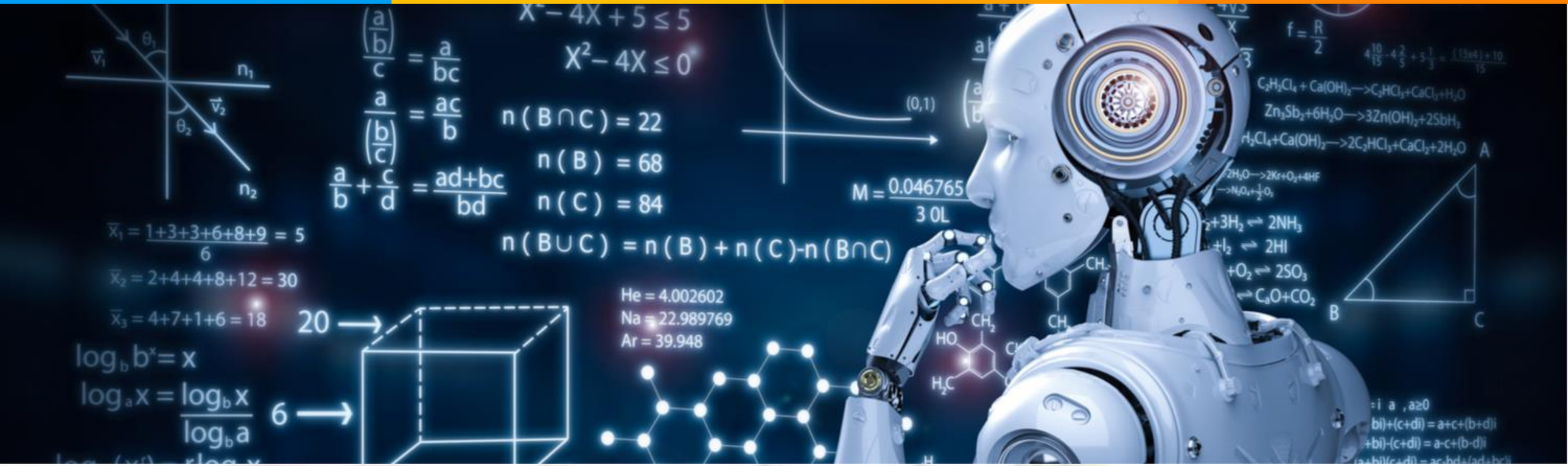
Duration: 60 min | Srikanth Shenoy | Orientation | AI & ML / BDA

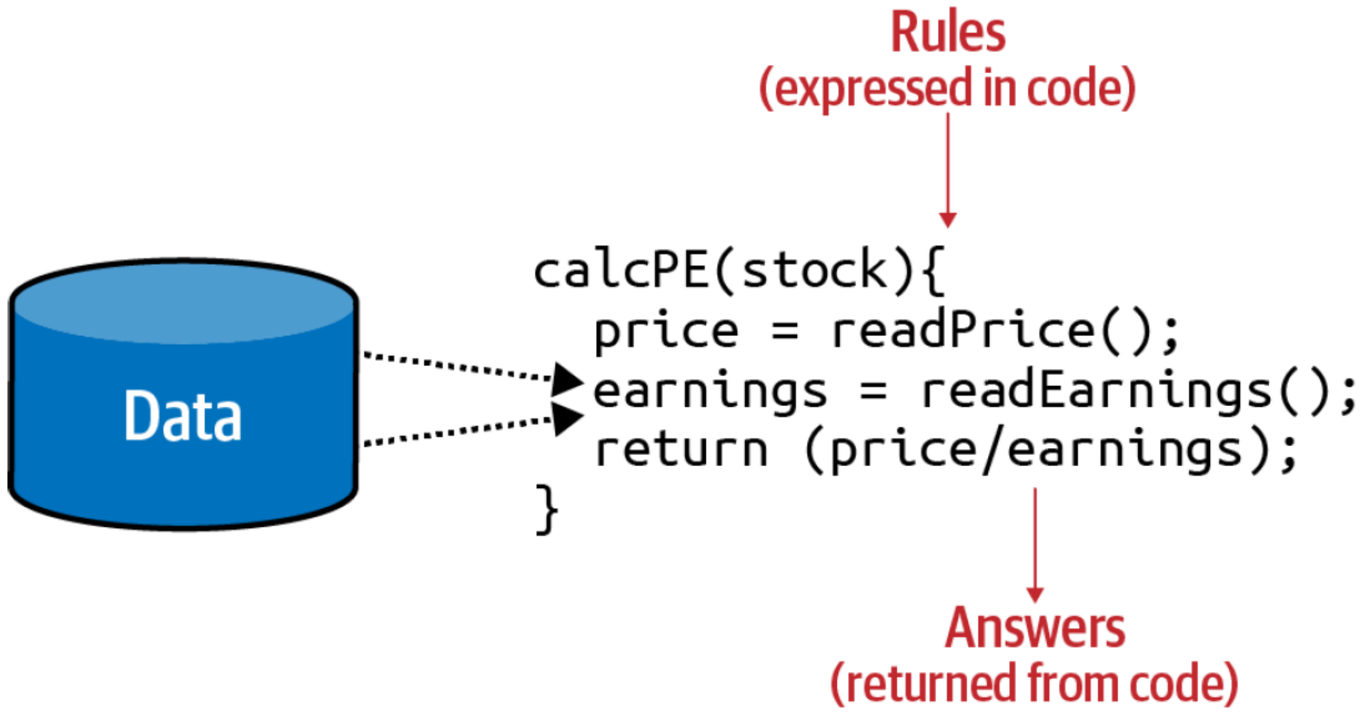


A simplified view of data science lifecycle & eco system

$X^2-4X+5\le 5$
$X^2-4X\le 0$
$n(B\cap C)=22$
$n(B)=68$
$n(C)=84$
$n(B\cup C)=n(B)+n(C)-n(B\cap C)$
$\frac{a}{b}+\frac{c}{d}=\frac{ad+bc}{bd}$
$\log_b b^x = x$
$\log_a x = \frac{\log_b x}{\log_b a}$
$\bar{x}_1 = \frac{1+3+3+6+8+9}{6} = 5$
$\bar{x}_2 = 2+4+4+8+12 = 30$
$\bar{x}_3 = 4+7+1+6 = 18$
$M = \frac{0.046765}{3\,0L}$
$f = \frac{R}{2}$
He = 4.002602
Na = 22.989769
Ar = 39.948
20
6
(0,1)
A
B
C

1. ML intro

Traditional Programming



Solving it traditional way

Explicit coding will not work

Traditional approach can’t scale

- Consider running
  - Front pose, perspective, low lighting

Machine Learning approach

```
01010010101001010101
10010101010010111101
01001010100101010010
01010010101001010101
```

Label = WALKING

```
10101001010010101010
01010100100100100001
00100111110101011111
10101001001111010111
```

Label = RUNNING

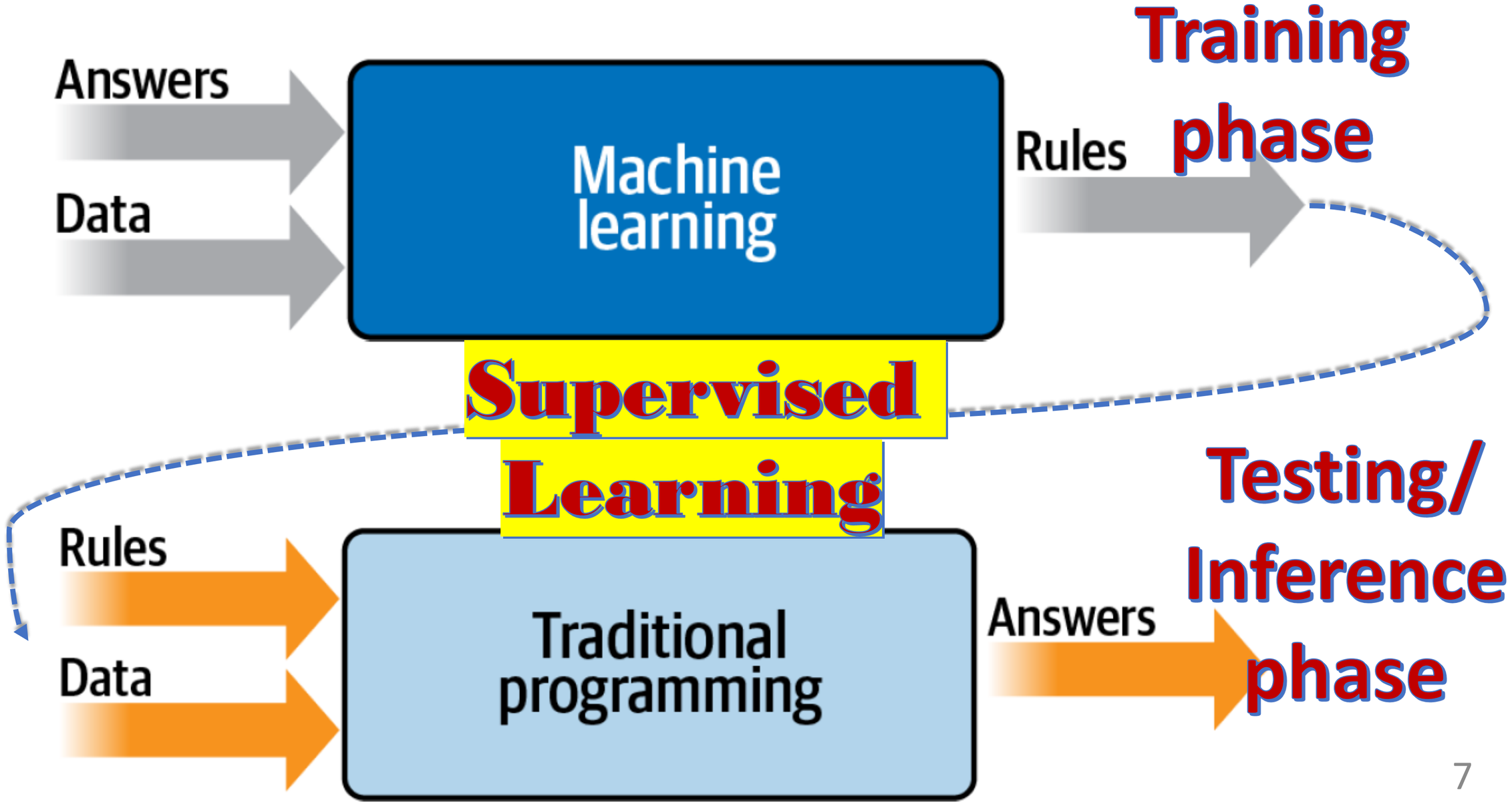
```
10010100111110101010
11010101110101011101
10101011110101010111
11111100011110101010
```

Label = BIKING

```
11111111110100111010
00111111010111110101
01011101010101011101
10101010101001111101
```

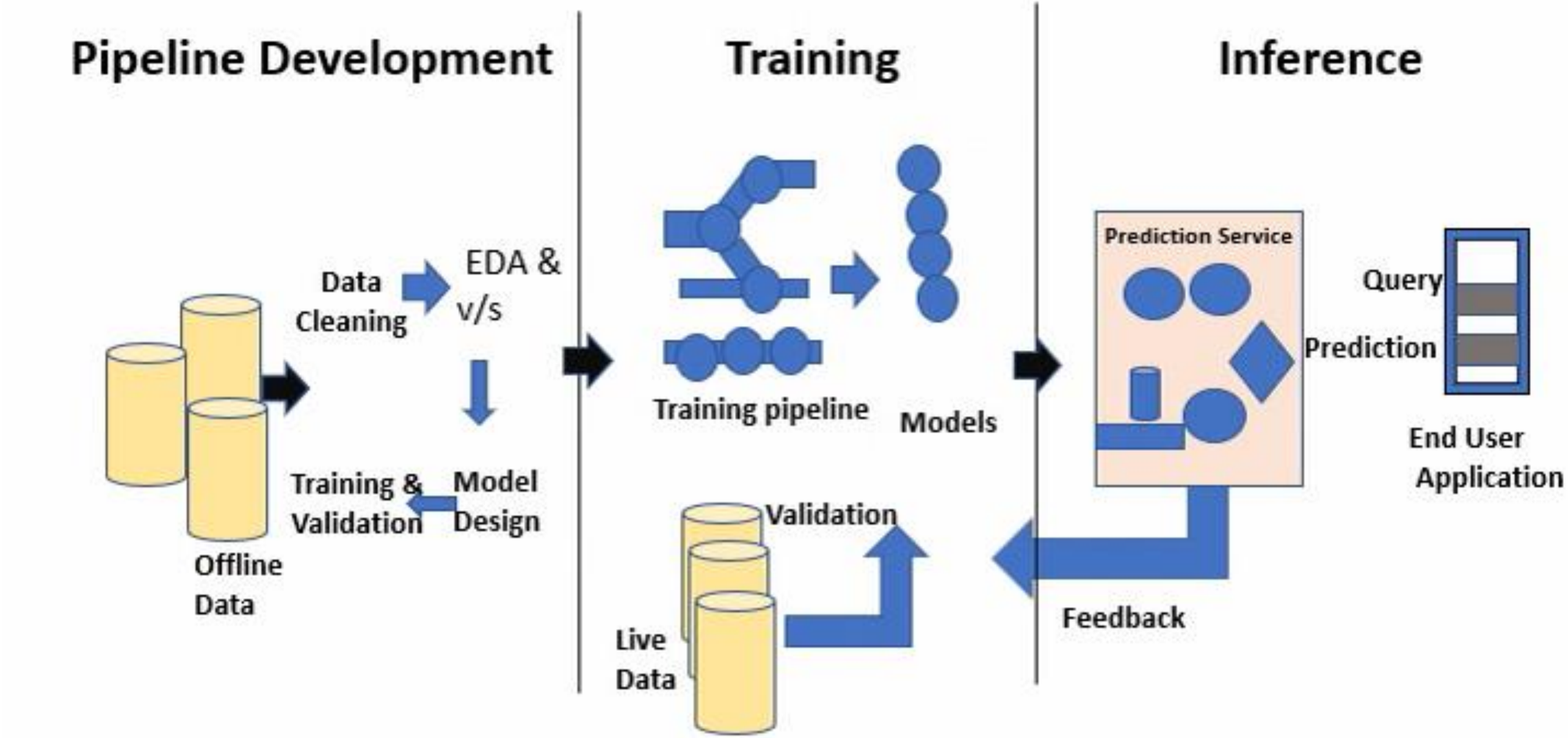
Label = GOLFING

And then…

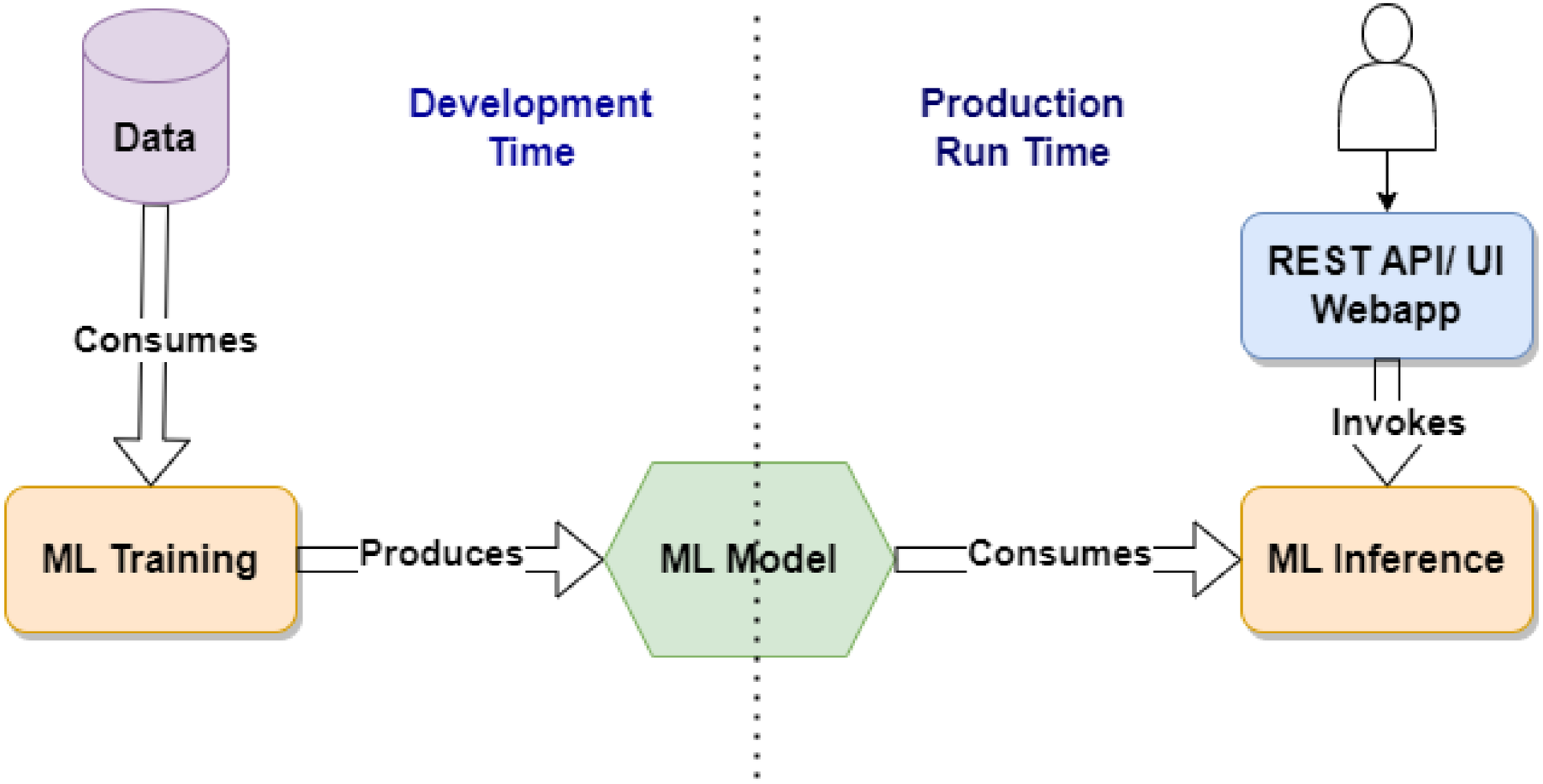

Answers
Data
Machine learning
Rules
Training phase
Supervised Learning
Rules
Data
Traditional programming
Answers
Testing/ Inference phase

Is this enough?

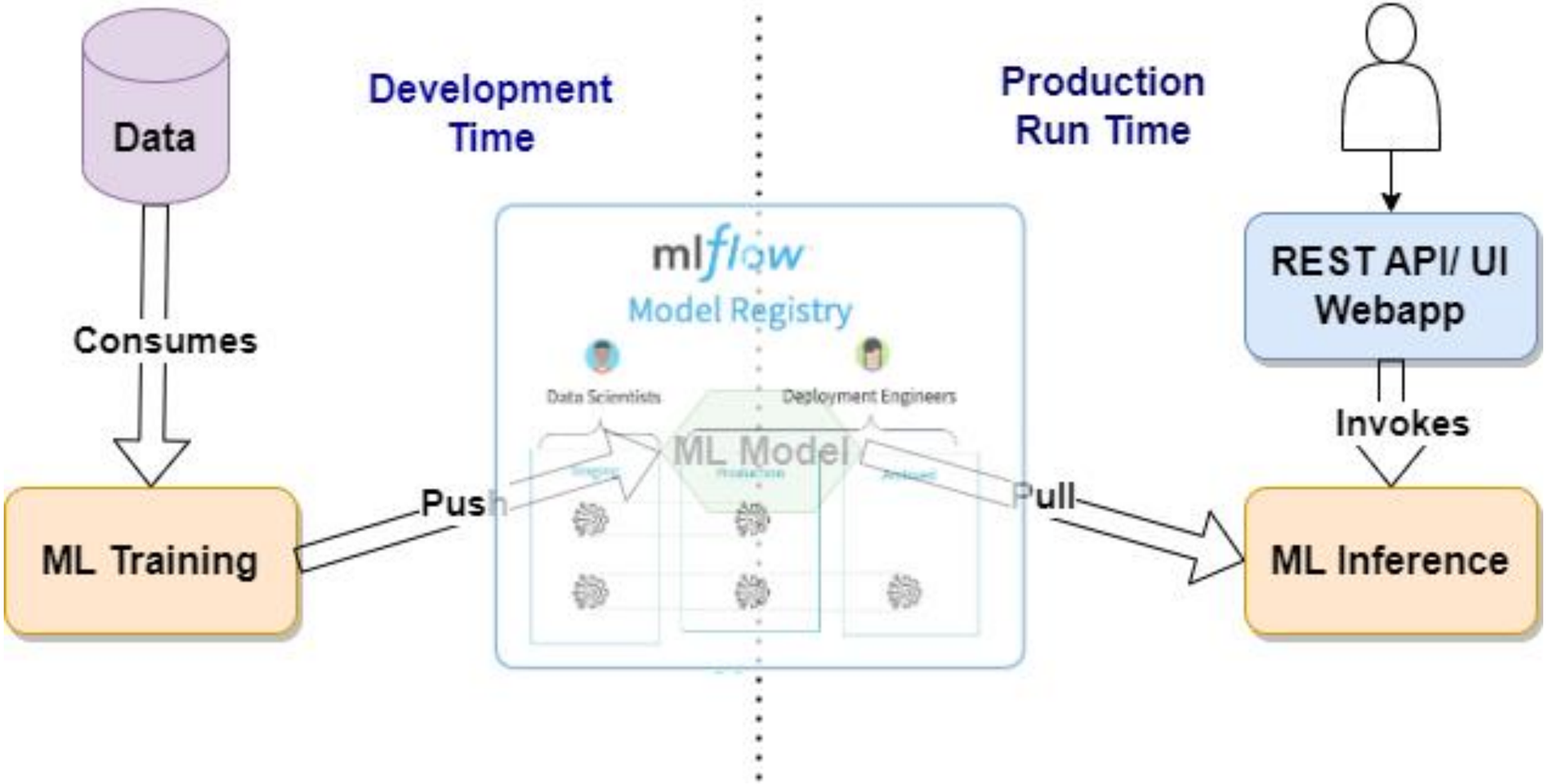
2. Lifecycle & Ecosystem


Pipeline Development
Training
Inference
Data Cleaning
EDA & v/s
Training & Validation
Model Design
Offline Data
Training pipeline
Models
Validation
Live Data
Prediction Service
Query
Prediction
End User Application
Feedback

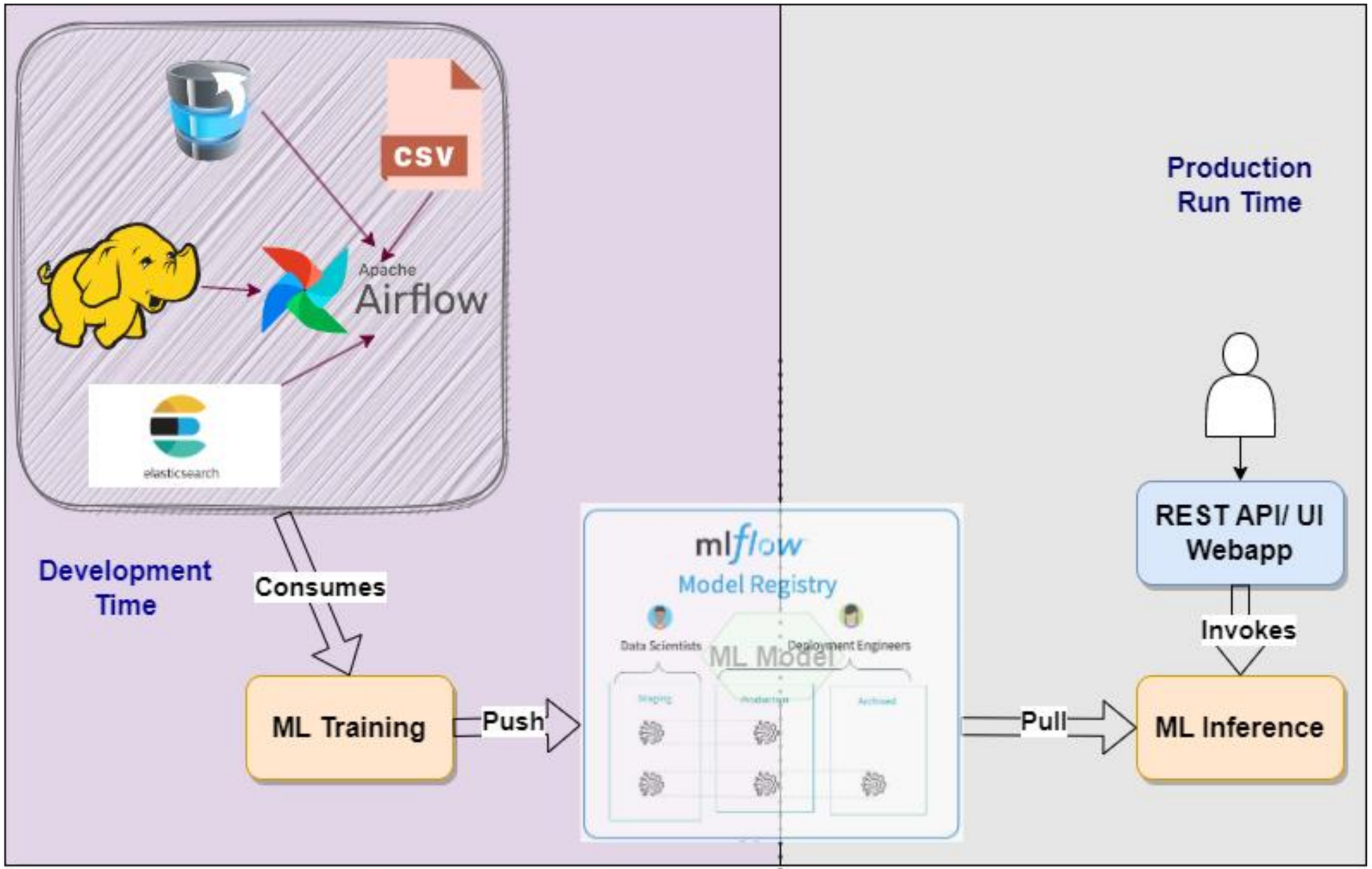
A little dose of real world



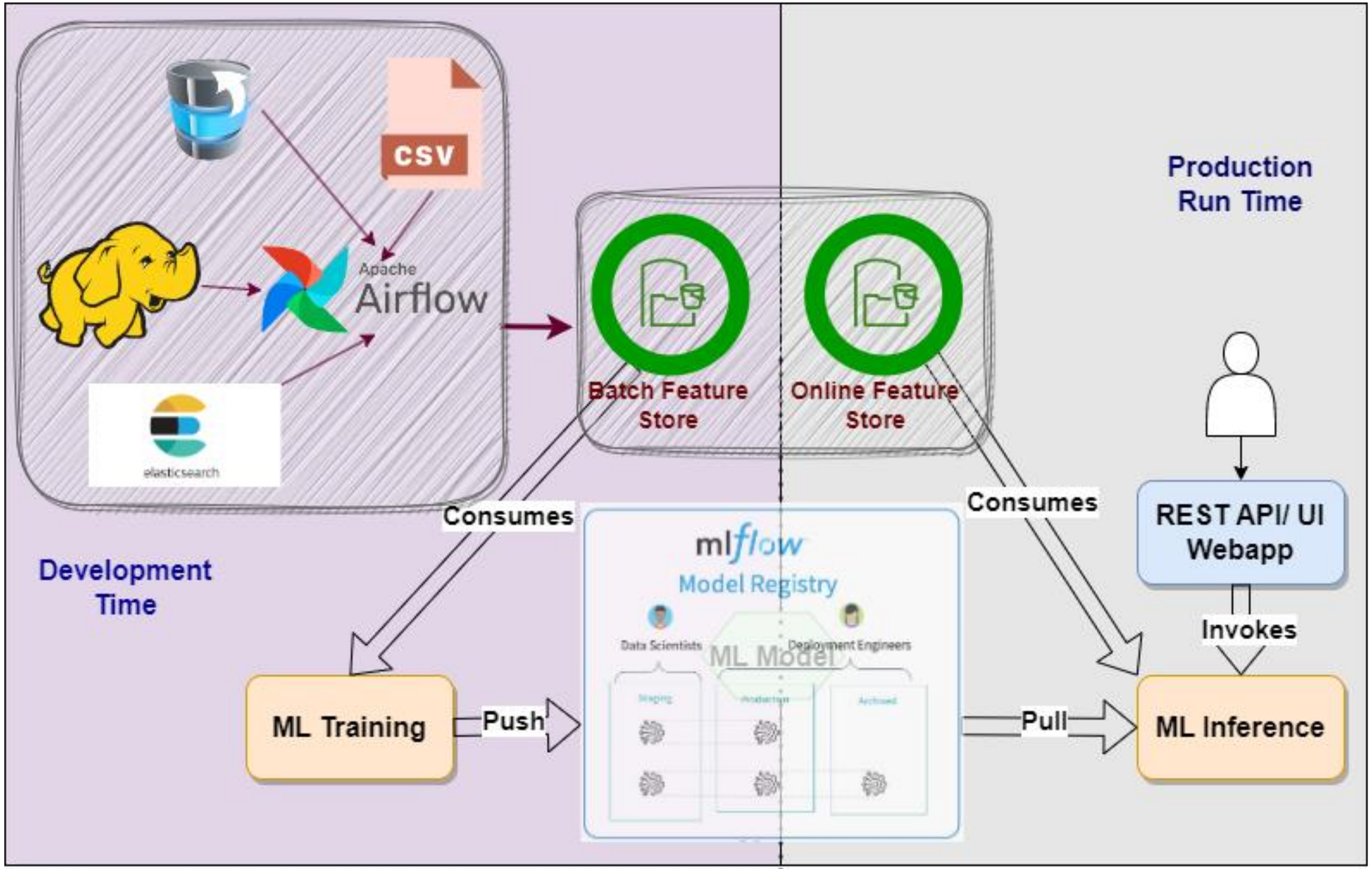
Model registry



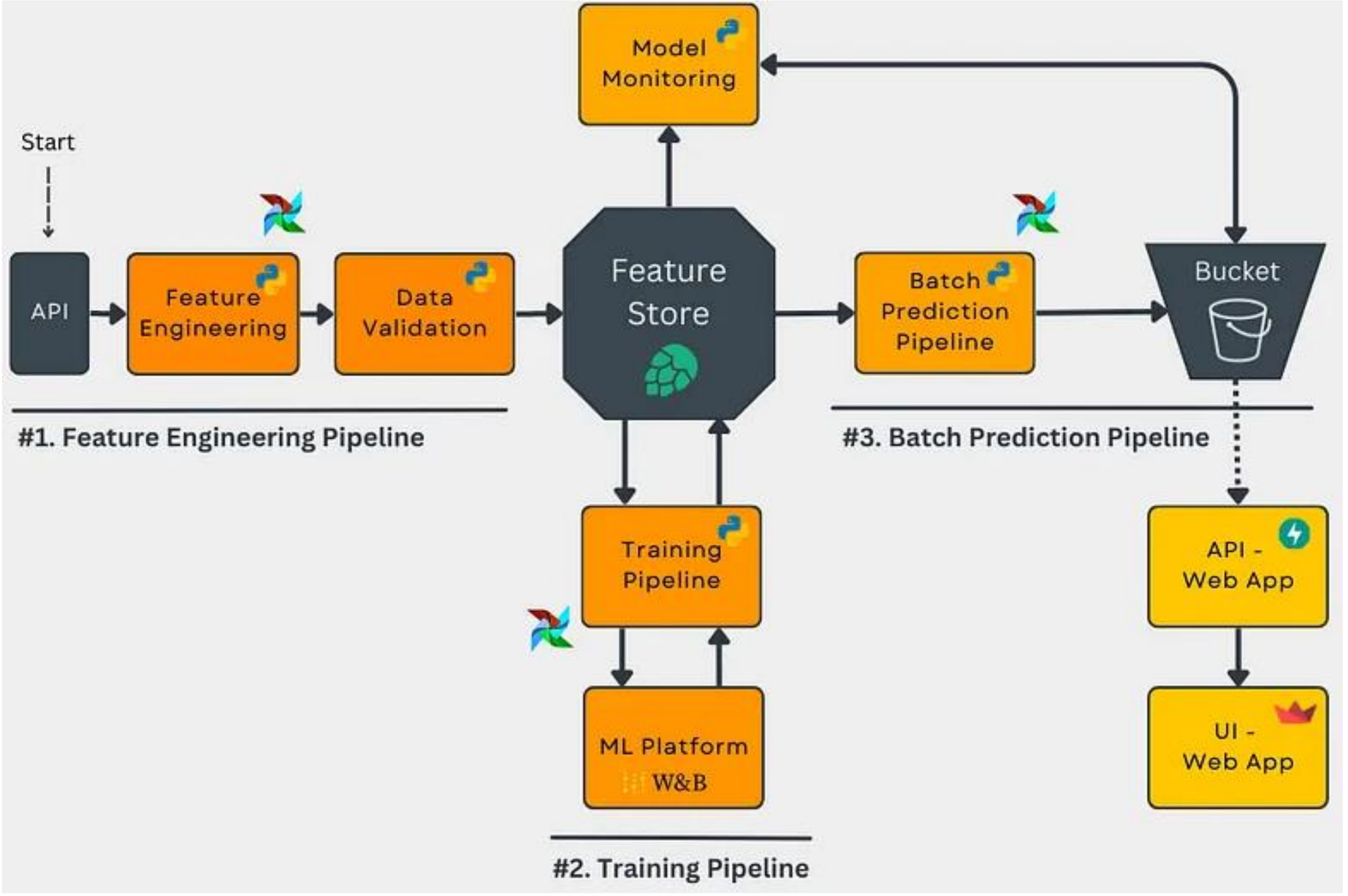
Where does the data come from?



ML Lifecycle (50%)



ML Lifecycle (75%)



QUESTIONS

ThankYou!