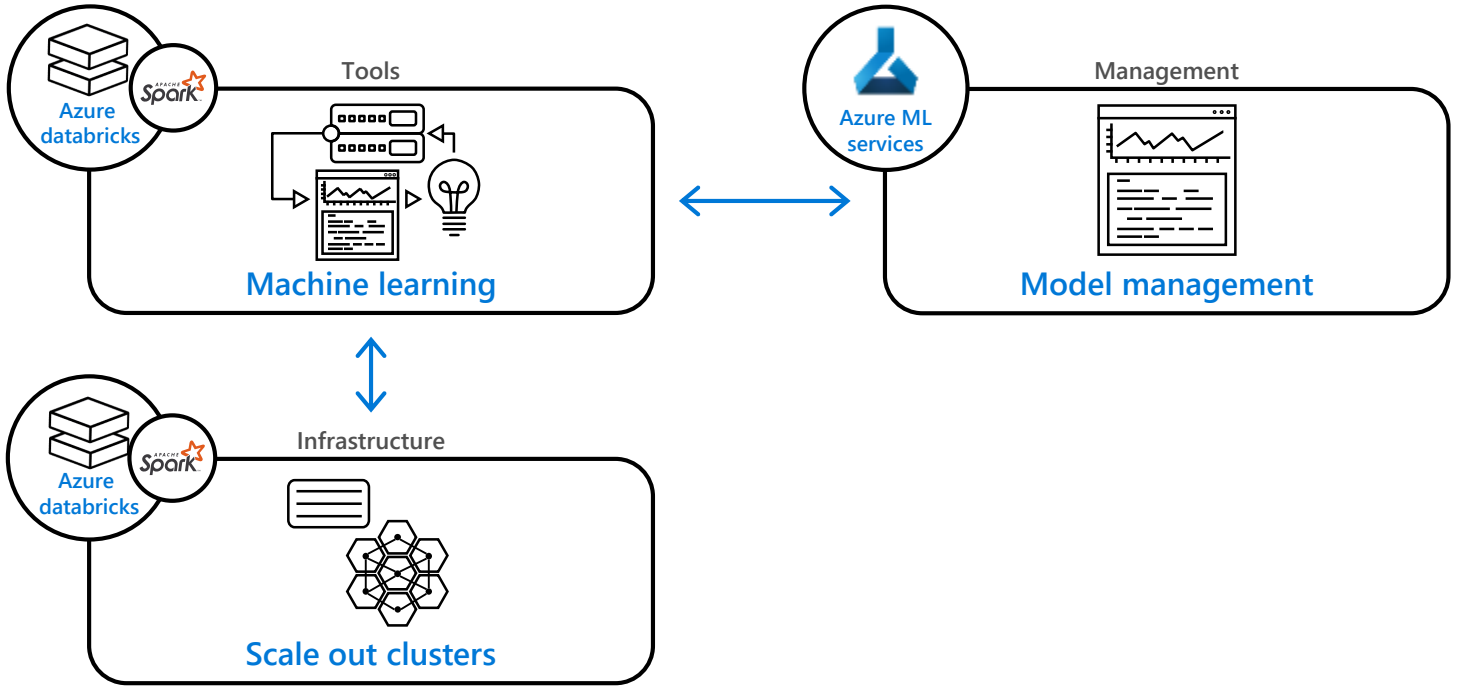
Scale without limits

Build in the language of your choice

Leverage scale out topology

Scale compute and storage separately

Train and evaluate Machine Learning models



Simplify model development

Collaborate in interactive workspaces
Access a library of battle-tested models
Automate job execution

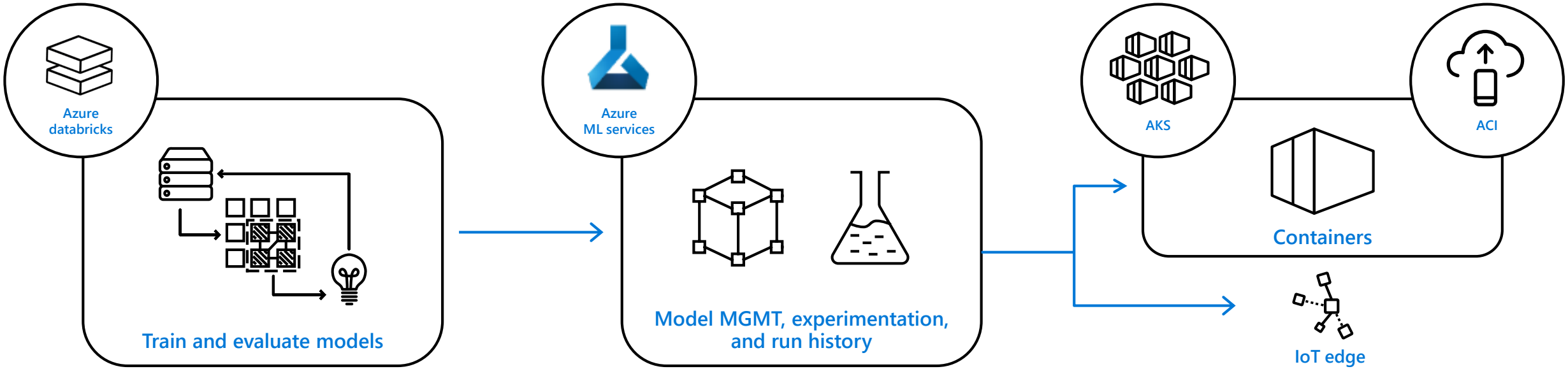
Scale compute resources to meet your needs

Easily scale up or scale out
Autoscale on a serverless infrastructure
Leverage commodity hardware

Quickly determine the right model for your data

Determine the best algorithm
Tune hyperparameters to optimize models
Rapidly prototype in agile environments

Operationalize and manage models with ease



Bring models to life quickly

Build and deploy models in minutes
Iterate quickly on serverless infrastructure
Easily change environments

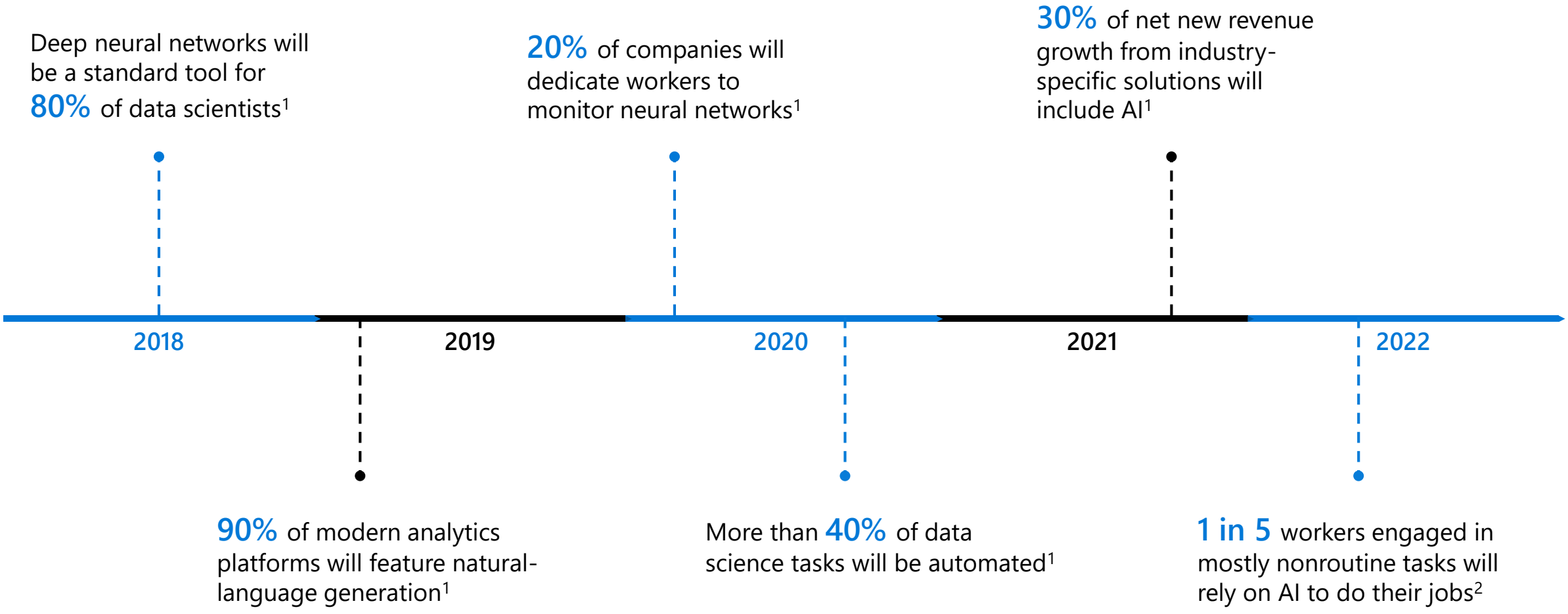
Proactively manage model performance

Identify and promote your best models
Capture model telemetry
Retrain models with APIs

Deploy models closer to your data

Deploy models anywhere
Scale out to containers
Infuse intelligence into the IoT edge

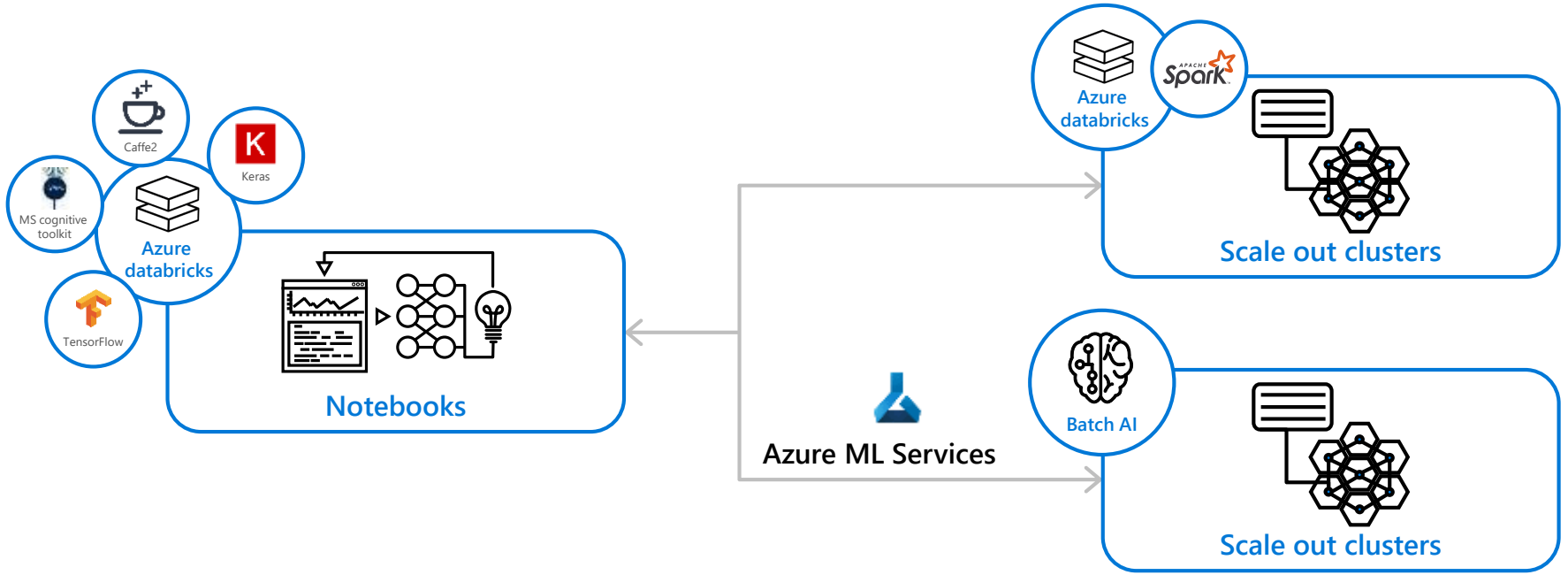
What are companies looking to do next?



[1] "100 Data and Analytics Predictions Through 2021", Gartner, 2017. [2] "Predicts 2018: AI and the Future of Work", Gartner, 2018.

Deep learning with Azure

Build and deploy deep learning models



Streamline AI development efforts

Leverage popular deep learning toolkits

Develop your language of choice

Scale compute resources in any environment

Choose VMs for your modeling needs

Process video using GPU-based VMs

Quickly evaluate and identify the right model

Run experiments in parallel

Provision resources automatically

Leverage deep learning services and frameworks

Azure databricks

Accelerate processing with the fastest Spark engine

Integrate natively with Azure services

Access enterprise-grade Azure security

Azure ML services

Bring AI to the edge

Increase your rate of experimentation

Deploy and manage your models everywhere

Leverage your favorite deep learning frameworks

TensorFlow | MS Cognitive Toolkit | PyTorch | Scikit-Learn | ONNX | Caffe2 | MXNet | Chainer

Introducing Azure Databricks

Fast, easy, and collaborative Apache Spark™-based analytics platform

Increase productivity

Build on a secure, trusted cloud

Scale without limits

Built with your needs in mind

- Role-based access controls
- Effortless autoscaling
- Live collaboration
- Enterprise-grade SLAs
- Best-in-class notebooks
- Simple job scheduling

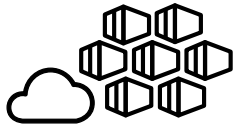
Seamlessly integrated with the Azure Portfolio

Azure Machine Learning Services

Bring AI to everyone with an end-to-end, scalable, trusted platform

Boost your data science productivity

Increase your rate of experimentation



Deploy and manage your models everywhere

Built with your needs in mind

- GPU-enabled virtual machines
- Low latency predictions at scale
- Integration with popular Python IDEs
- Role-based access controls
- Model versioning
- Automated model retraining

Seamlessly integrated with the Azure Portfolio