ALEXA

Data and Continuous (Skill) Improvement
AGENDA

- Intro to Alexa
- Terminology
- Telemetry Data
- Scenarios
INTRO TO ALEXA

- Echo
- Fire
- Spot
- Dot
- Show
- Third-Party
Skill Types

Smart Home Skill
Skill Types

Flash Briefing
Skill Types

Video Skill

Watch Next
Continue Watching, Your Watchlist, Your Video Library

Included with prime
Recommended Movies
Based on titles you have watched and more

Included with prime
Popular Movies
See More

Included with prime
Amazon Original Series
See More
Skill Types

Custom Skill

Nearly any skill you can imagine
TERMINOLOGY

AWS
AWS Lambda

Interaction
Interaction Model

Intent

Slot

Utterance

VUI
How Alexa Improves

Conjecture

Private Telemetry
Audio recordings
Automated retraining
HOW CAN OUR SKILLS IMPROVE?
TELEMETRY SOURCES

ASK SERVICE

INTERNAL APPLICATION
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

CATCHALL INTENT

CATCHALL SLOT
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 +Async calls to all carriers
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”
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.

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User taste information is valuable to 3rd parties