



U B E R

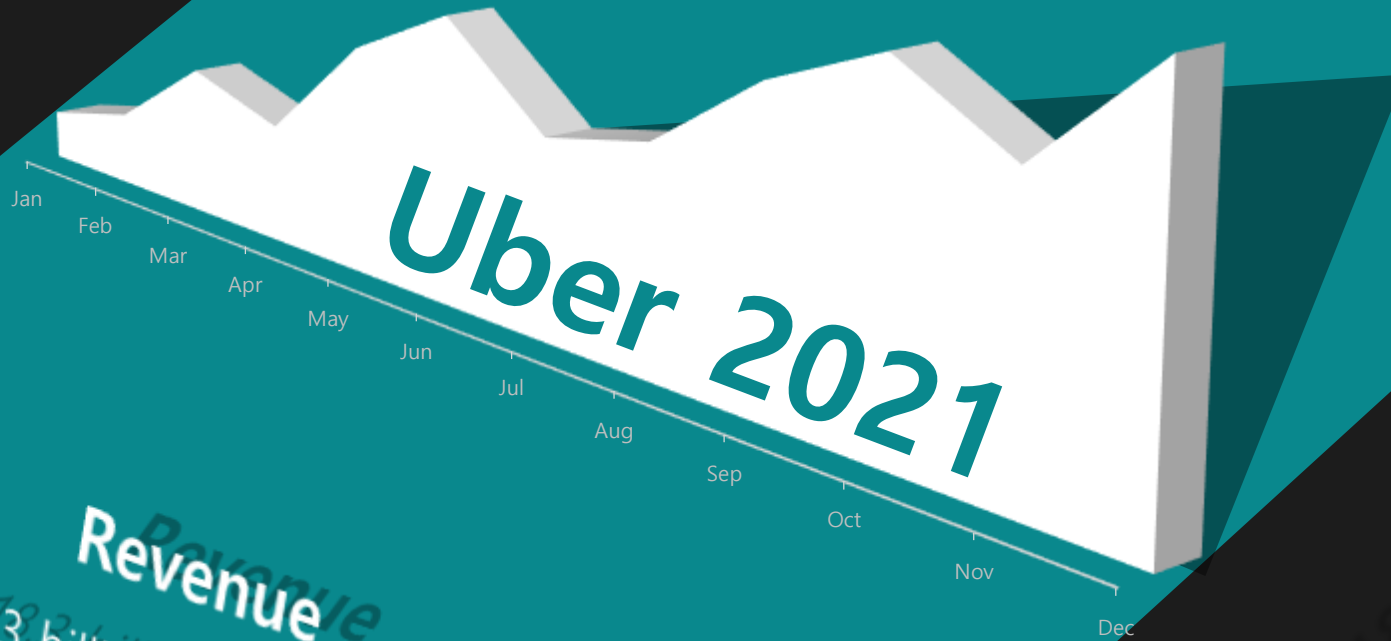
TEAM 3



U B E R



More than 20 various services



Revenue
\$18.3 billion revenue, 2021

Books
\$ 90 billion books, 2021

118 million Users by year



Background

Opportunity
& Challenge

Utilizing ML

ML-related
Business Problem

Solutions

Benefit & Cost

Traditional Taxis

Long waits

Rude drivers

Unreasonable price

Lack of route transparency

Unpredictable arrival time



All the shortcomings of traditional taxis were the opportunities for Uber



The explosive growth of AI technology,
GPS navigation, smartphones

And rise of the sharing economy
concept.

Opportunity



Ride Sharing Platform



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problem

Benefits
to Users

Uber

**Difficulties on handling
with huge data**

**Need to draw not only customer,
but also driver into uber platform
, solving problems inherent in
traditional taxi service**

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=

**How to match
How to price**

Utilizing ML : Dynamic Pricing

Background	Utilizing ML	Solutions
Opportunity & Challenge	ML-related Business problem	Benefits & Costs



**Dynamic Pricing
ML Model**

Utilizing ML : Dynamic Pricing

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& Costs



LSTM

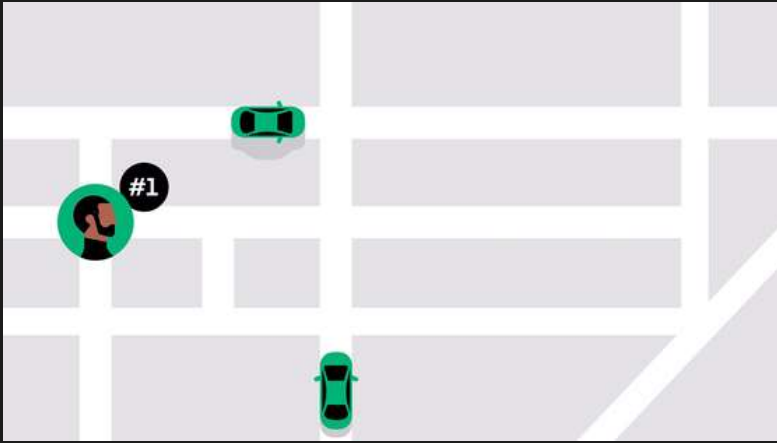
Unexpected



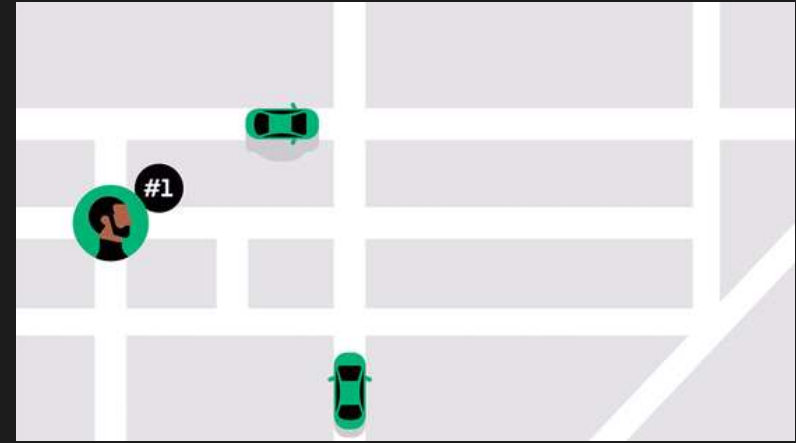
**Dynamic Pricing
ML Model**

Utilizing ML : Batched matching

Background	Utilizing ML	Solutions
	Opportunity & Challenge	ML-related Business problem
		Benefits & Costs



Only distance-based matching is not always best case



ML-based batched matching system finds the best matching rider-driver

- The reasonable matching system using machine learning provided irreplaceable convenience to both customers and riders.

Utilizing ML : ML Platforms

Background

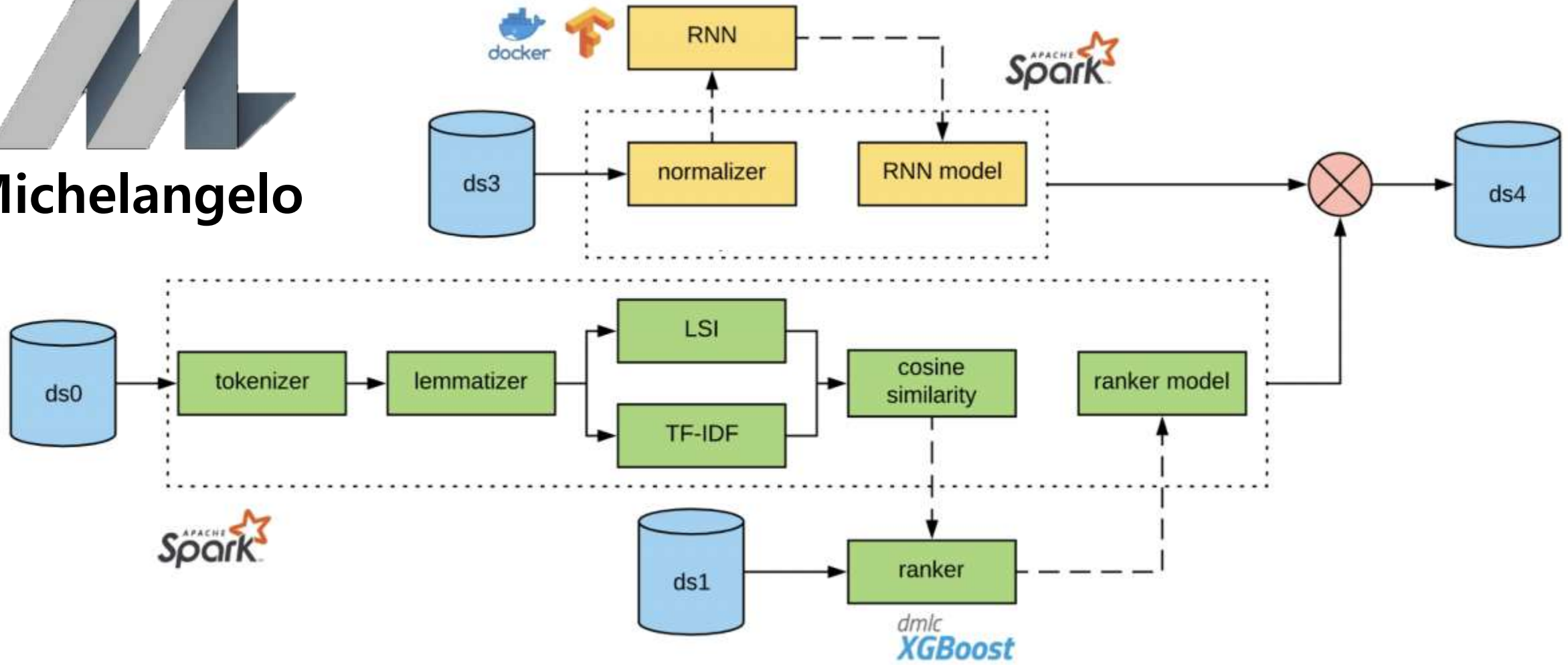
Utilizing ML

Solutions

Opportunity
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ML-related Business
problem

Benefits
& Costs





Business Problem: Payment Fraud

Background

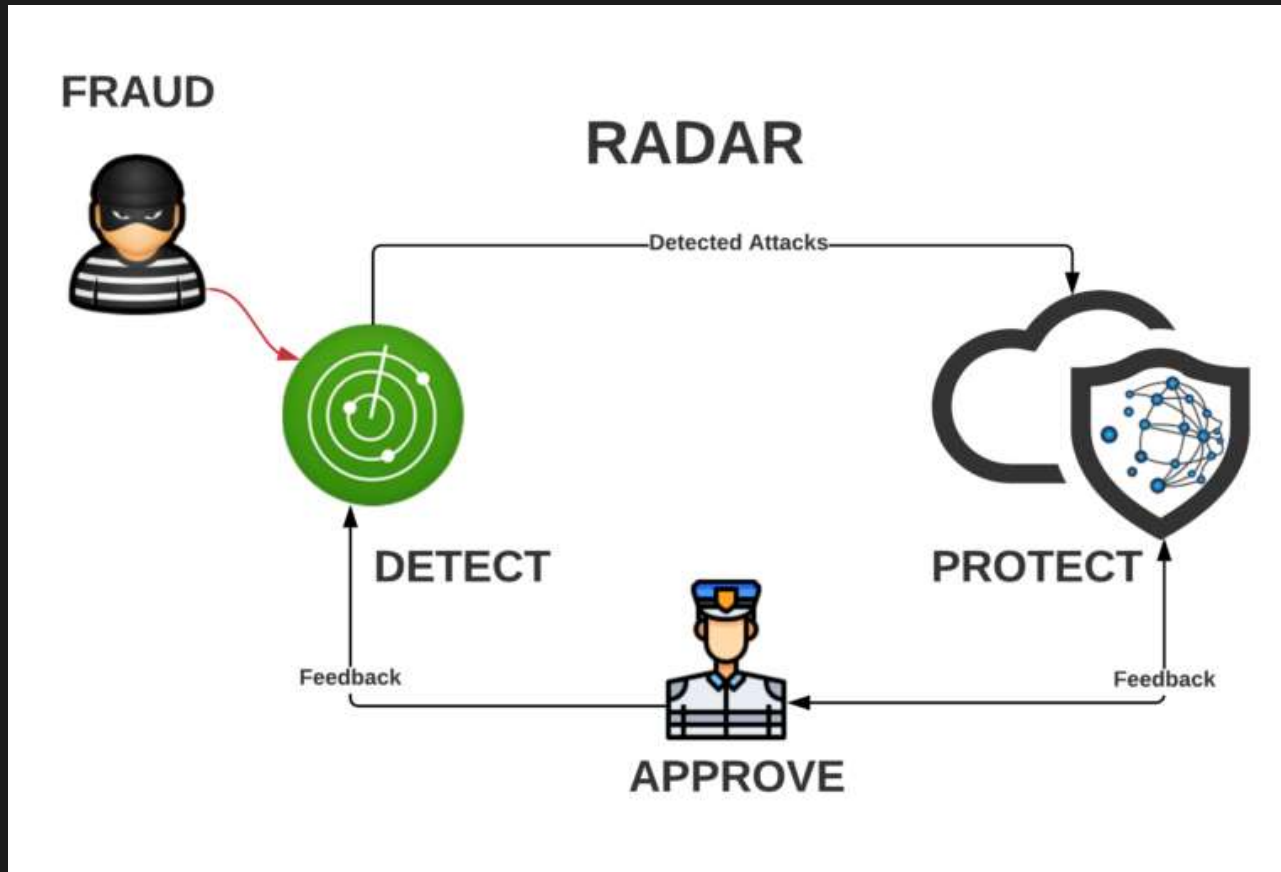
Utilizing ML

Solutions

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ML-related Business
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& Costs



2 Types of Payment fraud

- DNS(Do not settle)
- Chargeback

Solution: Payment Fraud

Background

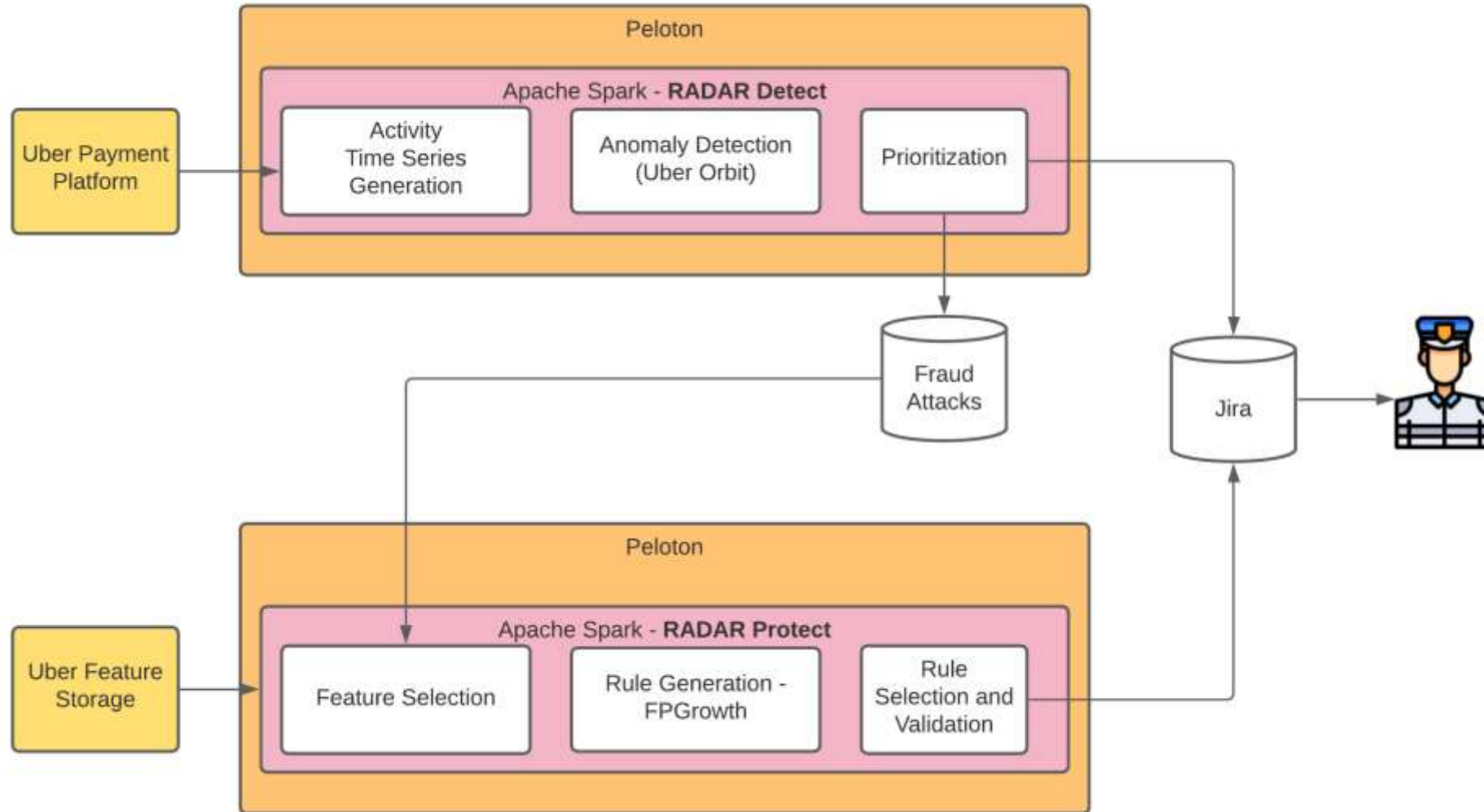
Utilizing ML

Solutions

Opportunity
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Benefits
& Costs



Radar
AI fraud
detection and
mitigation
system with
humans in the
loop



Business Problem: Capacity Safety

Background

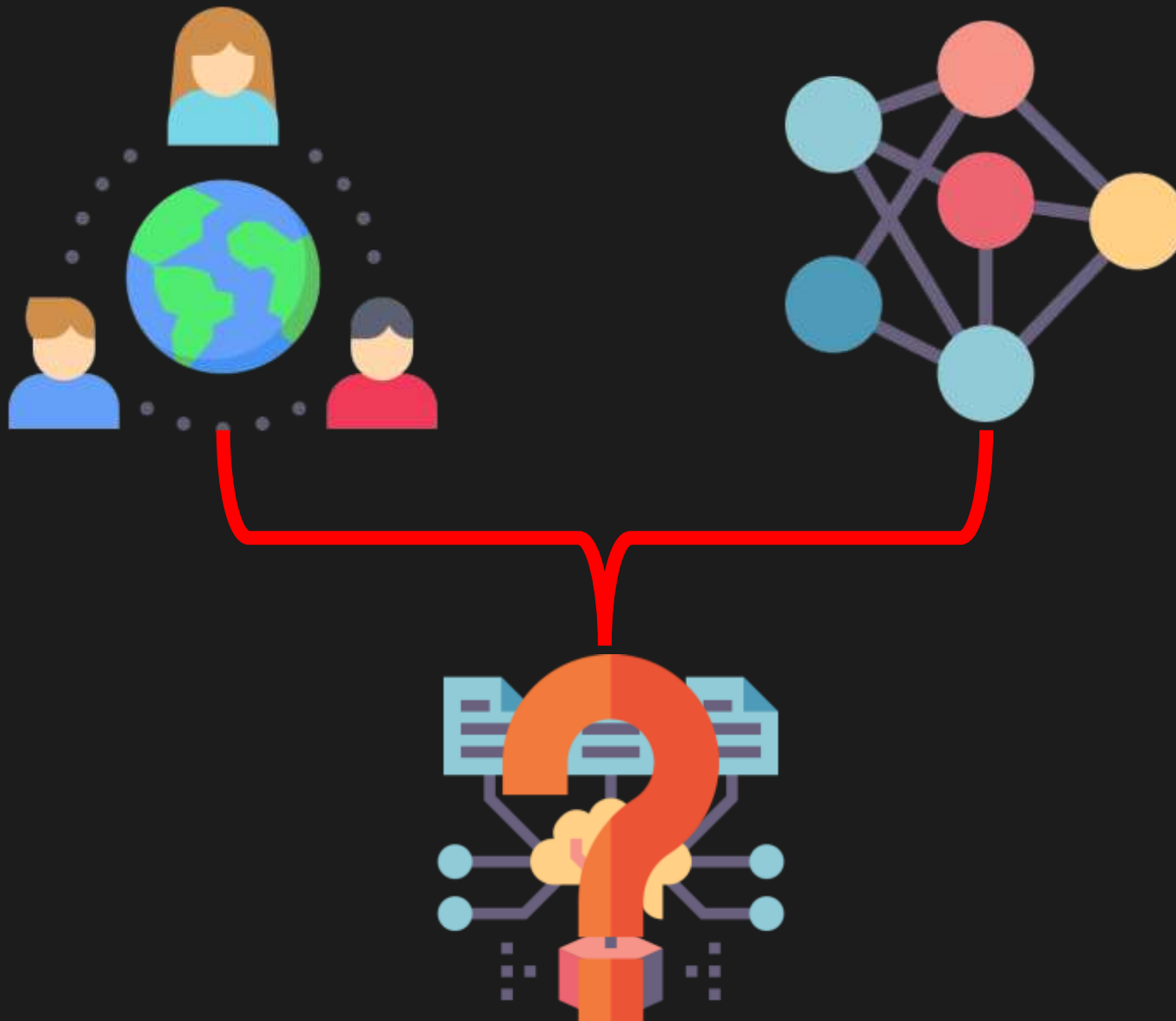
Utilizing ML

Solutions

Opportunity
& Challenge

ML-related Business
problem

Benefits
& Costs



Solution: Capacity Safety

Background

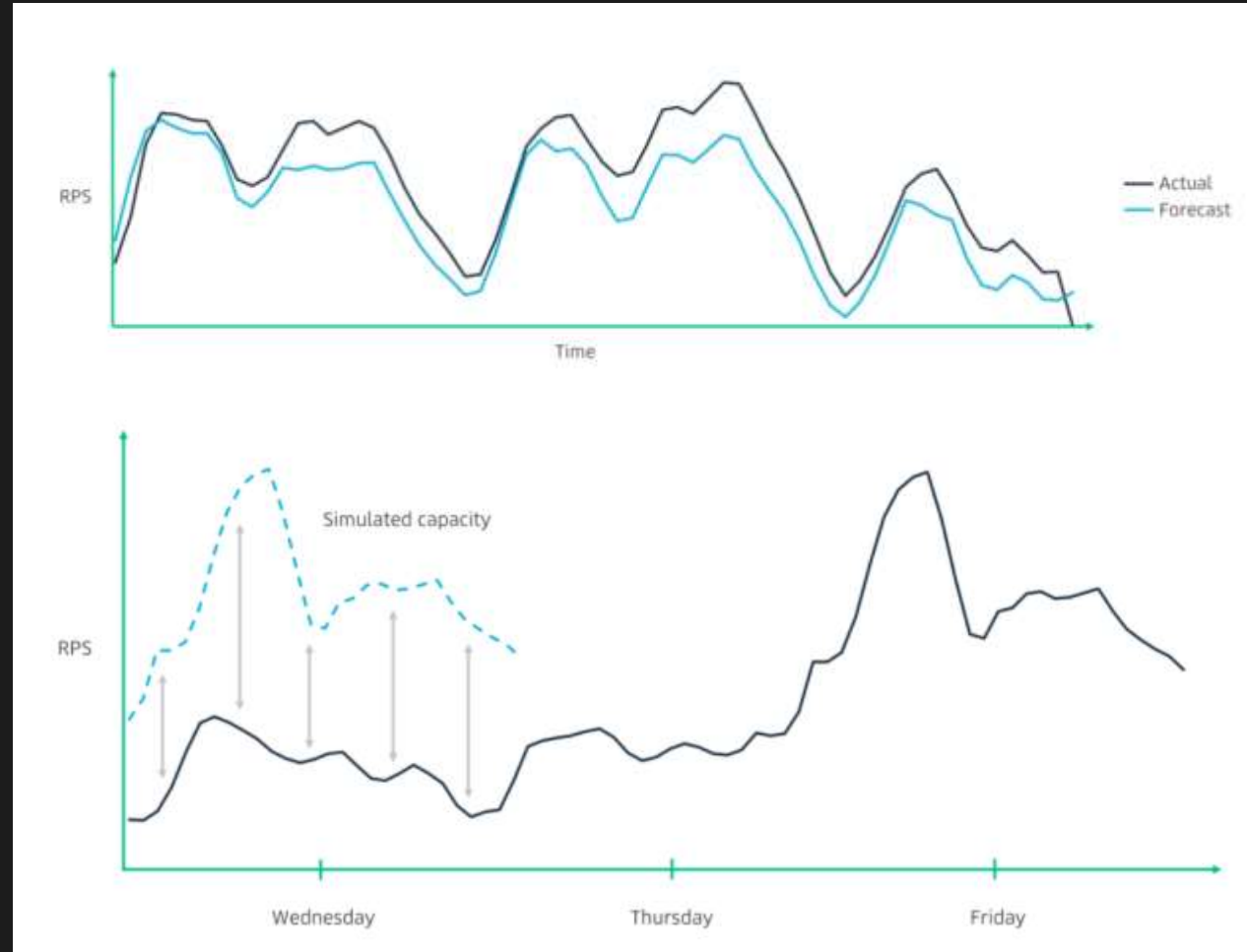
Utilizing ML

Solutions

Opportunity
& Challenge

ML-related Business
problem

Benefits
& Costs



Predict core metrics and Simulate
e.g.) requests per second, latency, and CPU usage

Business Problem: Others

Background	Utilizing ML	Solutions
Opportunity & Challenge	ML-related Business problem	Benefits & Costs



Law issues



Privacy



Price competition

Benefit & Cost

Background

Utilizing ML

Solutions

Opportunity
& Challenge

ML-related Business
problem

Benefits
& Costs

Productivity
Improvement



Reliability



Cost of
Big Data



Rely
Extensively
On ML





Team 3

Thank you!