



# *Amazon SageMaker Canvas Immersion Day*

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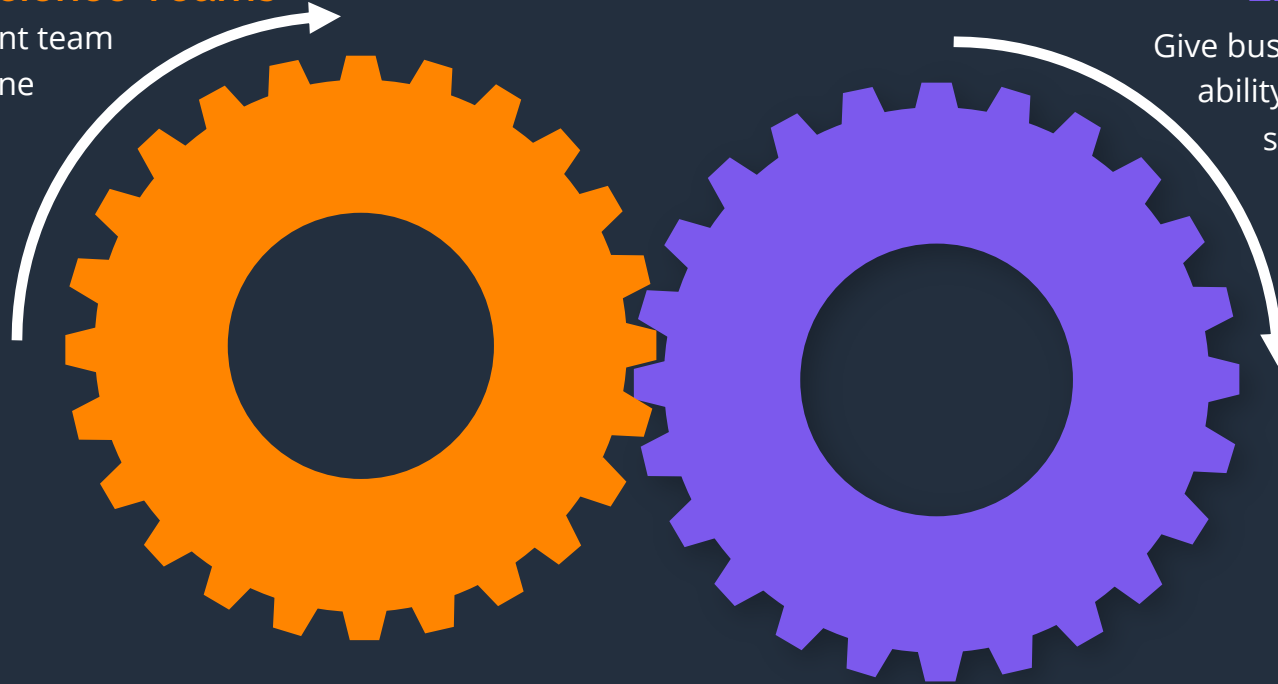
# Ways SageMaker Low-code/No-code Helps

## Accelerate Data Science Teams

Do more with your current team by using low-code machine learning tools in order to get to the desired outcomes faster.

## Enable Business Users

Give business users and analysts the ability to do ML without any code, scaling the number of people who can create ML powered insights, forecasts, and predictions



## Collaborate together

SageMaker LCNC ML has several points of collaboration making it easy for Business users to use data scientist models or for data scientists to make changes on the models analysts build and creating one place for all the analytics and machine learning in a team or organization

# Amazon SageMaker Canvas

**Build ML models and generate accurate predictions — no code required**



**Quickly access and prepare data for Machine Learning**



**Built-in AutoML to build models and generate accurate predictions**



**Share ML models and collaborate with data science teams**

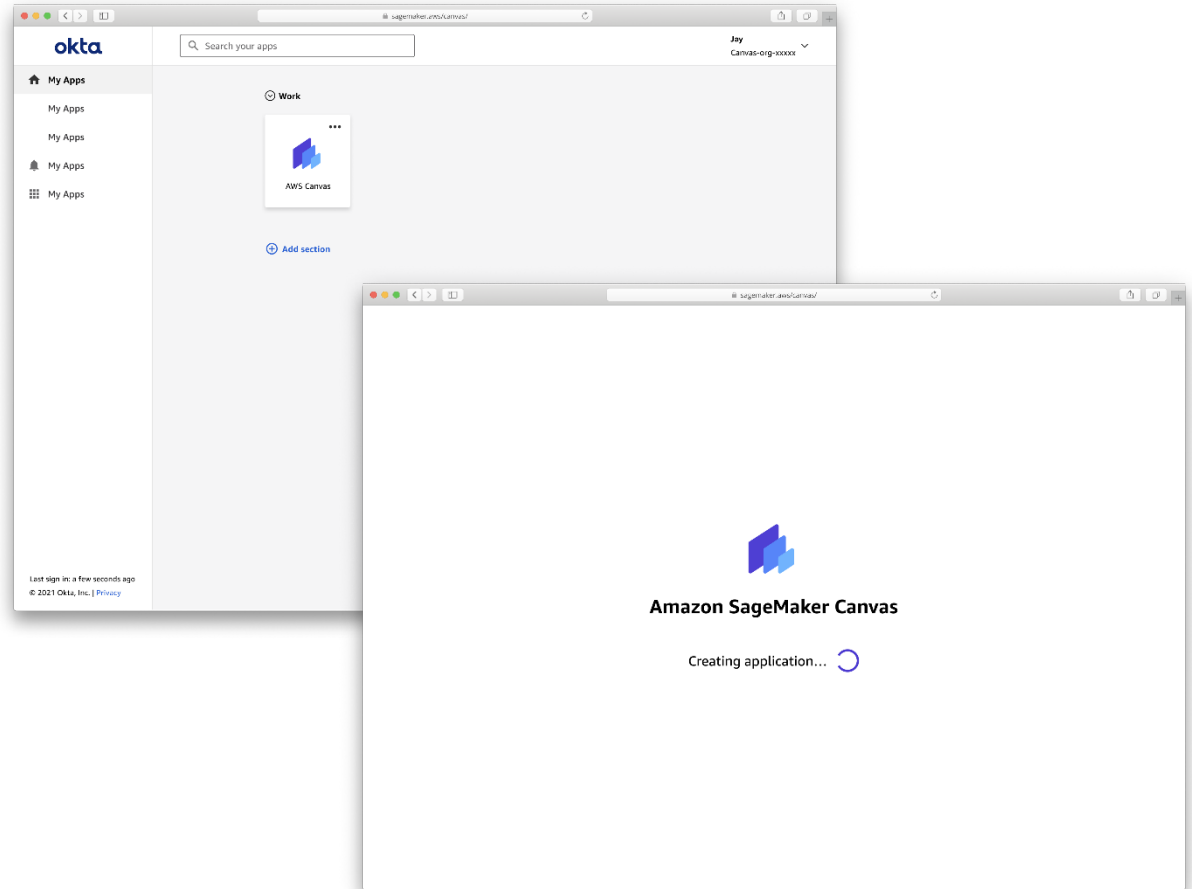


**Usage-based pricing to avoid licensing fees and reduce TCO**

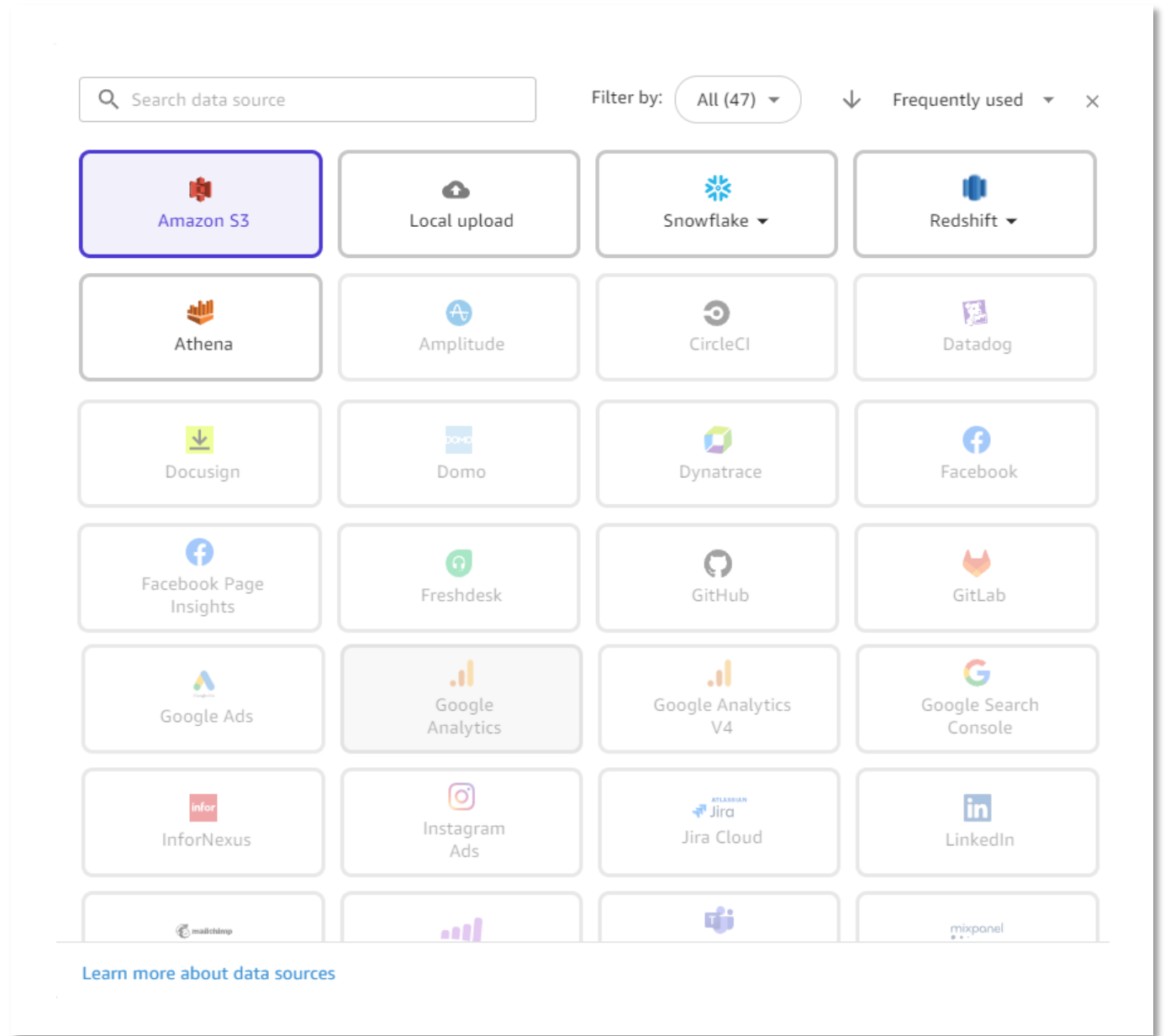


**Import ML models from any tool within or outside Amazon SageMaker and generate predictions directly in SageMaker Canvas**

*Self-service access to  
a business-friendly  
tool for Machine  
Learning, directly  
from or outside of the  
AWS console*



Import datasets from various sources like local disk, Amazon S3, and 40+ third-party data sources, such as SAP OData, Salesforce, and Snowflake.



Combine datasets  
from various sources

sagemaker.aws/canvas/

### Import Data

Upload S3 Snowflake Crystal 1 Redshift Crystal 1 Add Connection

Connection name Context

Search

- database1
- database2
- database3
- database4
  - schema1
  - schema2
    - table1

Autosaved 8/9/21 at 11:34 AM Edit in SQL

table1.csv table2.csv

#### Import preview

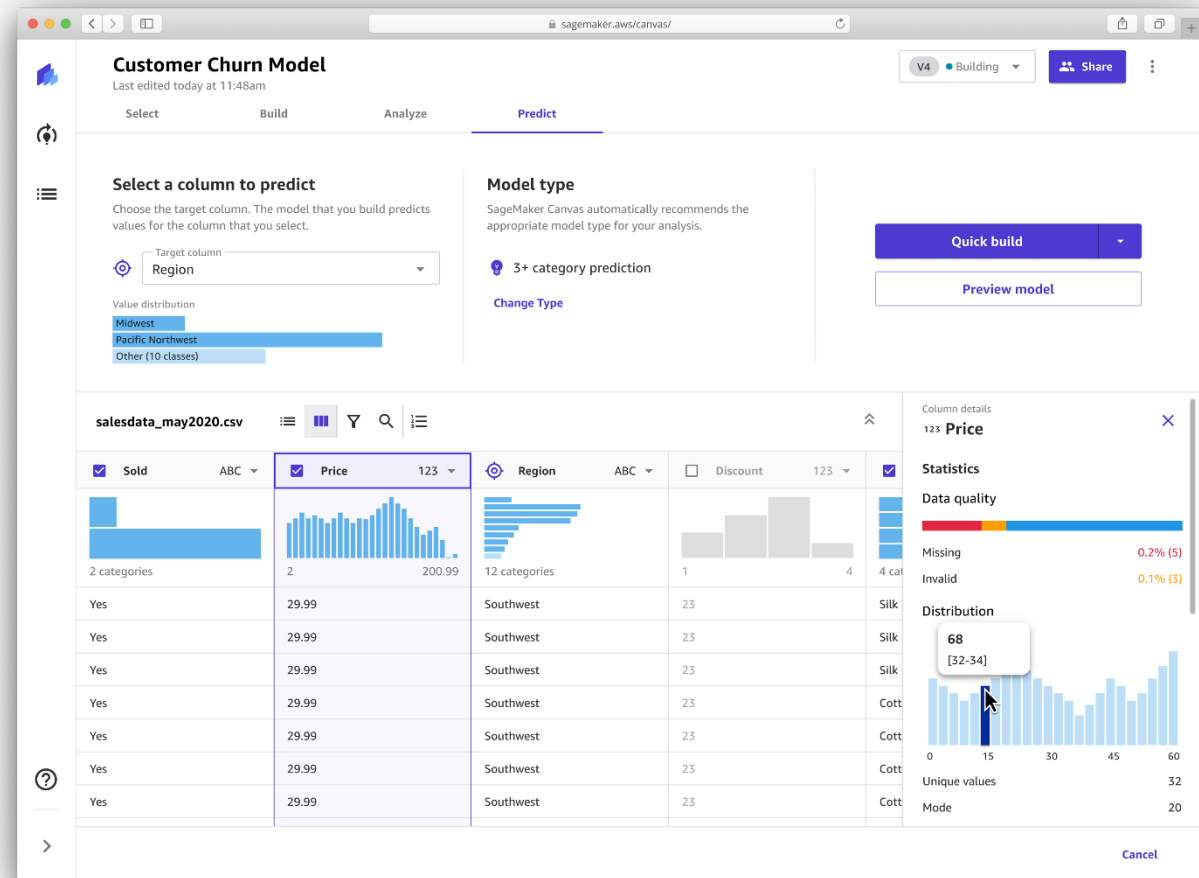
Show dropped columns

<input checked="" type="checkbox"/> Sold	ABC	<input type="checkbox"/> Price	123	<input checked="" type="checkbox"/> Region	ABC	<input checked="" type="checkbox"/> Discount	123	<input checked="" type="checkbox"/> Fabric	ABC	<input checked="" type="checkbox"/> Age	123
Yes		29.99		Southwest		23		Cotton		27	
Yes		29.99		Southwest		23		Silk		35	
Yes		29.99		Southwest		23		Silk		32	
Yes		29.99		Southwest		23		Silk		32	
Yes		29.99		Southwest		23		Cotton		30	

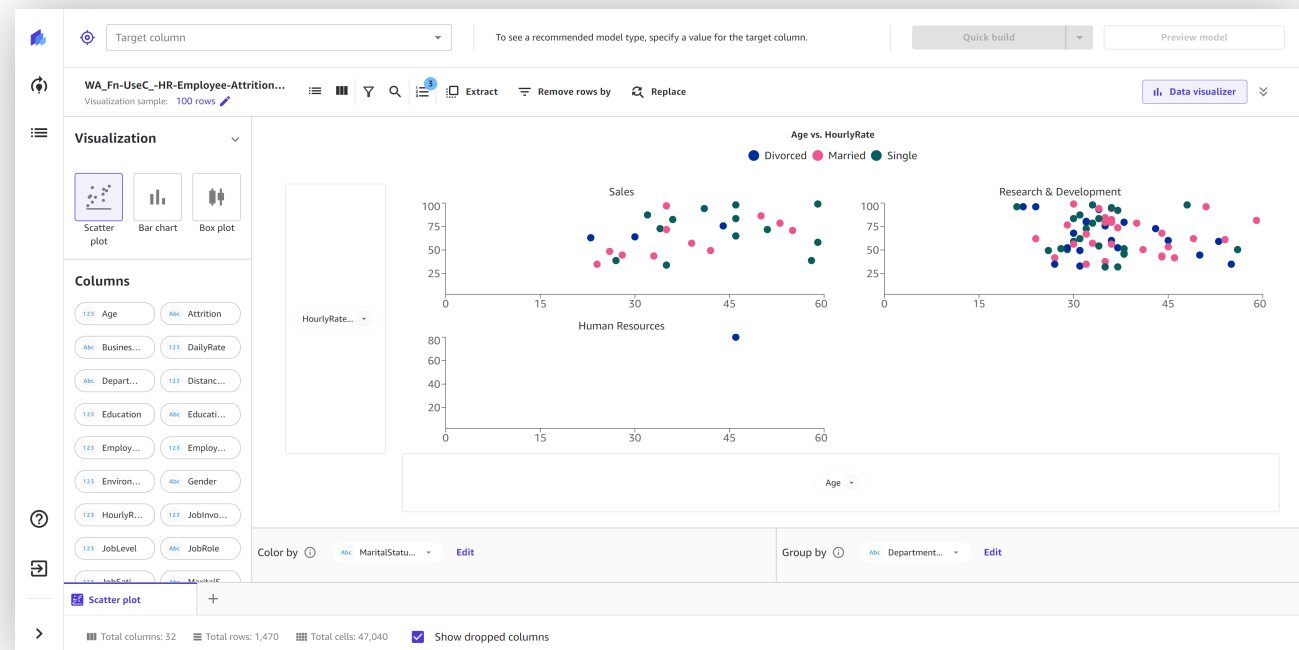
Previewing the first 100 rows

Close Import data

*Quickly understand  
and prepare  
your data via a  
visual interface*



*Explore and visualize  
your data to gain  
insights into your  
data before building  
ML models*





*Automatically  
build an accurate  
ML model for  
your dataset,  
whether it's tabular,  
images or text*

### Create new model

Model name


Model name

New model

Use only letters, numbers, and underscores up to 32 characters.


Problem type

Select the problem type you want the model to solve.




☒ Predictive analysis

Build models using tabular datasets to predict single or multiple categories as well as regression and time-series forecast problems.



☐ Image analysis

Build models using image datasets to predict single or multiple categories for image classification problems.



☐ Text analysis

Build models using tabular datasets to predict single or multiple categories for text classification problems.

Cancel

Create

aws

Access ready-to-use natural language processing (NLP) and computer vision (CV) models to extract information and generate insights from thousands of documents, images, and lines of text.

The screenshot displays the Amazon SageMaker Canvas user interface, specifically the 'Ready-to-use models' section. On the left is a navigation sidebar with options: 'Amazon SageMaker Canvas', 'Ready-to-use models' (selected), 'My models', 'Shared models', and 'Datasets'. The main content area is titled 'Ready-to-use models' and includes a search bar for 'Search use case'. Below the search bar, it states: 'Here are some ready-to-use models we've prepared for you to use. You can start generating predictions with pre-built models without writing a single line of code. To get started, bring your data such as text, images, or documents and select a model to extract information and insights.' There is a link 'Create a custom model' and a filter section 'Filter by data type:' with buttons for 'Text', 'Image', and 'Document'. The models are displayed in a grid with sorting options 'Last used', 'Grid', and 'List'. The models listed are: 'Sentiment analysis' (Powered by Amazon Comprehend), 'Entities extraction' (Powered by Amazon Comprehend), 'Personal information detection' (Powered by Amazon Comprehend), 'Language detection' (Powered by Amazon Comprehend), 'Object detection in images' (Powered by Amazon Rekognition), 'Text detection in images' (Powered by Amazon Rekognition), 'Expense analysis' (Powered by Amazon Textract), 'Identity document analysis' (Powered by Amazon Textract), and 'Document analysis' (Powered by Amazon Textract).

Amazon SageMaker  
Canvas

Ready-to-use models

My models

Shared models

Datasets

Ready-to-use models

Here are some ready-to-use models we've prepared for you to use.

You can start generating predictions with pre-built models without writing a single line of code. To get started, bring your data such as text, images, or documents and select a model to extract information and insights.

Search use case

Can't find the right model? [Create a custom model](#)

Filter by data type: Text Image Document

↓ Last used Grid List

**Sentiment analysis**  
Detect sentiment in lines of text, which can be positive, negative, neutral, or mixed.  
Powered by Amazon Comprehend

**Entities extraction**  
Extract entities, which are real-world objects such as people, places, and commercial items, or units such as dates and quantities, from text.  
Powered by Amazon Comprehend

**Personal information detection**  
Detect personal information that could be used to identify an individual, such as addresses, bank account numbers, and phone numbers, from text.  
Powered by Amazon Comprehend

**Language detection**  
Determine the dominant language in text such as English, French or German.  
Powered by Amazon Comprehend

**Object detection in images**  
Detect objects, concepts, scenes, and actions in your images.  
Powered by Amazon Rekognition

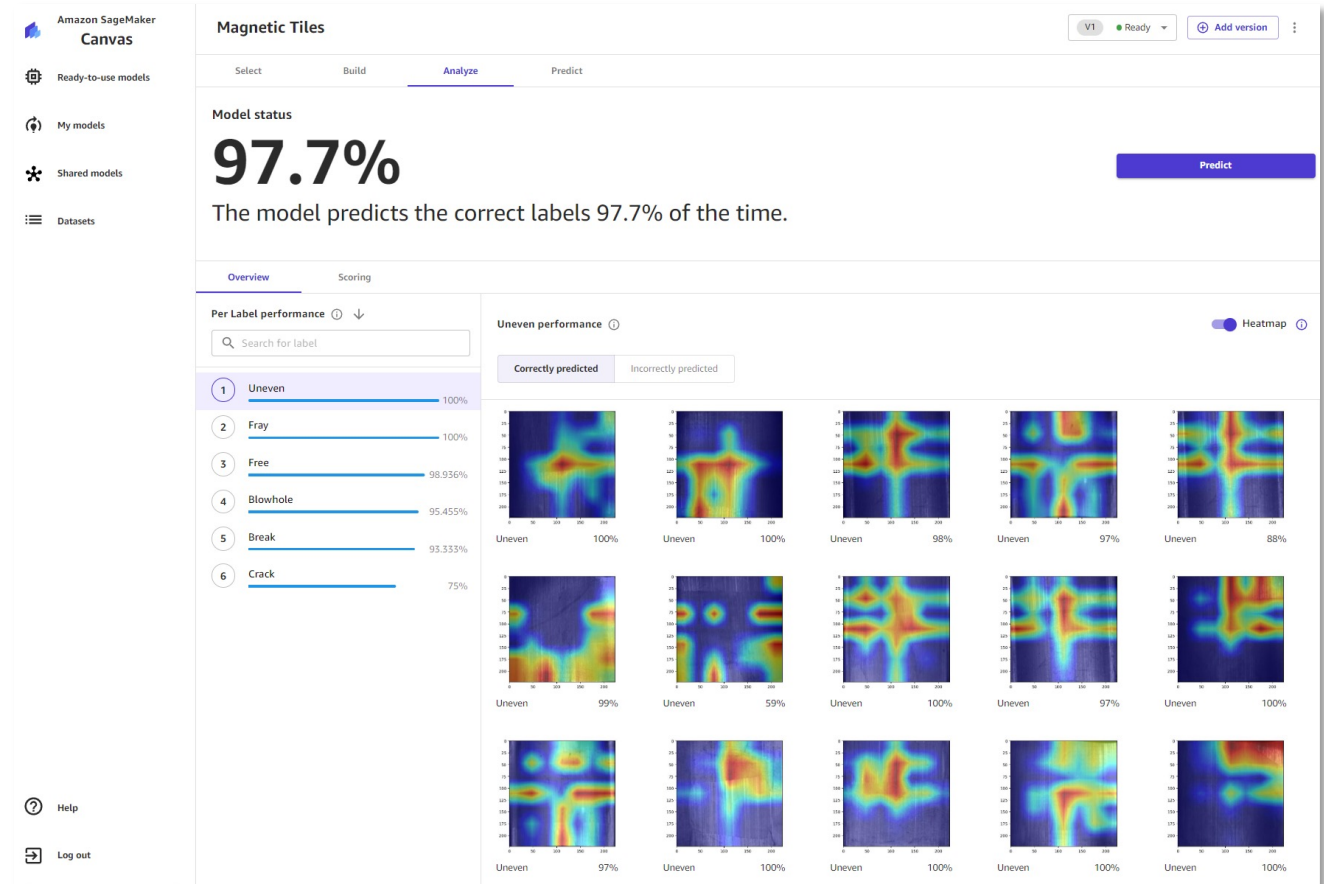
**Text detection in images**  
Detect text in your images.  
Powered by Amazon Rekognition

**Expense analysis**  
Extract information from invoices and receipts, such as date, number, item prices, total amount, and payment terms.  
Powered by Amazon Textract

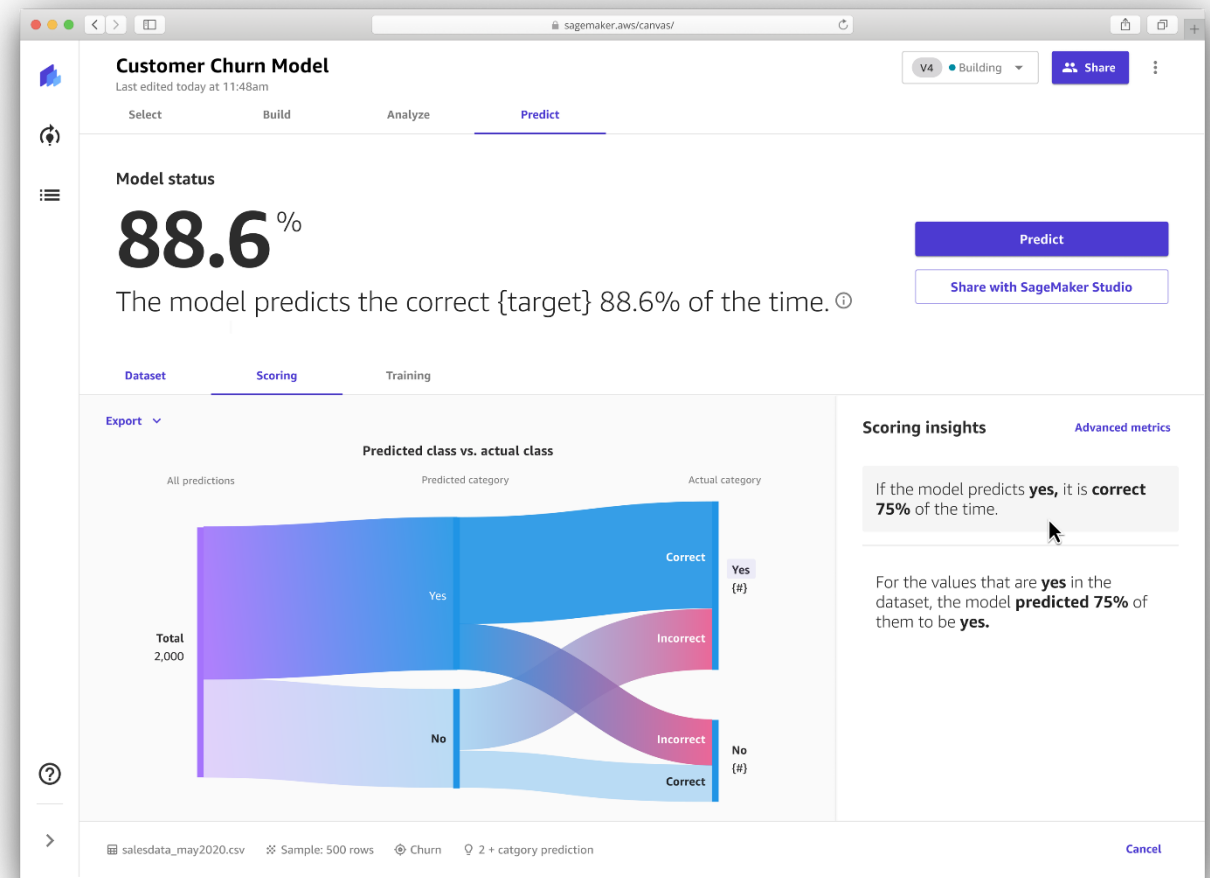
**Identity document analysis**  
Extract information from passports, driver licenses, and other identity documentation issued by the US Government.  
Powered by Amazon Textract

**Document analysis**  
Analyze documents and forms for relationships among detected text.  
Powered by Amazon Textract

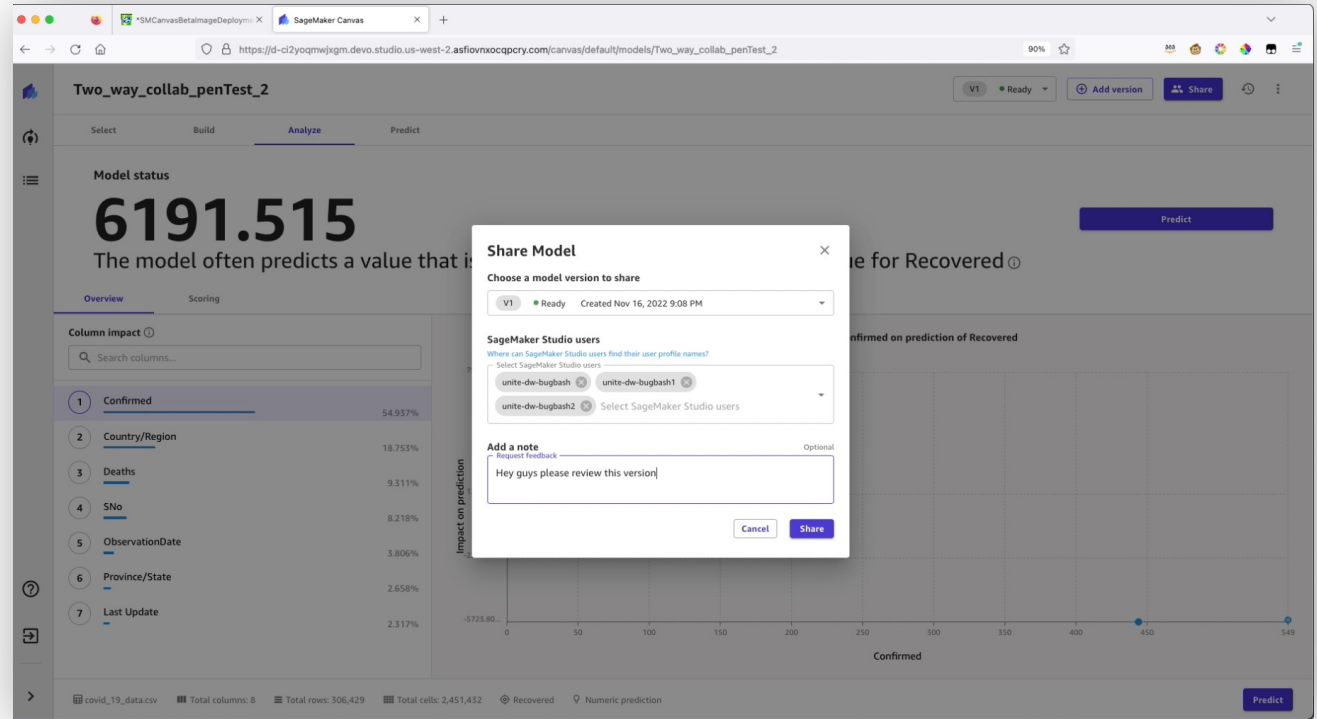
# Build custom CV and NLP models that are trained using your own data



*Get the first ML model in minutes. Review advanced metrics and feature importance to understand and explain predictions.*



*Share ML models with data scientists using Amazon SageMaker Studio for review and update so you can generate predictions on new model versions*



*Run what-if scenarios, or get predictions on an entire dataset*

**Customer Churn Model**  
Last edited today at 11:48am

Select Build Analyze **Predict**

**Predict target values**

Batch prediction Single prediction

Modify values to calculate target column in real time.

Filter columns

Column	Column impact	Value	Reset all to average
Contract	61.3%	Two year	
OnlineSecurity		Month-to-month	
TechSupport		One year	
InternetService		Two year	
PaymentMethod		Fiber optic	
OnlineBackup		Electronic check	
DeviceProtection		No	
MonthlyCharges		Yes	
PaperlessBilling		104.8	
		Yes	

**Churn prediction** Copy

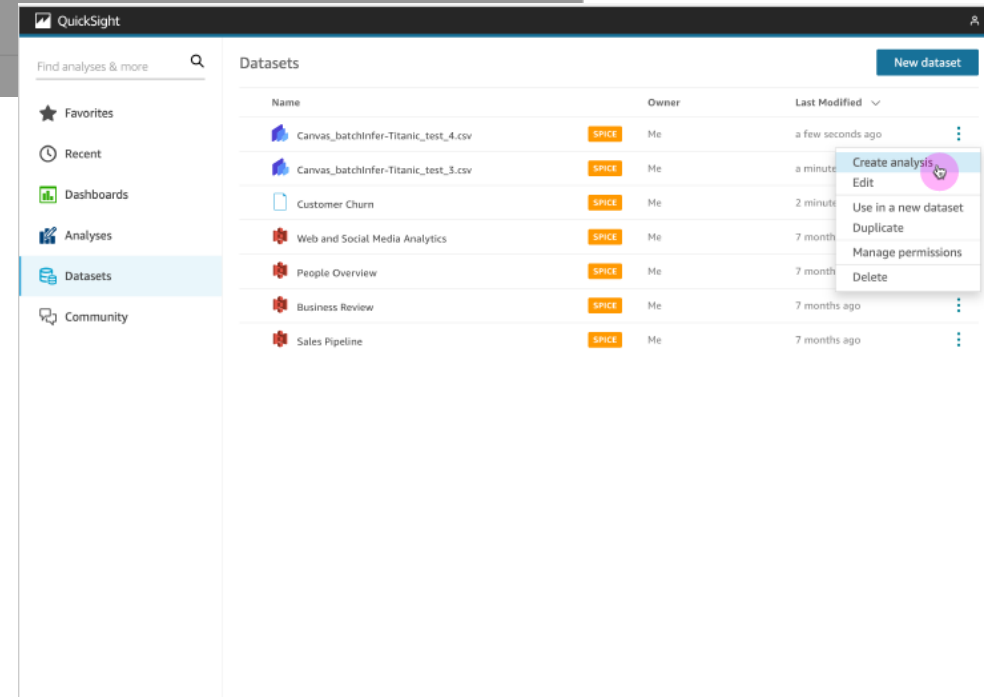
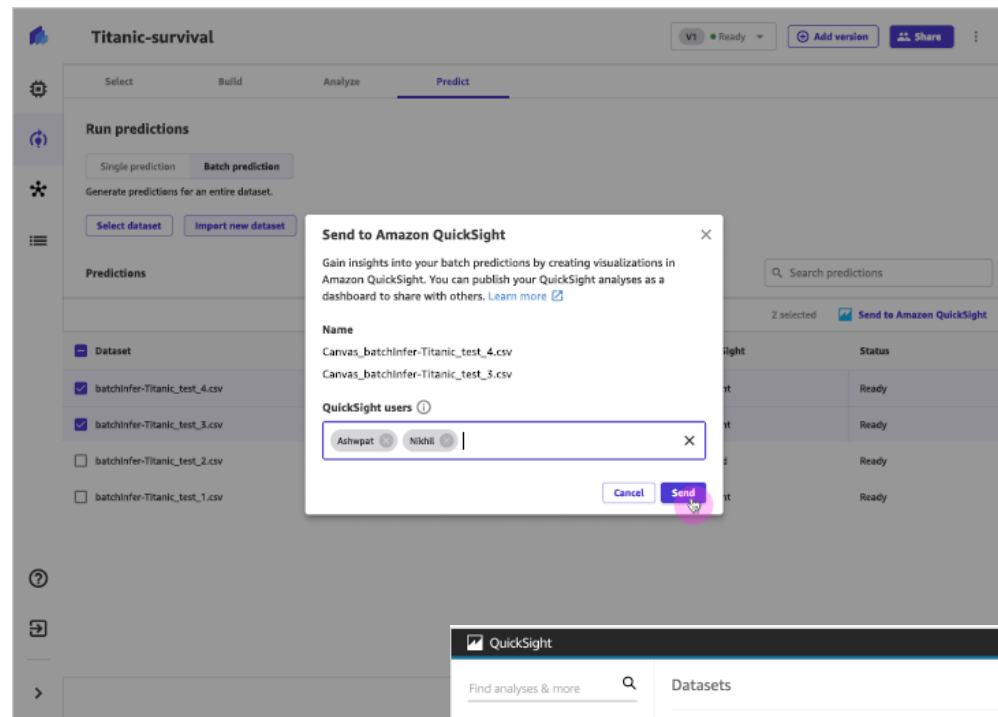
■ Average probability ■ New probability

No 71.5%

Yes 28.5%

Close Download

# Share *Publish batch predictions from Canvas to QuickSight to build predictive dashboards*



# *How to get started with Amazon SageMaker Canvas*

1

[Immersion Day](#)

2

[MOOC via Coursera](#)

3

[Getting started tutorial](#)

[aws.amazon.com/sagemaker/canvas](https://aws.amazon.com/sagemaker/canvas)





# Thank you!

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