



# *Amazon SageMaker Canvas Immersion Day*

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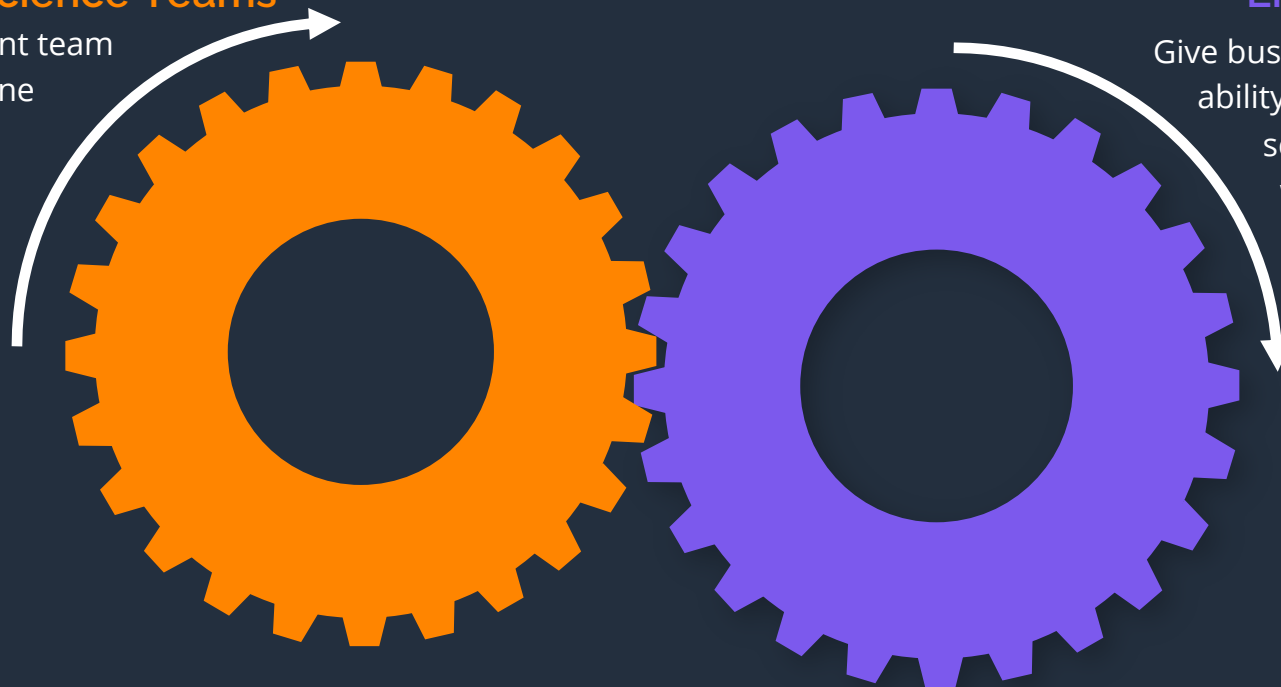
# Ways SageMaker Low-code/No-code Helps

## 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**

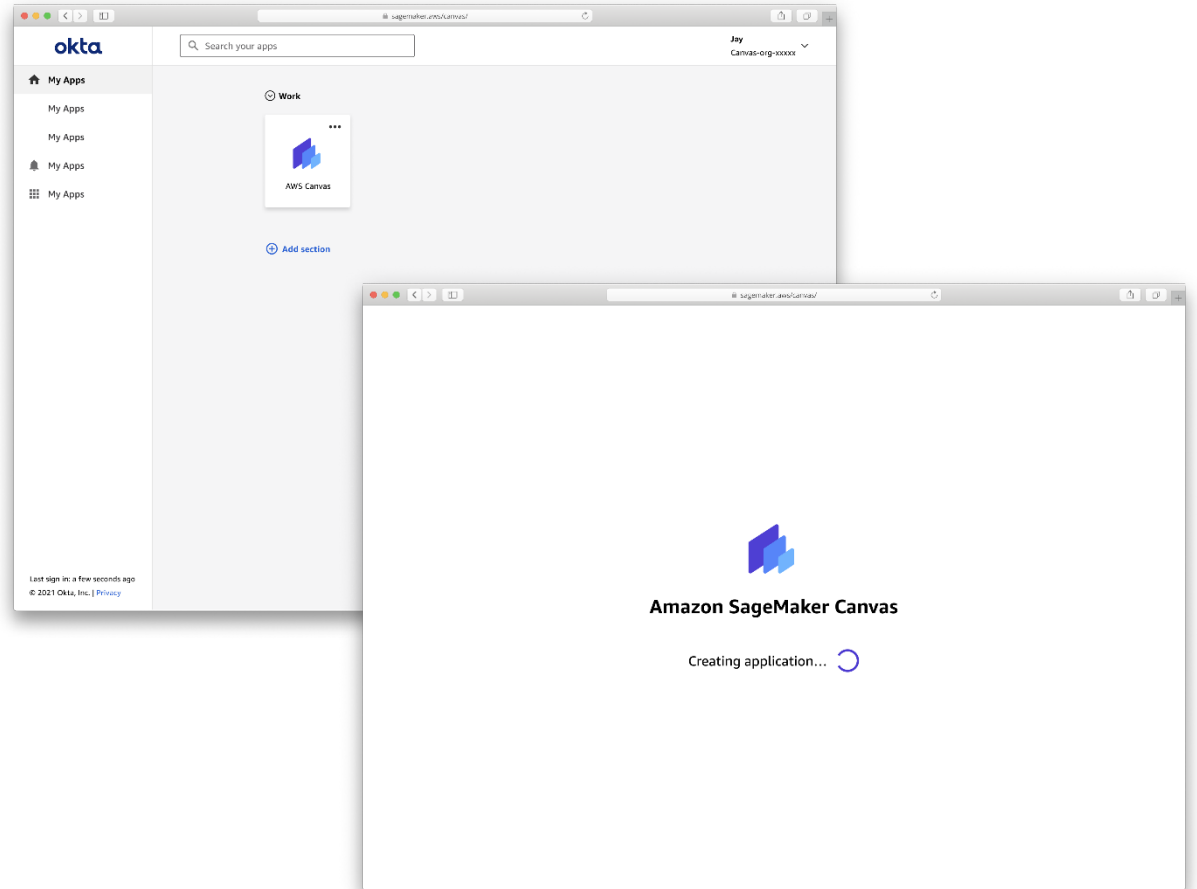


**Usage-based pricing to avoid licensing fees and reduce TCO**

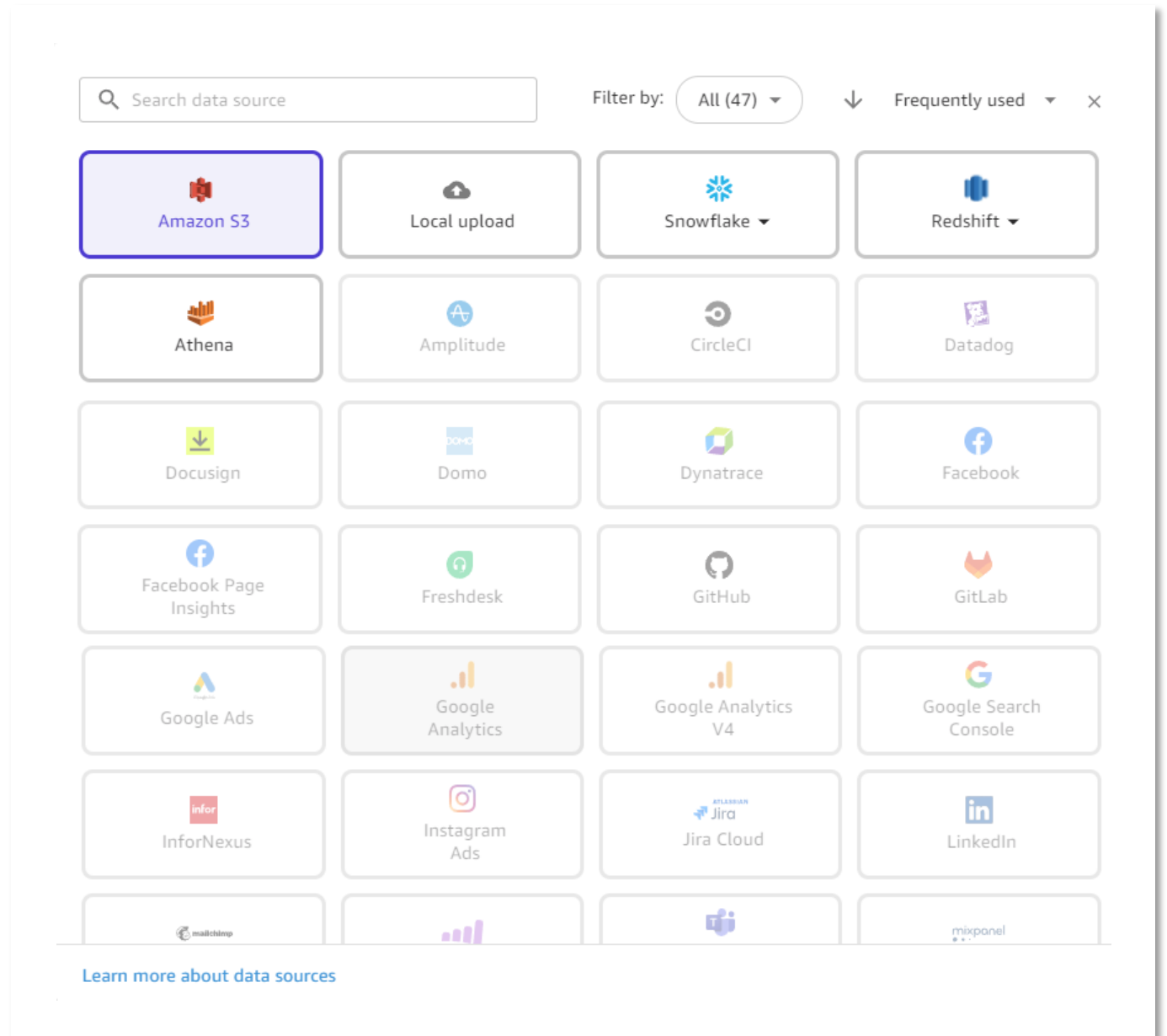


**Import ML models from any tool within or outside Amazon SageMaker and generate predictions directly in SageMaker Canvas**

*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

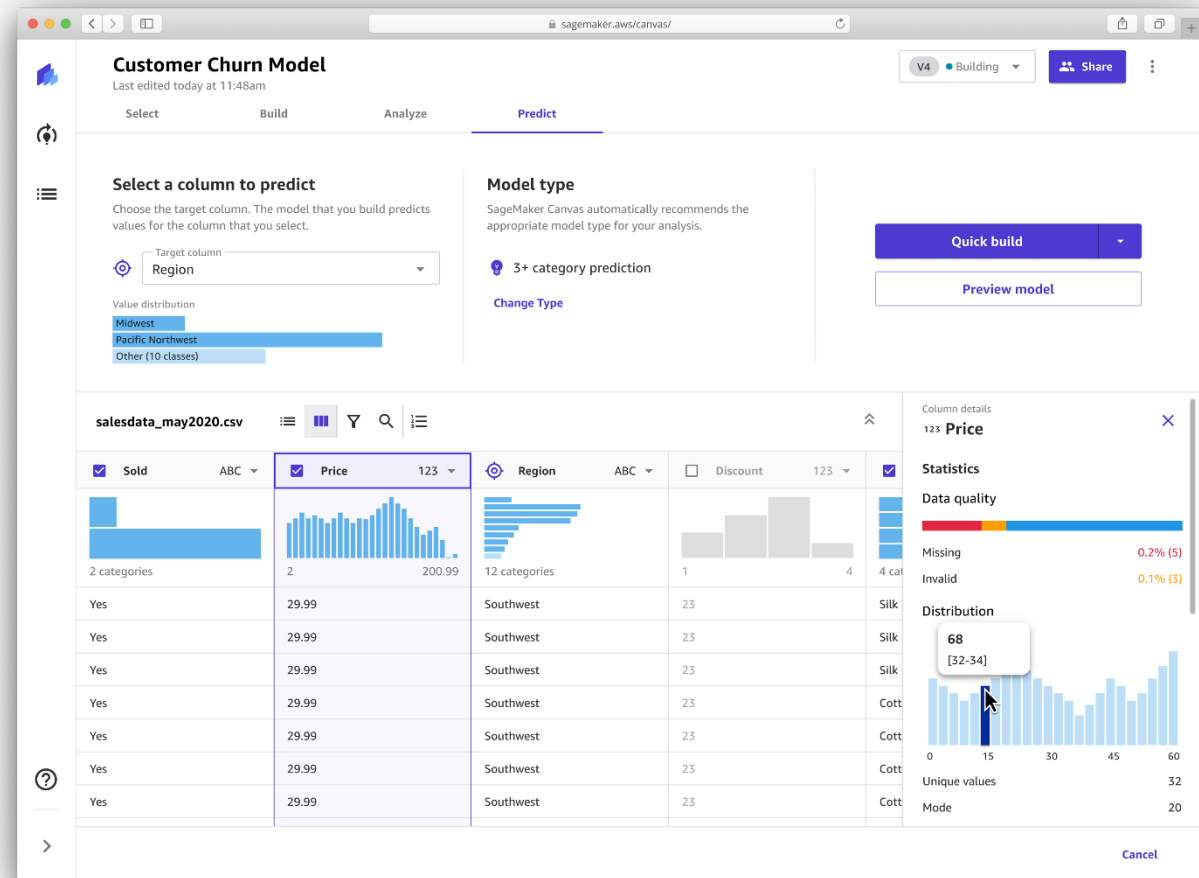
Show dropped columns

<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	

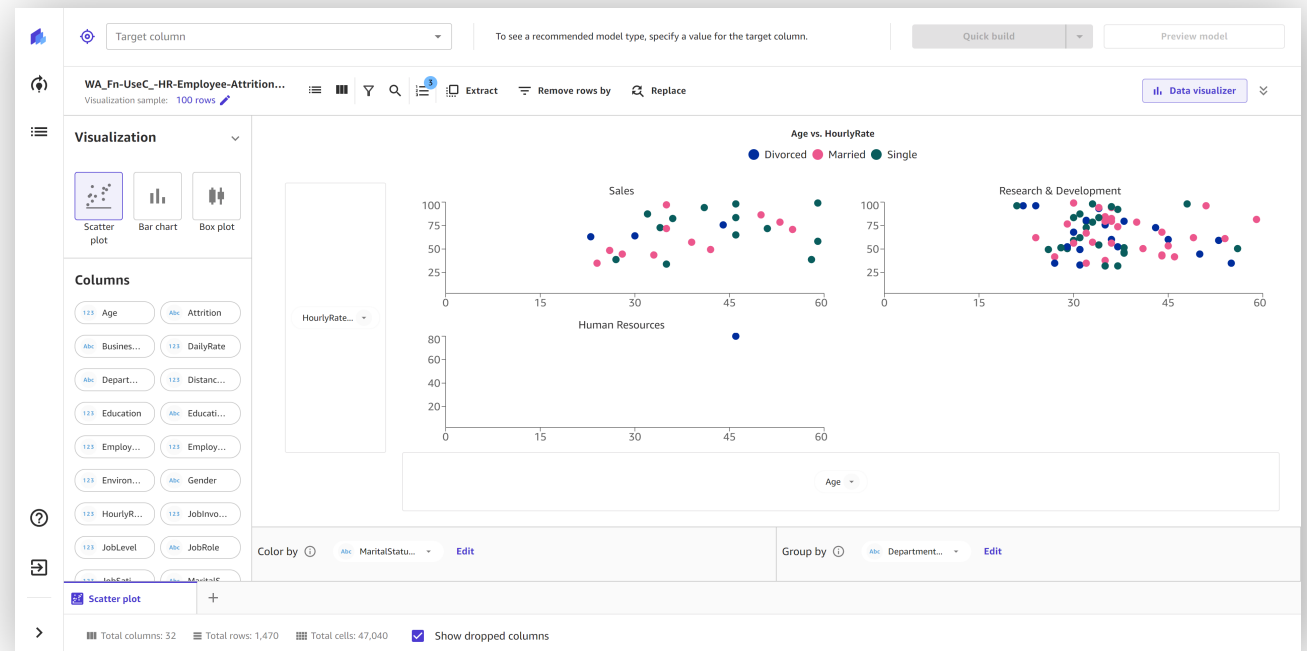
Previewing the first 100 rows

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

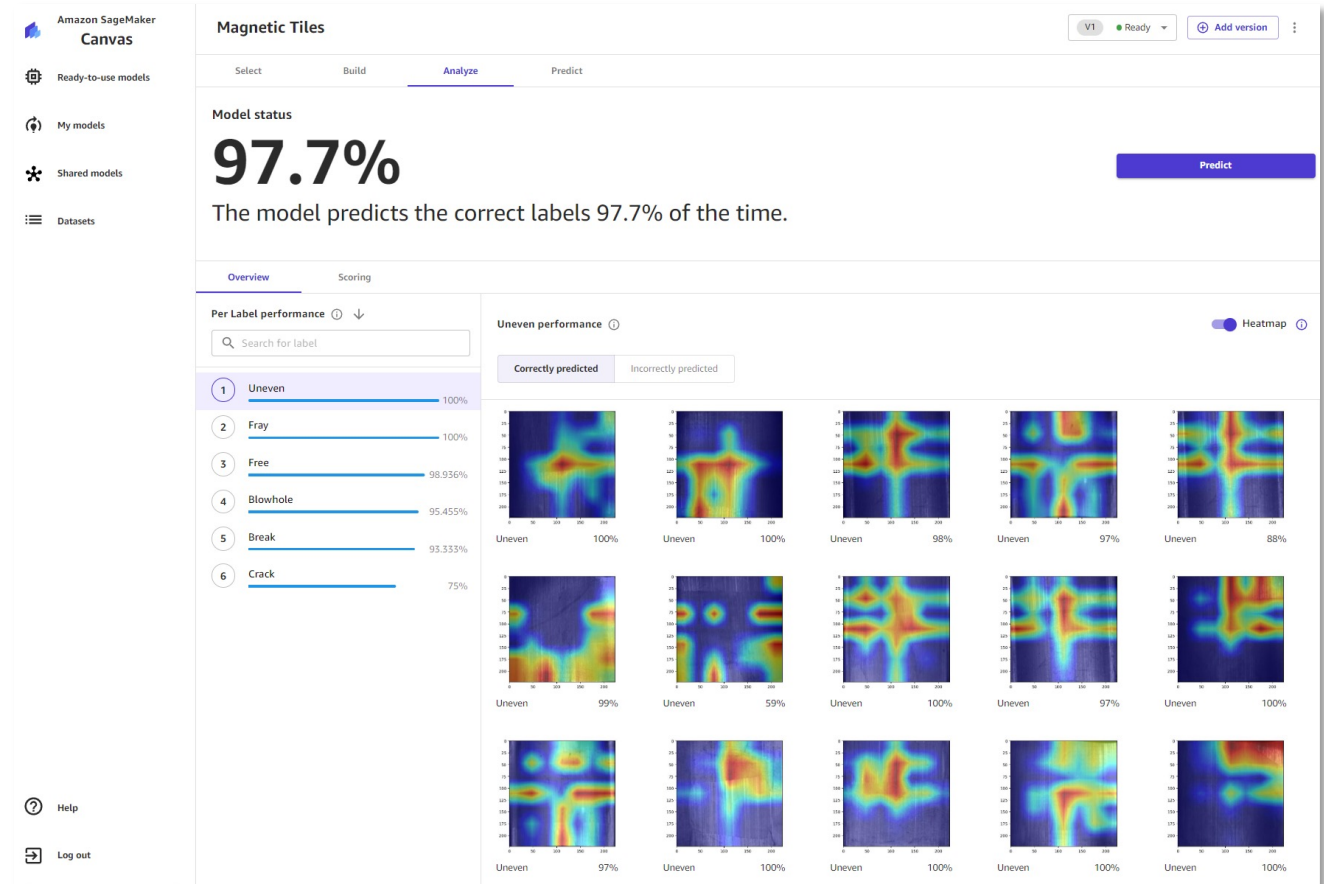
aws

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.

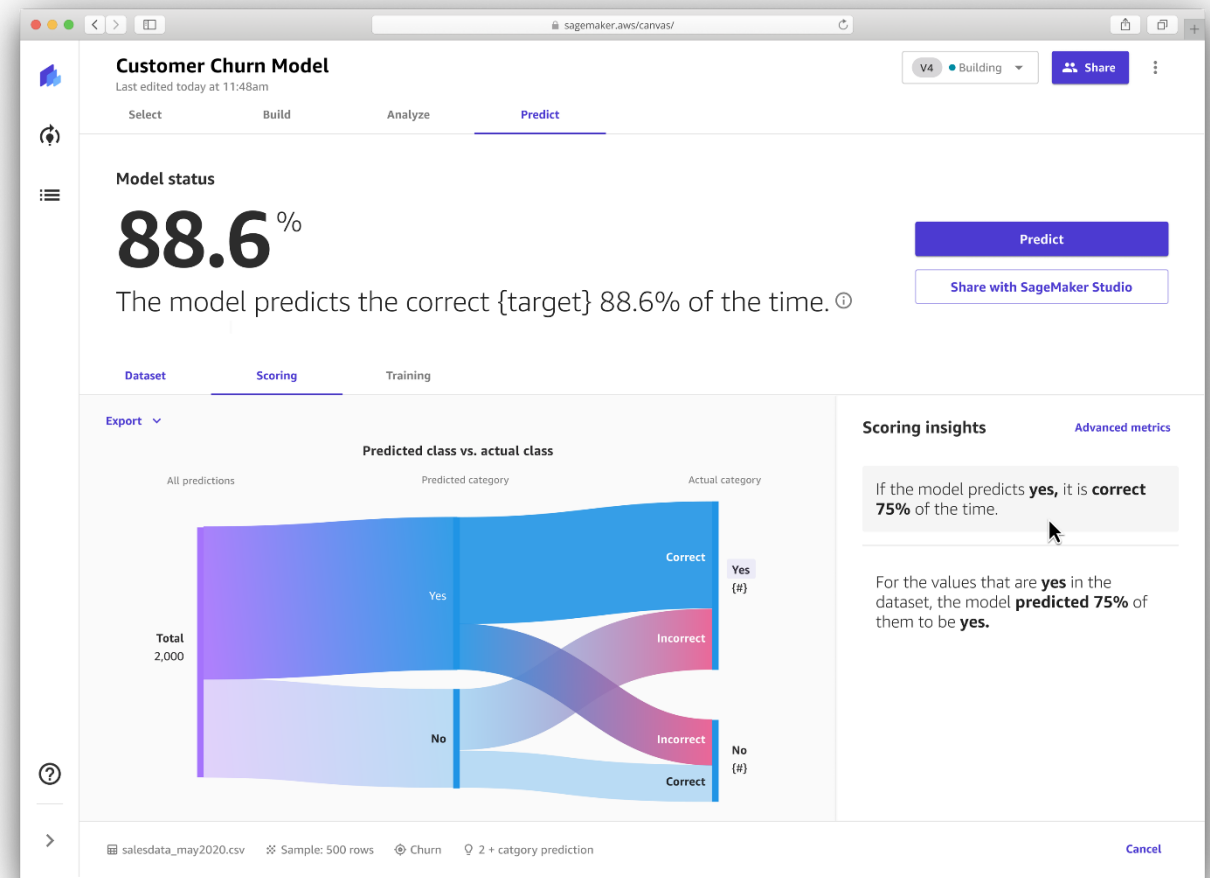
The screenshot displays the Amazon SageMaker Canvas interface, specifically the 'Ready-to-use models' section. On the left is a navigation sidebar with options: 'Amazon SageMaker Canvas', 'Ready-to-use models' (selected), 'My models', 'Shared models', and 'Datasets'. The main content area is titled 'Ready-to-use models' and includes a sub-header: 'Here are some ready-to-use models we've prepared for you to use.' Below this, a paragraph states: '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.' A search bar labeled 'Search use case' is present. Below the search bar, a link reads 'Can't find the right model? [Create a custom model](#)'. A filter section shows 'Filter by data type:' with buttons for 'Text' (selected), 'Image', and 'Document'. To the right of the filters are controls for 'Last used' (a dropdown), and view toggles for 'Grid' (selected) and 'List'. The models are displayed in a grid of eight cards:

- 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.

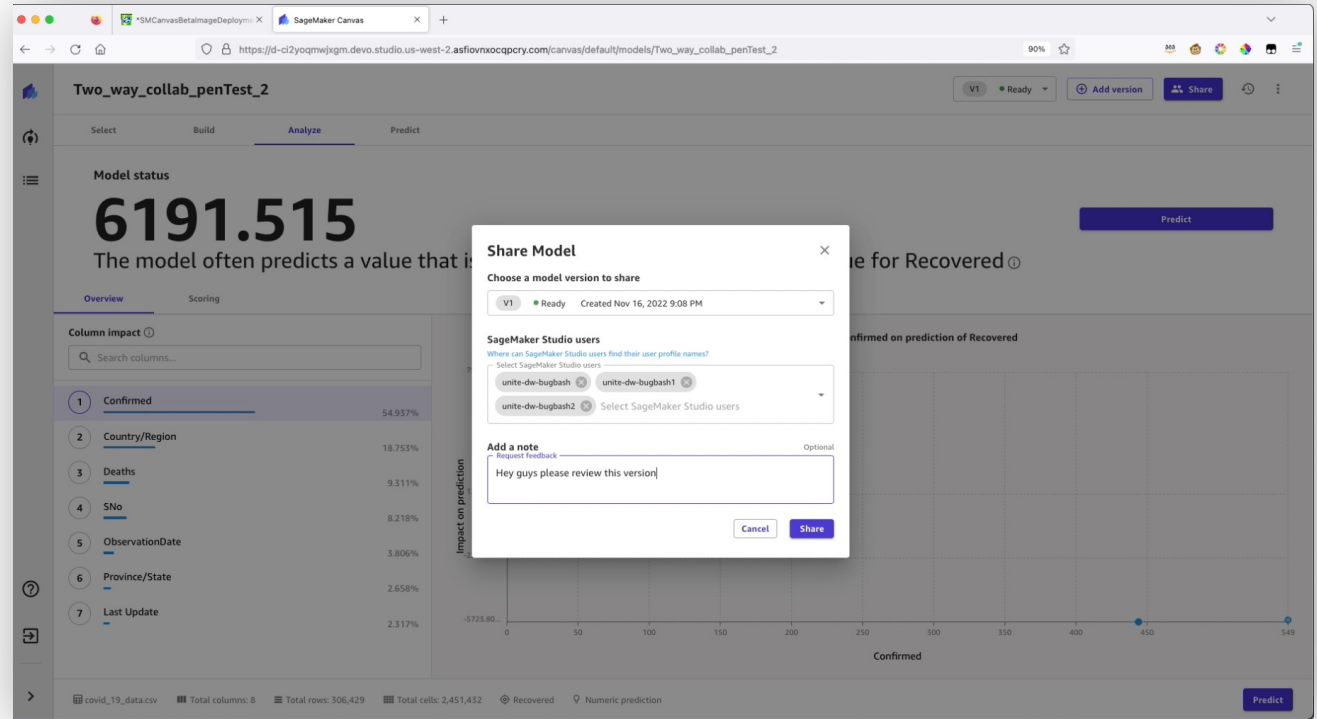
# Build custom CV and NLP models that are trained using your own data



*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*

The screenshot shows the 'Customer Churn Model' interface in the 'Predict' tab. The top navigation bar includes 'Select', 'Build', 'Analyze', and 'Predict'. The 'Predict' tab is active, showing a 'Predict target values' section with 'Batch prediction' and 'Single prediction' buttons. Below this is a 'Filter columns' input field. The main area displays a table of model features with their column impacts and values. The 'Contract' feature is highlighted, and its value is set to 'Two year'. A dropdown menu is open for the 'Contract' feature, showing options: 'Month-to-month', 'One year', 'Two year', and 'Fiber optic'. The 'Churn prediction' section on the right shows a bar chart with 'No' at 71.5% and 'Yes' at 28.5%. The 'Download' button is visible at the bottom right.

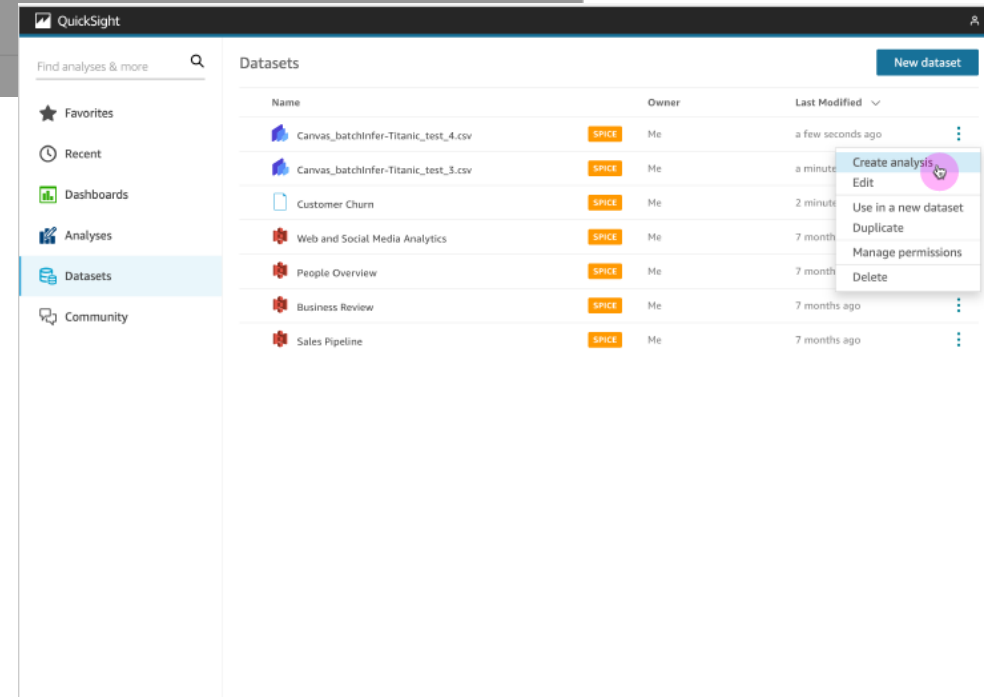
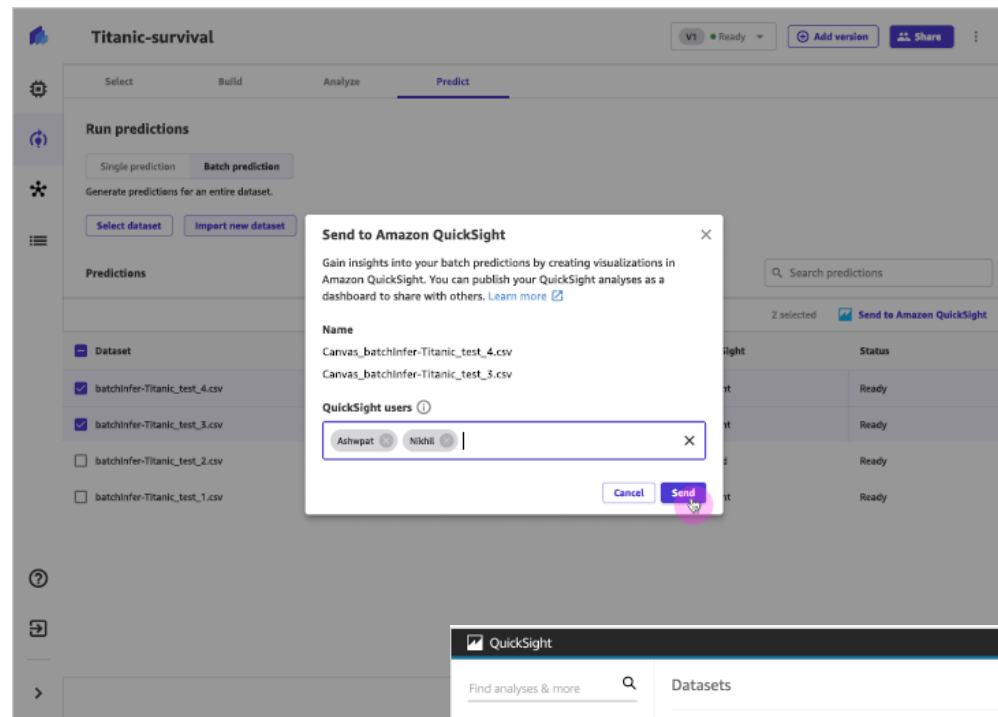
Column	Column impact	Value
Contract	61.3%	Two year
OnlineSecurity		Month-to-month
TechSupport		One year
InternetService		Two year
PaymentMethod		Fiber optic
OnlineBackup		Electronic check
DeviceProtection		No
MonthlyCharges		Yes
PaperlessBilling		104.8
		Yes

Churn prediction

No 71.5%

Yes 28.5%

# 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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