

# INTELLIGENCE-DRIVEN USER COMMUNICATIONS AT SCALE

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The Uber logo, consisting of the word "Uber" in a white, sans-serif font, is positioned in the bottom left corner of the slide.

# Team



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Engineer, Uber  
Prior: Microsoft



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Engineer, Databricks  
Prior: Uber, LinkedIn, CAD



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Engineering Manager, Uber  
Prior: eBay, PayPal

**01** Mission

**02** Communication Terminology

**03** Vision for Intelligent Communications

**04** Architecture

**05** Scale

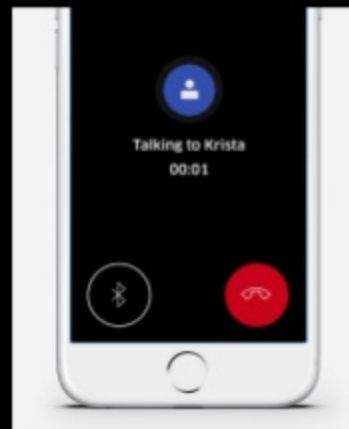
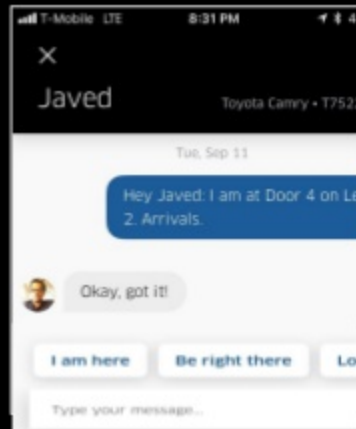
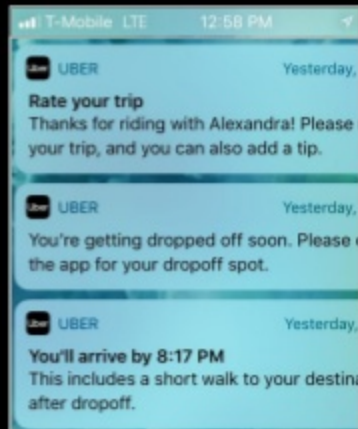
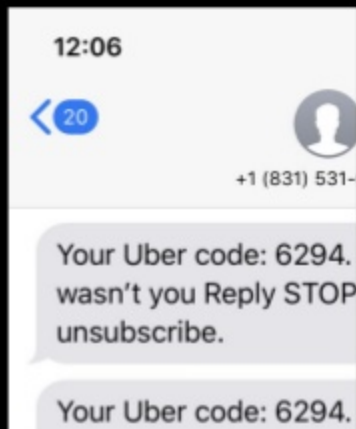
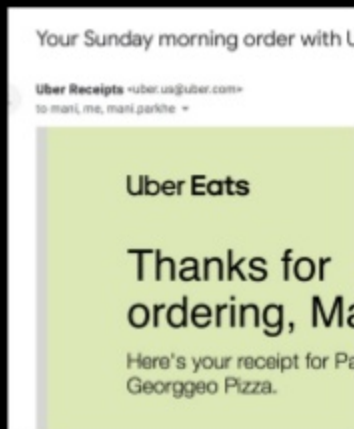
**06** Use Cases

**07** Q&A

WHY | MISSION

Drive billions of individual interactions intelligently and efficiently, across all communication channels that customers use, and adapt in real time to their behaviors.

# Channels



**Email**

**SMS**

**Push  
Notification**

**In-App  
Message**

**Voice/VoIP**

Marketing

Marketing

Transactional

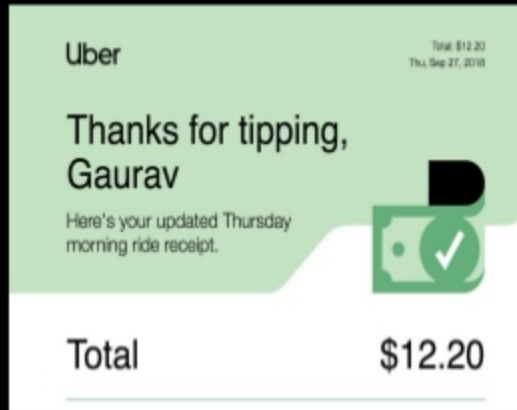
Transactional

Transactional

Transactional

Transactional

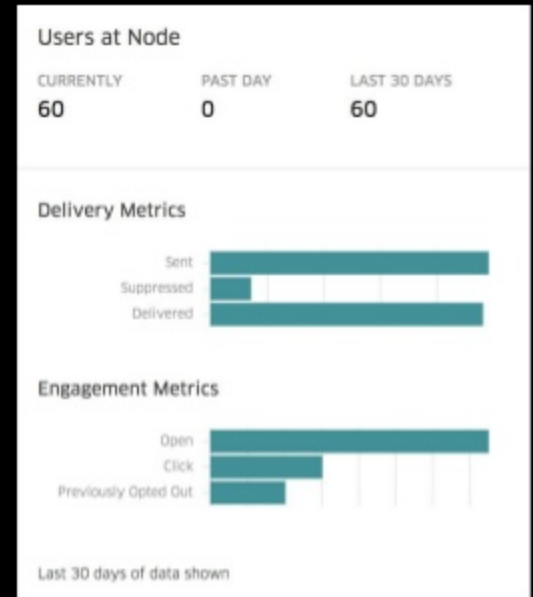
# Tools



**Authorization and  
Personalization of  
Content**



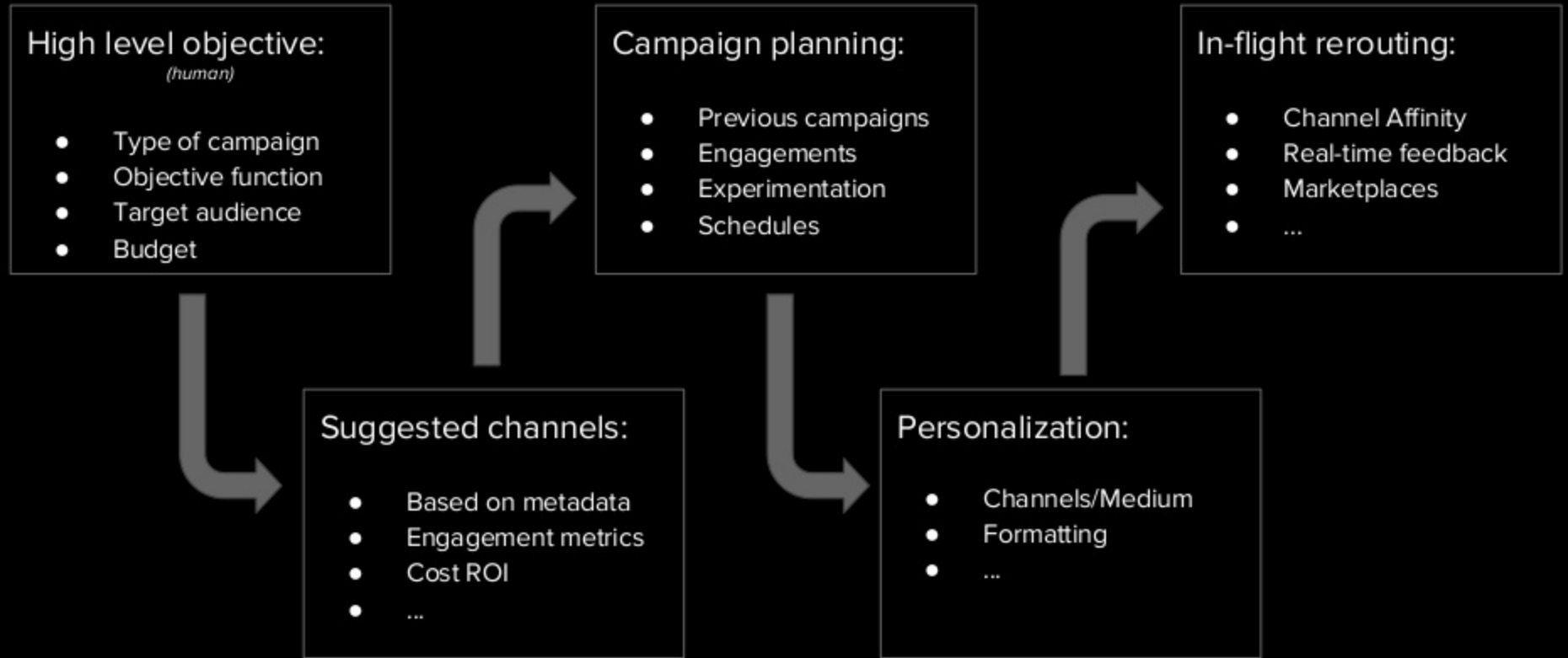
**Create  
IFTTT  
campaigns**



**Delivery and  
Engagement  
stats**

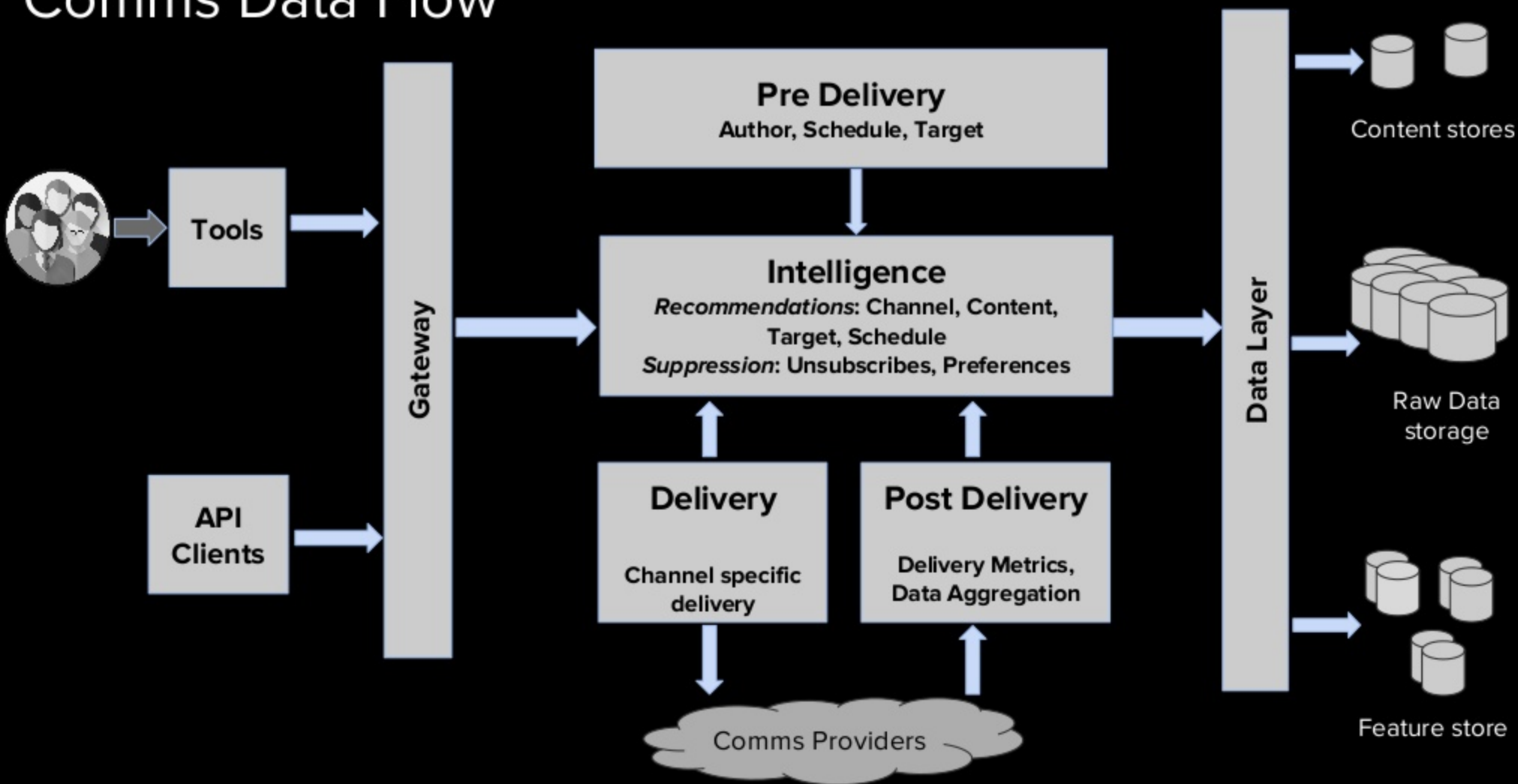
Automating campaigns

# Vision: AI-driven Marketing and CRM campaigns





# Comms Data Flow



# Scale

500M

Messages Sent Daily

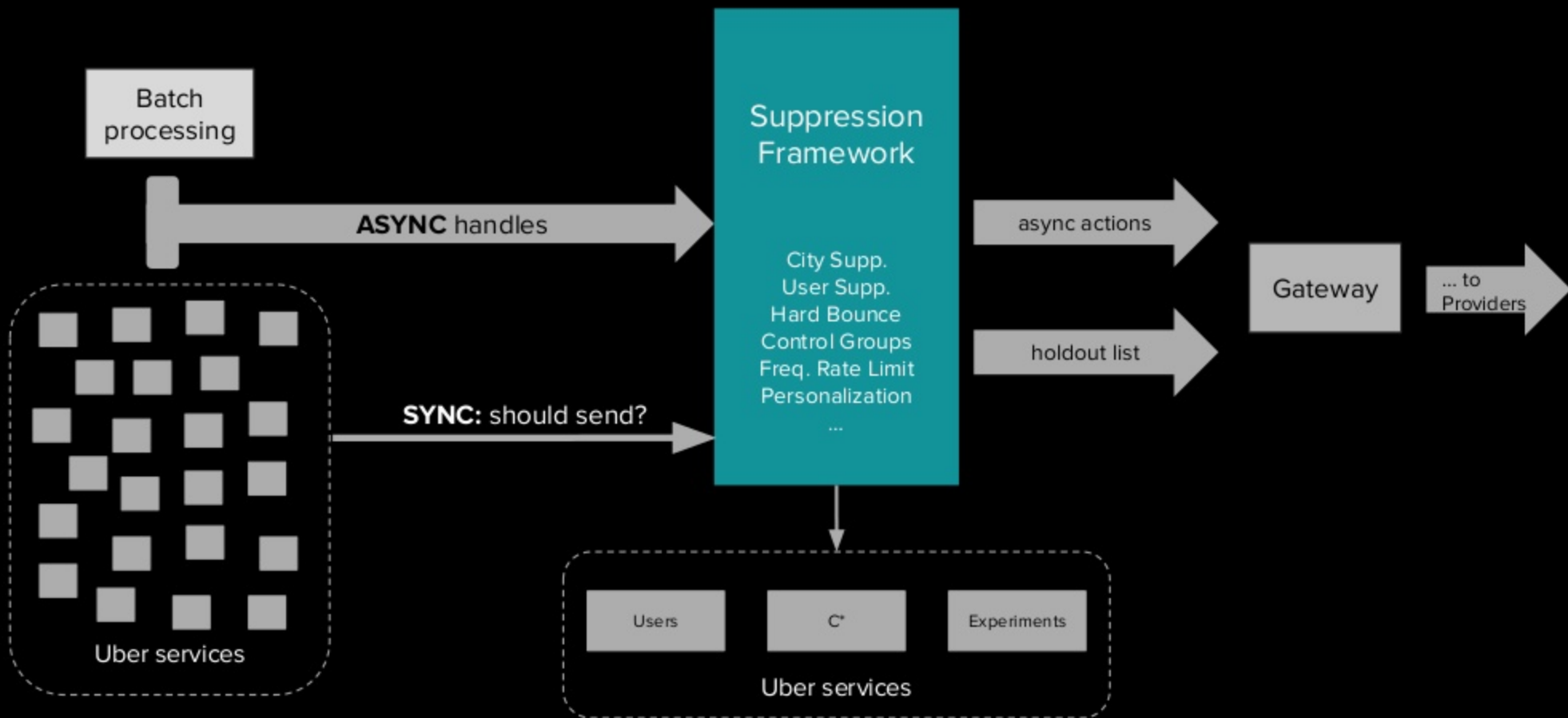
3.5B

Events Processed Daily

- 500M messages sent and 3.5B message related events processed through the system
- Transactional vs. Marketing SLAs
- Global: Supports 168 locales

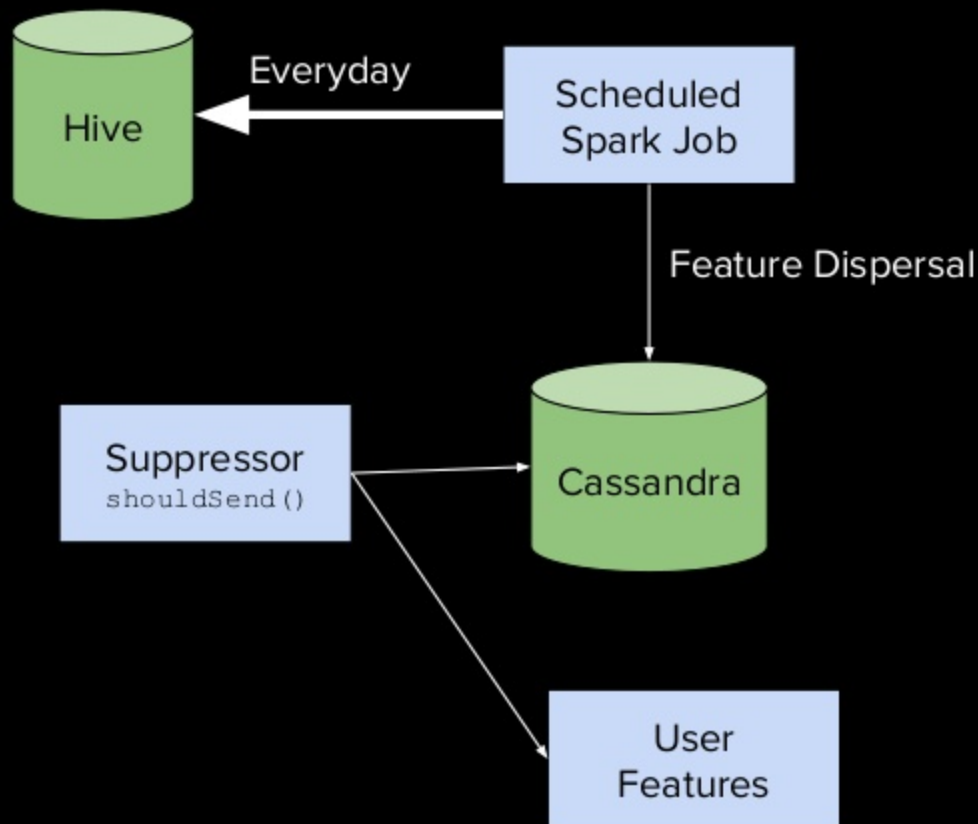
# Filters: Suppression Framework

Blocking communications in-flight ...



# Example: City-based message suppression

- Estimate most likely city for a user
- Disperse features to Cassandra via Spark app periodically
- Suppressor framework stops marketing messages in real-time



Thank you!

# Uber

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