



An Introduction to Domo's Data Science Products & Services

Lunch & Learn | March 2, 2023

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Data Science Professional Services at Domo, Inc.



DATA SCIENCE PROFESSIONAL SERVICES

WHAT WE DO

Provide consulting to Domo clients on data science/machine learning (DSML) projects

- ❖ Full DSML solutions (modeling), data science readiness, data strategy

Support data science initiatives at Domo

- ❖ Product development; sales & marketing; education & trainings
- ❖ Sponsoring Lunch & Learns focused on data science the first Thursday of every month
 - ❖ Leave in comments ideas on what topics you'd like to see covered





DATA SCIENCE PROFESSIONAL SERVICES

WHO WE ARE

Our team is led by PhDs with over 25 years of experience in using data to impact business development and drive value

The team has experience working with all industries, with all data types, and with all sizes of businesses and data-specific projects

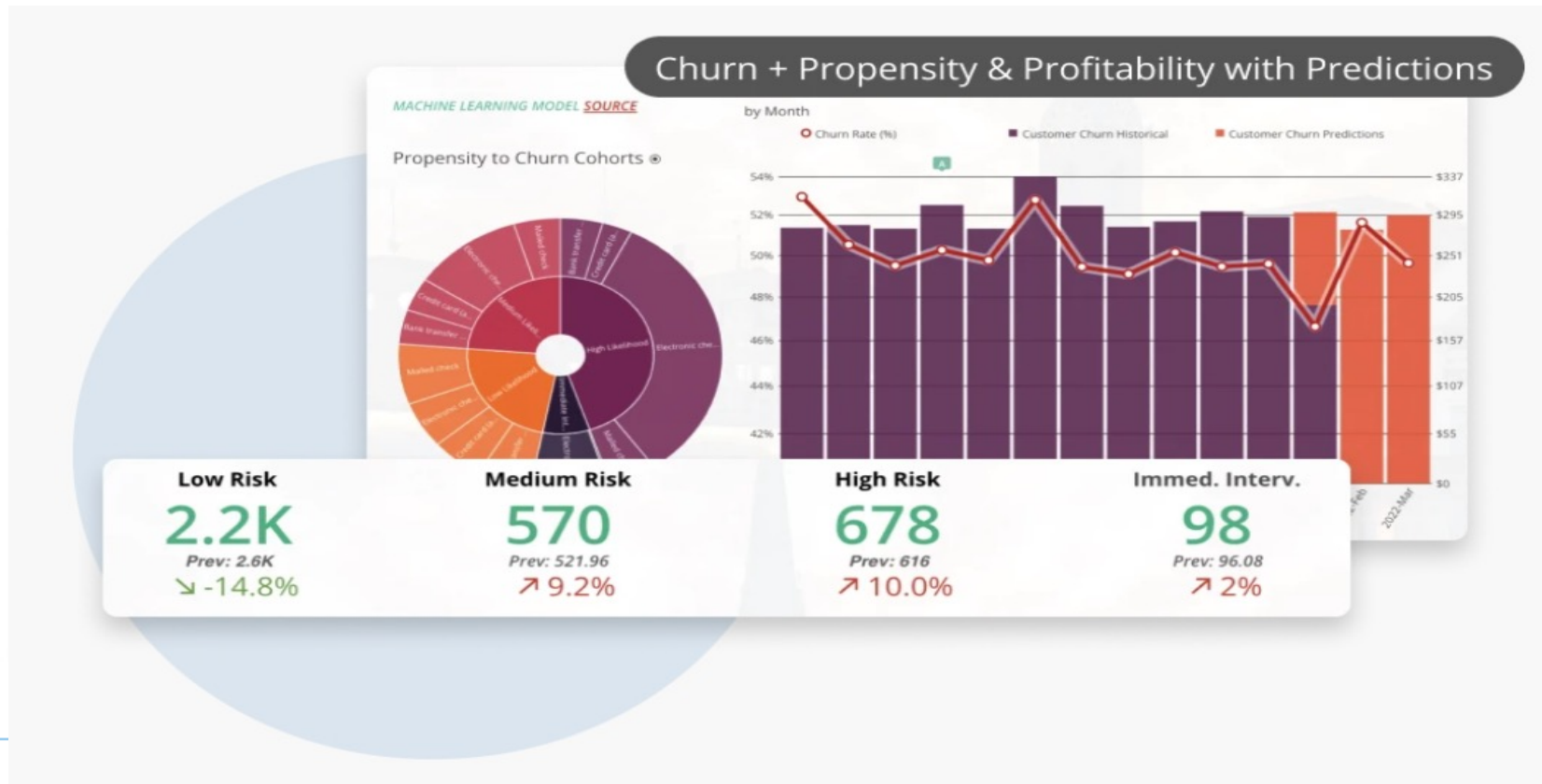
INTERESTED IN WORKING WITH US?

Contact your Account Executive (AE) for more info

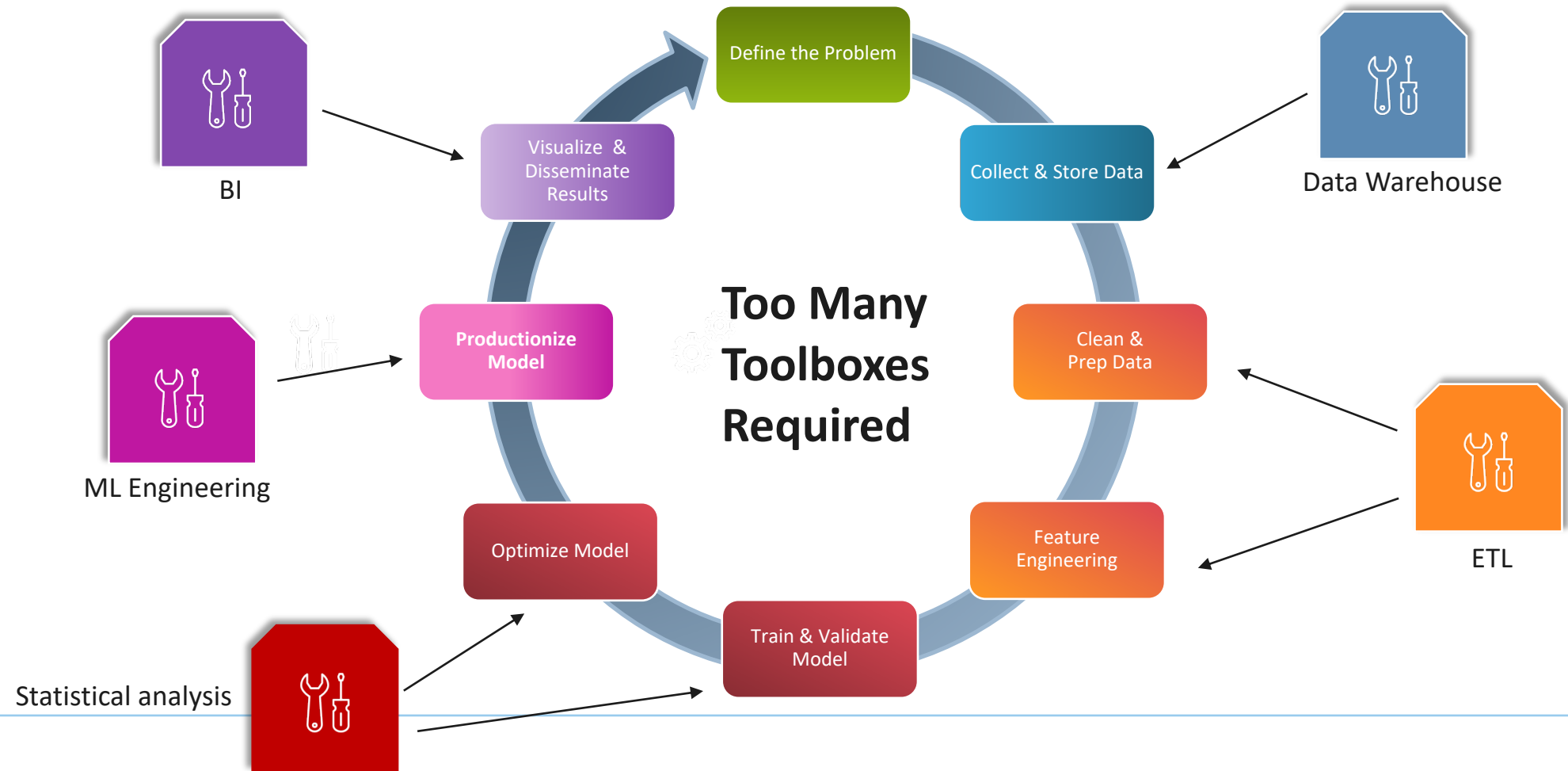


What is data science?

Data science combines **statistics** with specific **subject matter expertise** to uncover actionable insights in an organization's **data**.



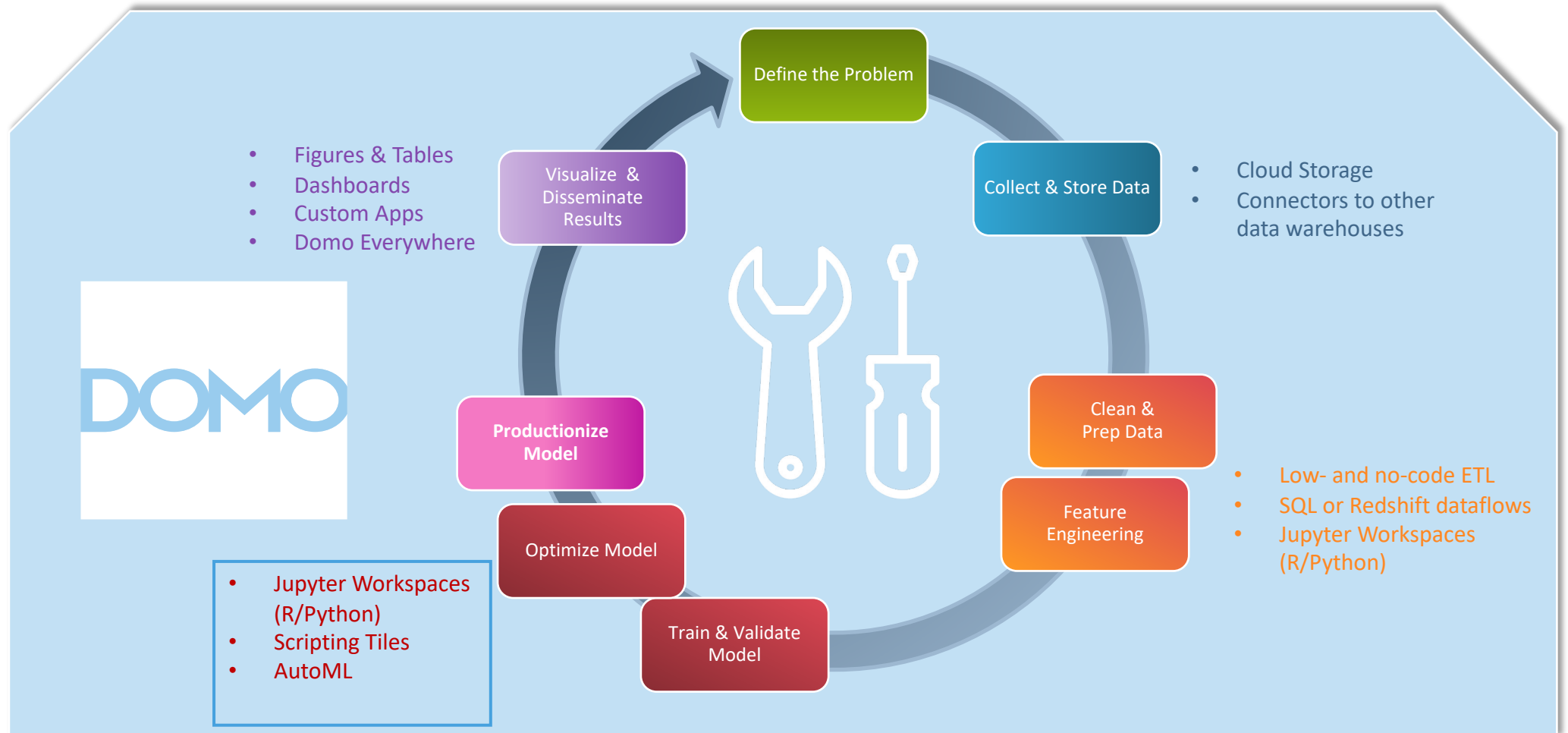
Where Data Science Workflows Often Fall Short



Domo is a One-Stop-Toolbox for Data Science/ML



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Jupyter Workspaces

Domo's integrated Jupyter Workspaces let's you explore your data, train & productionize models, and create custom visualizations - all in one place

FEATURES

- Read & write data directly to & from Domo
- Write code in notebooks using Python or R programming languages
- Choose your compute tier
- Productionize models in a notebook
- Run tasks programmatically (for developers)
- Schedule notebooks to run automatically at a set time or frequency
- Share workspaces to enable collaboration
- Integrate with GitHub for version control

The screenshot displays the Domo Jupyter Workspaces interface. On the left, a file explorer shows a directory with files: README.md (16 minutes ago), untitled.md (8 minutes ago), and untitled.txt (8 minutes ago). The main area features a 'Launcher' panel with options for Notebook, Console, and Terminal. The 'Notebook' option is selected, opening an R notebook titled 'R_sentiment_analysis.ipynb'. The notebook content includes a title 'Sentiment Analysis for demo', a purpose statement, and code for installing and loading R packages. The output of the code is displayed as a tibble with columns: date, review_id, stars, text, store, and city.

```
# Required packages
packages <- c("SentimentAnalysis", "sentimentr", "corpus", "SnowballC")

# This code only installs the packages listed above if they're not already installed (which saves time)
install.packages(setdiff(packages, rownames(installed.packages())))
```

```
library("domojupyter")
library("SentimentAnalysis")
library("sentimentr")
library("SnowballC")
library("data.table")
library(tn)
library(dplyr)
library(tidyverse)
```

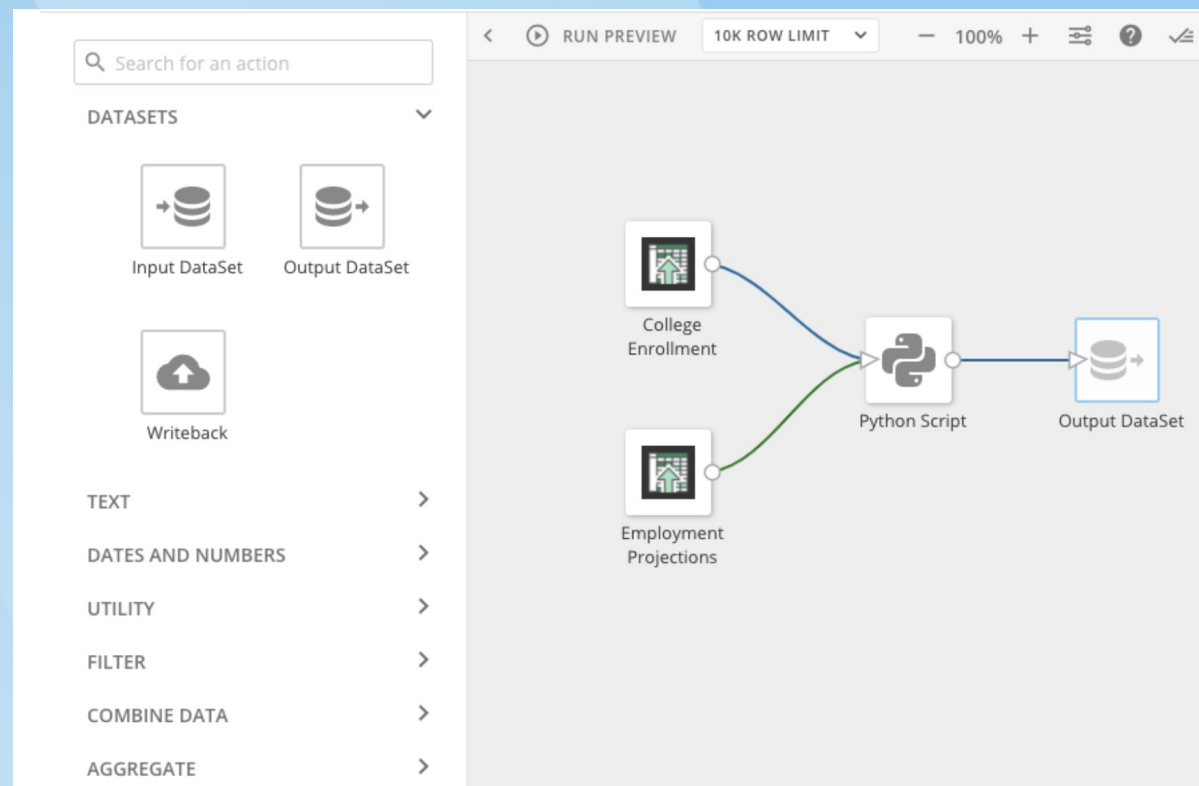
```
data <- read_dataframe("Reviews_for_sentiment_analysis", query = "SELECT * FROM table", show_col_types = FALSE)
head(data)
```

date	review_id	stars	text	store	city
<dtm>	<chr>	<dbl>	<chr>	<chr>	<chr>
2022-10-25 11:03:15	ChZDSUHNMG9nSOVJQ0FnSUMtc1B2SUmEAE	3	(Translated by Google) It's still New York! (Original) やはりニューヨークですね!	UNIQLO	New York
2022-10-19 04:52:57	ChdDSUHNMG9nSOVJQ0FnSURlczZPVmI3RRAB	5	Bought a very nice hat from here.	UNIQLO	New York
2022-10-14 21:13:21	ChdDSUHNMG9nSOVJQ0FnSURlGvYXZjbnRRAB	5	Love UNIQLO. This store has a good selection of clothes. Prices are the same as the store in Brooklyn and NJ.	UNIQLO	New York
2022-10-11 18:29:11	ChdDSUHNMG9nSOVJQ0FnSURlZ2VieHhBRAB	4	A store with huge selection but poor signage. Staff is helpful.	UNIQLO	New York
2022-10-11 10:16:24	ChdDSUHNMG9nSOVJQ0FnSURlM3U1Z25BRAB	5	(Translated by Google) Great store, special products (Original) Tolles Geschäft, besondere Produkte	UNIQLO	New York
2022-10-06 08:01:26	ChdDSUHNMG9nSOVJQ0FnSURlHR1nbnRRAB	3	(Translated by Google) It's smaller than the UNIQLO's in Soho or on Fifth Avenue. (Original) Es más pequeña que los UNIQLO del Soho o de la Quinta Avenida	UNIQLO	New York



Scripting Tiles

Use Scripting Tiles to run brief R or Python code directly in an ETL dataflow



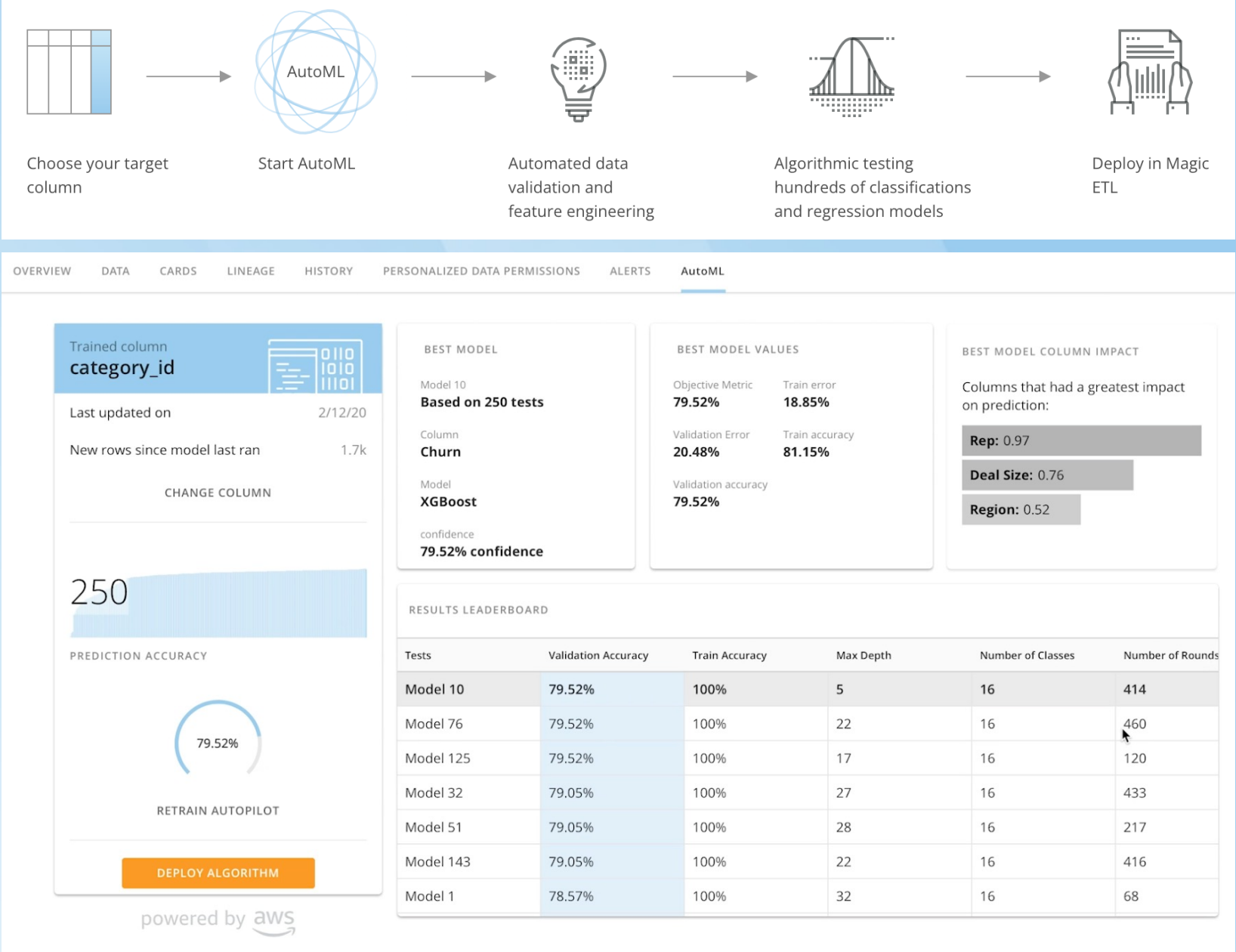
```
Python Script  CODE SCHEMA NOTES

1 # Import the domomagic package into the script
2 from domomagic import *
3
4 # read data from inputs into a data frame
5 input1 = read_dataframe('College Enrollment')
6
7 # write your script here
8 |
9
10 # write a data frame so it's available to the next action
11 write_dataframe(input1)
```



AutoML

AutoML is a low-code option for automatically generating & testing multiple machine learning models



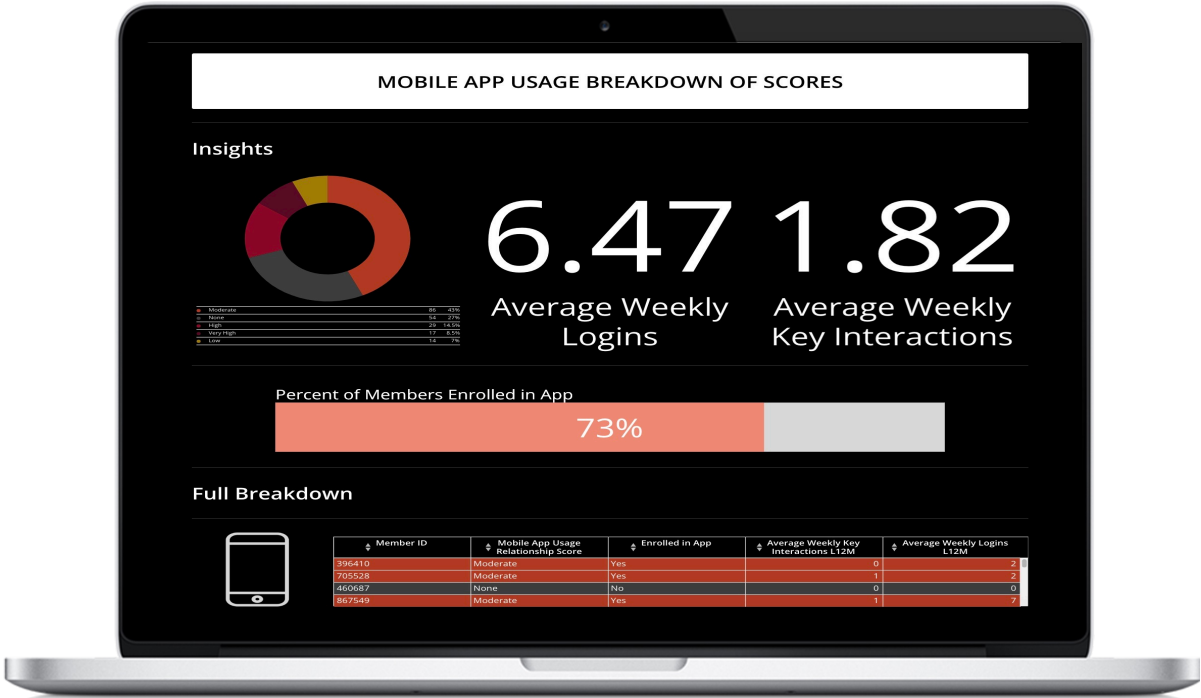


Live Demos of Data Science/ML Solutions

Sentiment Analysis



Customer Relationship Score



Q&A



Thank You