

ALEXA

Data and Continuous (Skill) Improvement

AGENDA



- Intro to Alexa
- Terminology
- Telemetry Data
- Scenarios



INTRO TO ALEXA

Echo



Fire



Spot



Third-Party



Dot



Show



DEVELOPMENT OPTIONS



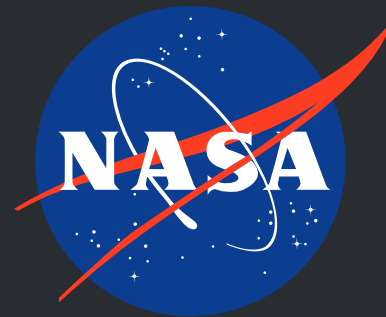
Skill Types

Smart Home Skill



Skill Types

Flash Briefing



Skill Types

Video Skill

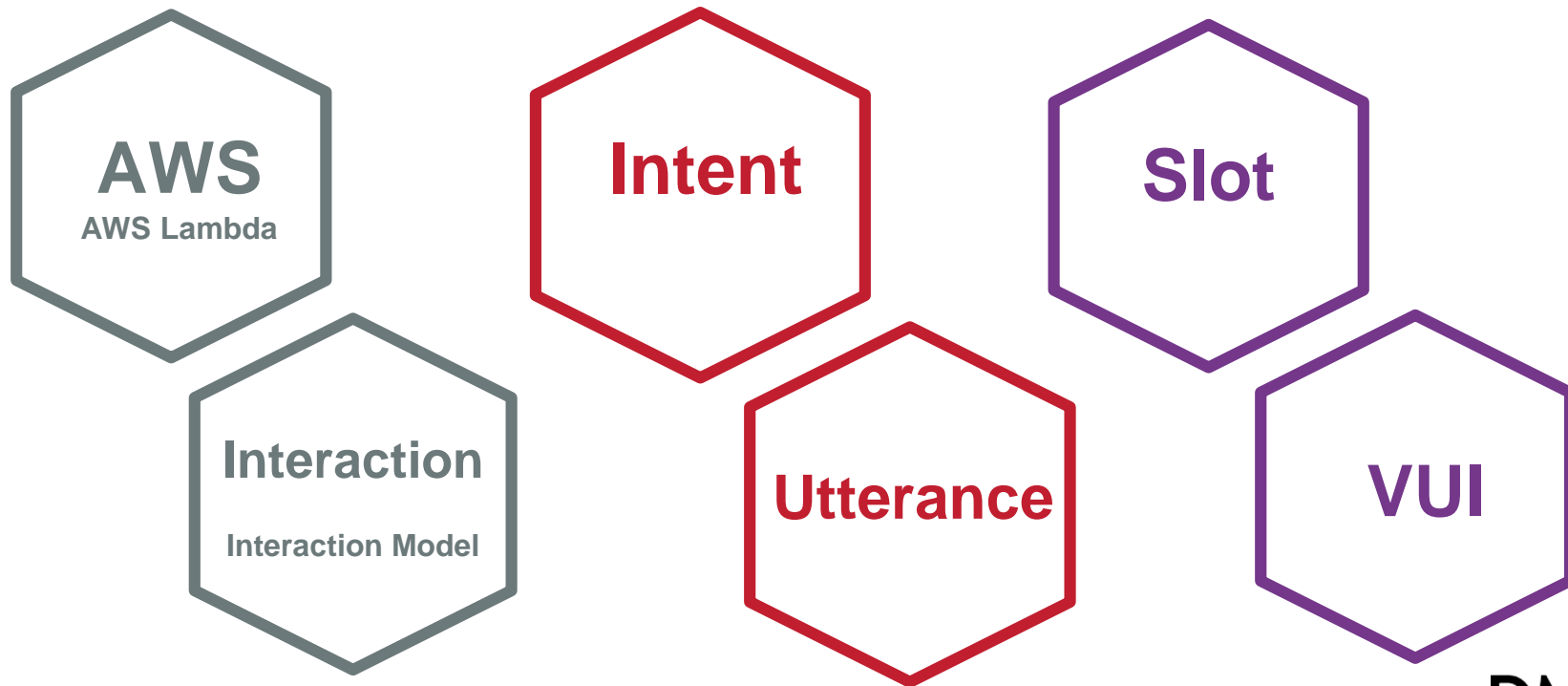
<p>Watch Next</p> <p>Continue Watching, Your Watchlist, Your Video Library</p> <p>Edit</p>	
<p>Included with prime</p> <p>Recommended Movies</p> <p>Based on titles you have watched and more</p>	
<p>Included with prime</p> <p>Popular Movies</p> <p>See More</p>	
<p>Included with prime</p> <p>Amazon Original Series</p> <p>See More</p>	

Skill Types

Custom Skill

Nearly any skill you can imagine

TERMINOLOGY

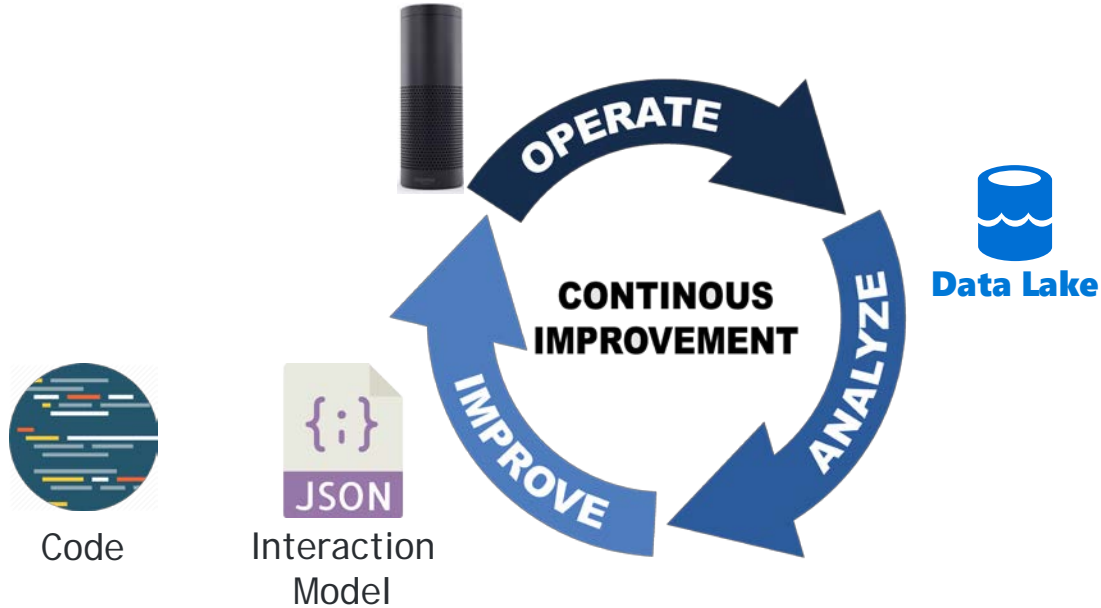


How Alexa Improves

Conjecture

Private Telemetry
Audio recordings
Automated retraining

HOW CAN OUR SKILLS IMPROVE?



TELEMETRY SOURCES



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ASK TELEMETRY - REQUESTS

Session

- SessionID
- Attributes (Key Value Pairs)
- UserID
- User Access Token
- User Consent Token



System

- DeviceID
- Supported Interfaces



Request

- RequestID
- Timestamp
- Locale
- Intent.name
- Intent.slots
- Intent.slot.name
- Intent.slot.value

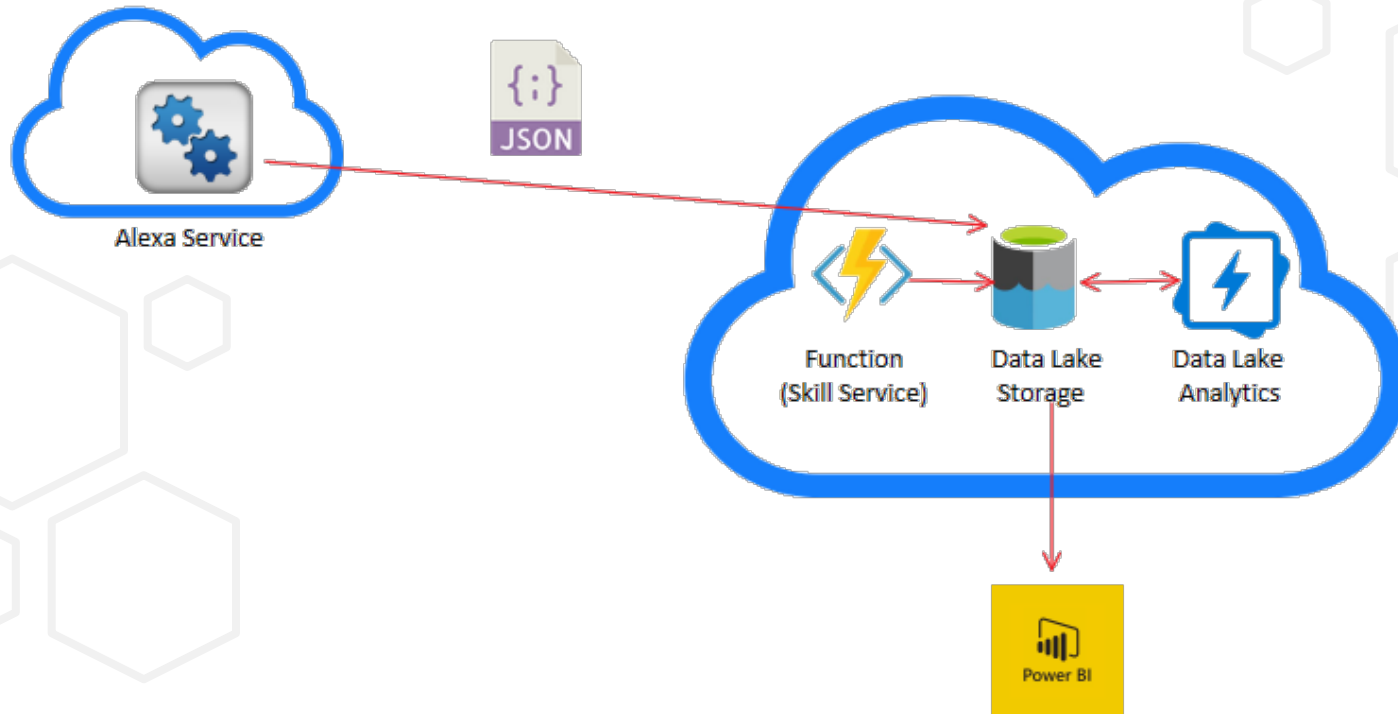


Internal Application Telemetry

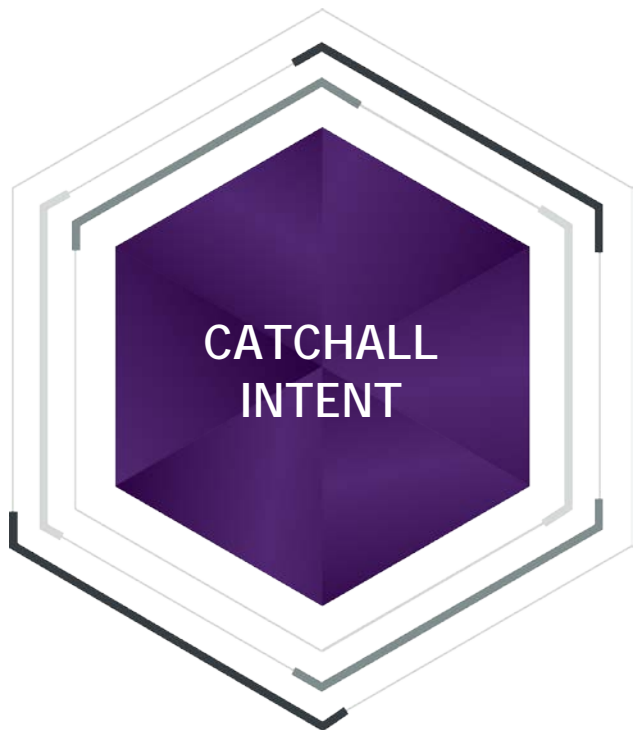
It's your infrastructure

The Sky's the limit!

DATA PLATFORM INFRASTRUCTURE



ASK LEARNING SECRET SAUCE



COMPANY RECEPTIONIST

- > Start with one intent: VisitorArrived
 - > Limited utterances:
 - > “Shannon Lowder is here to see Homer Simpson”
 - > “I’m here to see Homer Simpson”
 - > “I’m here”

ANALYSIS RESULTS

Many Incomplete Sessions

- Add more detail to StartIntent
- Enhance Reprompts
- Use slots to search Office365 API calendars



Many Catchall Intents

- Add new utterances
- Add more detail to StartIntent
- Add new intents



Aggregate Complete Sessions

- Downtime windows
- Suggesting larger conference rooms for certain users
- Suggest reschedule times
- Offer additional help during long waits



Parcel Tracking



Track my ~~{Carrier}~~
Package {TrackingCode}

Use Reprompt to gather {Carrier}

OR

Use progressive response to buy time
+Asnyc calls to all carriers

Parcel Tracking



Aggregate shipping time

New intent: Suggest Carrier

"I'm ordering a product from {location} on {date}, which carrier is most likely to get it here first"

Song Quiz



User scoring model

New ability: individual skill levels

User scores better in 80s trivia than 90s or 2000s.

User gets Artists more likely in 90s.

Grant higher bonuses on artists in 2000s.

User taste information is valuable to 3rd parties