

AIM314

# Accelerate your ML journey with Amazon SageMaker low-code tools

Claire O'Brien Rajkumar

Sr. Product Manager  
Amazon Web Services

Vadim Omeltchenko

Sr. AI/ML Solutions Architect  
Amazon Web Services

Ori Goshen

Co-Founder, Co-CEO  
AI21 Labs

# AIM314

Accelerate your ML journey  
with Amazon SageMaker  
low-code tool

## Speakers

- Vadim Omeltchenko, AI/ML SA, AWS
- Ori Goshen, Co-CEO, AI21 Labs
- Claire OBrien, Product Manager, Amazon Web Services

## Relevant Announcements

- ❖ [SageMaker now imports data from EMR](#)

## Takeaways

- ❖ A product demo of SageMaker. How to input, train, and deploy models.

## Azure

- ❖ I don't believe Azure has a similar product. The closest product is [Azure Machine Learning capability](#) of Azure Synapse Analytics.

[< Section Header](#)

[< Table of Contents](#)

## Why Low-Code

- Typical ML Workflow (Prepare, Build, Train & Tune, Deploy & Manage)
  - Challenges: Requires Deep Expertise, Experimentation is expensive, data-scientists are in short supply.
- Low-Code: Faster ML Workflows, Open & Customizable solutions, great for new and experienced practitioners

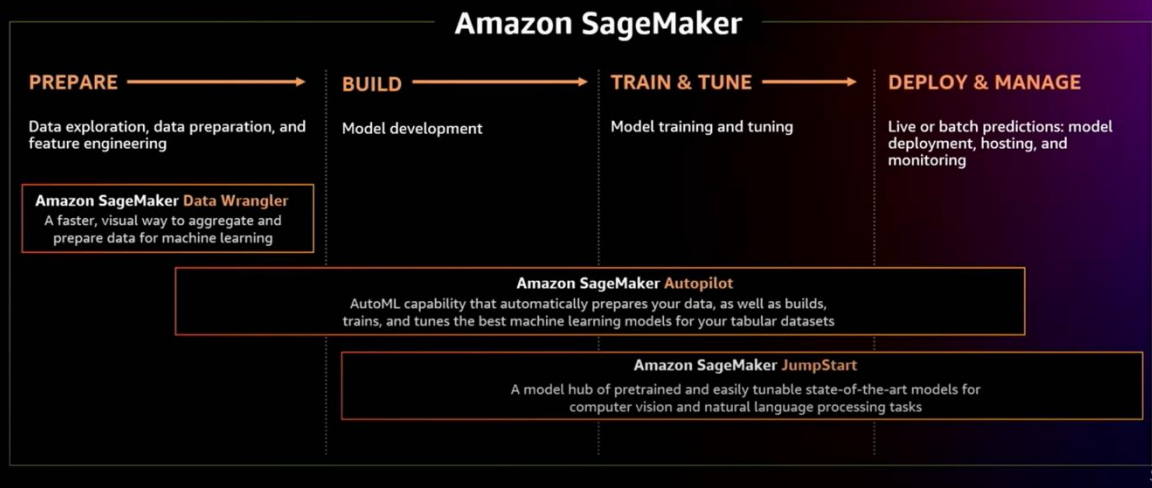
## SageMaker [Low-Code Overview](#)

- Data Wrangler (Prepare)
  - Visually aggregate and prepare data.
  - Exploratory Analysis using, ML powered to diagnose data quality issues, SageMaker Clarify integration to detect and mitigate bias, and Quick Model to estimate quality of model
  - Point & Click Data Transformations and Custom Code Editor and Code Snippets
  - Can export to Python code or Notebook
- Autopilot (Build, Train, Tune, Deploy)
  - AutoML that to select & tune for best model
  - Feature Selection / Data Split (Train / Test),
  - Choose Training Modes (AutoGluon, Hyper Parameter Optimization
  - Model Visibility, Explainability
  - Deploy to SageMaker Endpoint, can be used to make real-time
- Jumpstart (Prebuilt Models)
  - A model hub of pre-trained and easily tunable models.
  - Using Pre-Trained Models Saves Time
  - Models come from publicly available models
  - Includes Sample Jupyter Notebooks
  - Cloud Formation Templates
  - Ability to bring in 3<sup>rd</sup> Party Commercial Models

## Demos

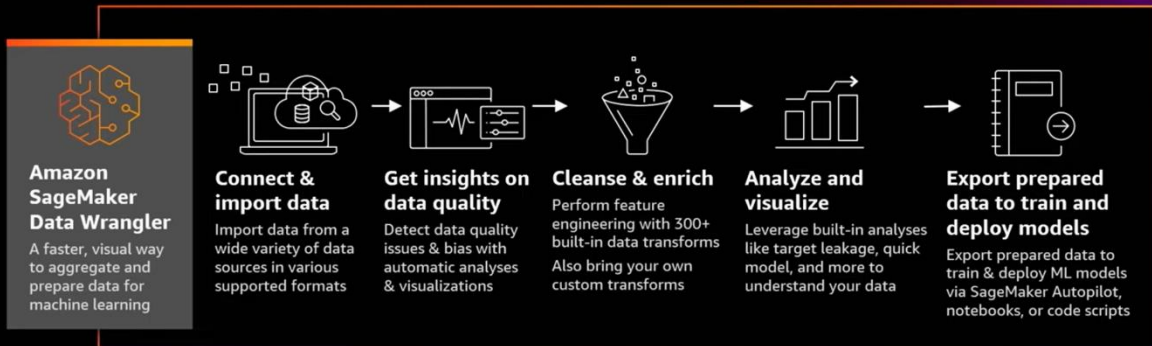
- Demo of [Data Wrangler](#)
- Demo of [AutoPilot](#)
- Demo of [Jumpstart](#)
- Demo of [A21 Labs Language Models](#)

# Low-code machine learning from AWS



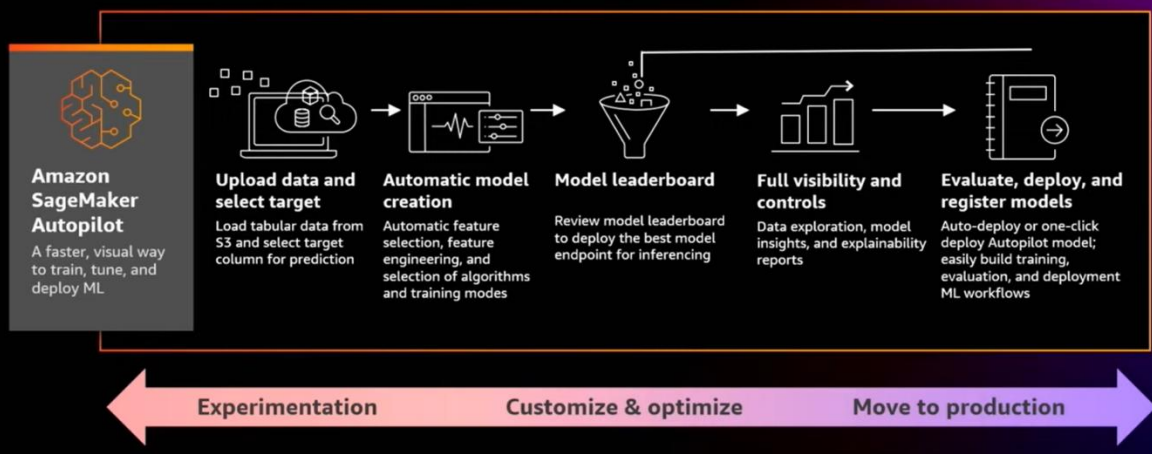
# How SageMaker Data Wrangler works

LOW-CODE TOOL FOR PREPARING DATA FOR ML



# How SageMaker Autopilot works

LOW-CODE TOOL FOR BUILDING, TRAINING, AND TUNING MACHINE LEARNING MODELS



# SageMaker Data Wrangler and SageMaker Autopilot in ML workflow

