

VOICE ENABLE ALL THE THINGS



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amazon alexa

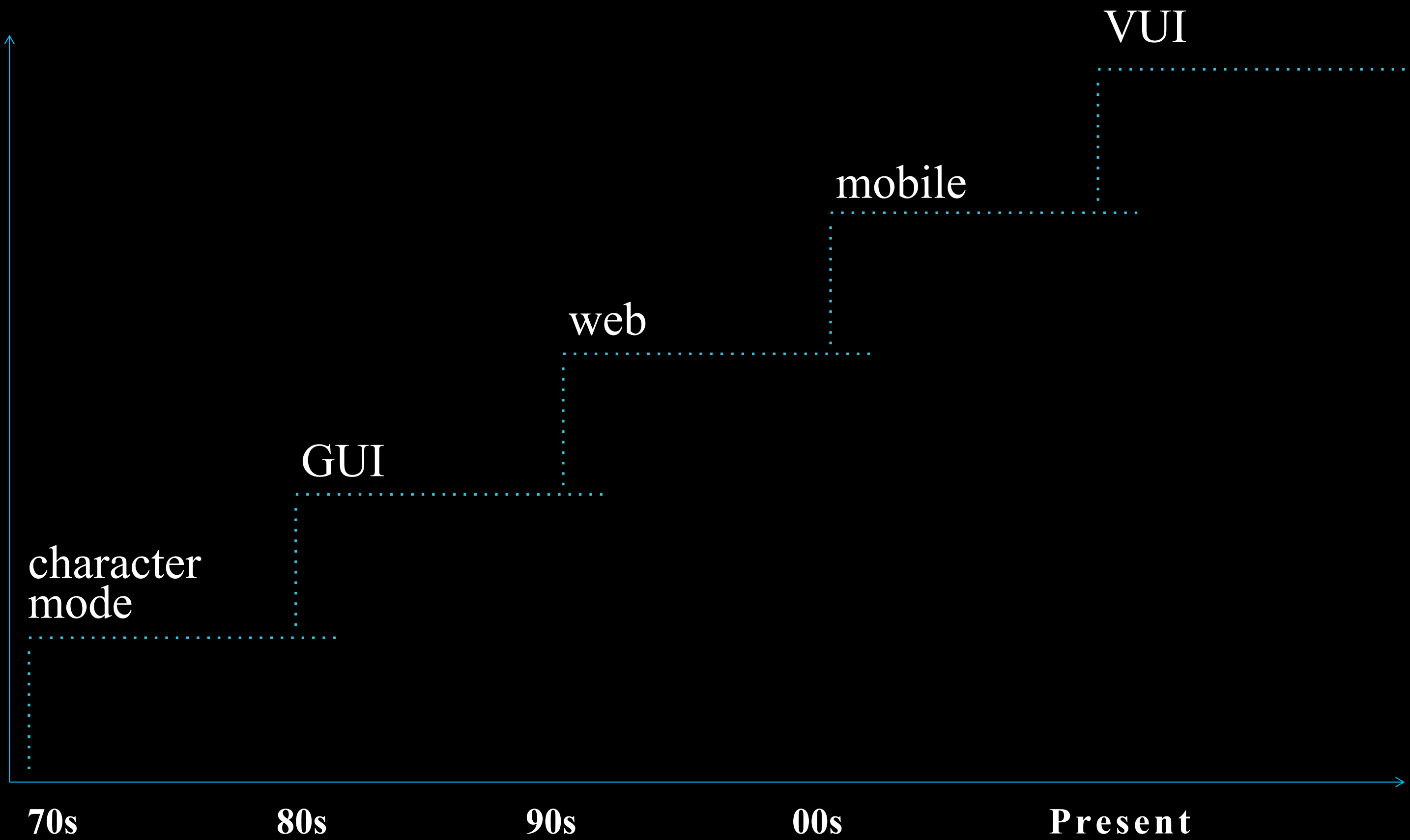


Sam Heyman
Developer Advocate
Skyscanner









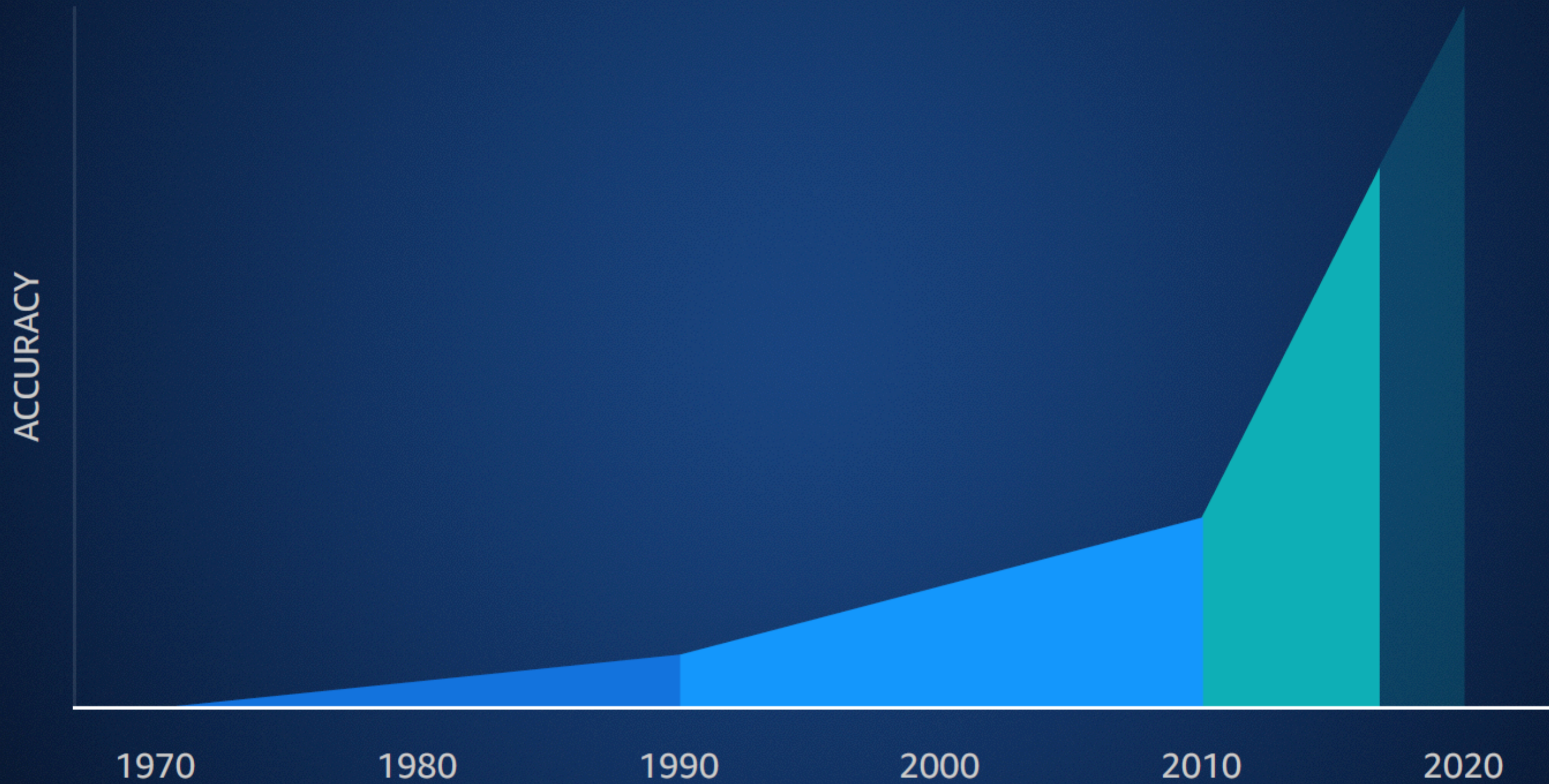
WE BELIEVE VOICE REPRESENTS
THE NEXT MAJOR DISRUPTION IN COMPUTING

“

The age of touch could soon come to an end.
From smartphones and smartwatches, to home devices, to in-car infotainment systems, *touch is no longer the primary user interface.*

”

Speech Understanding Advancements





MEET OUR ALEXA-ENABLED DEVICES





BUY 5 ECHO DOTS
GET 1 FREE

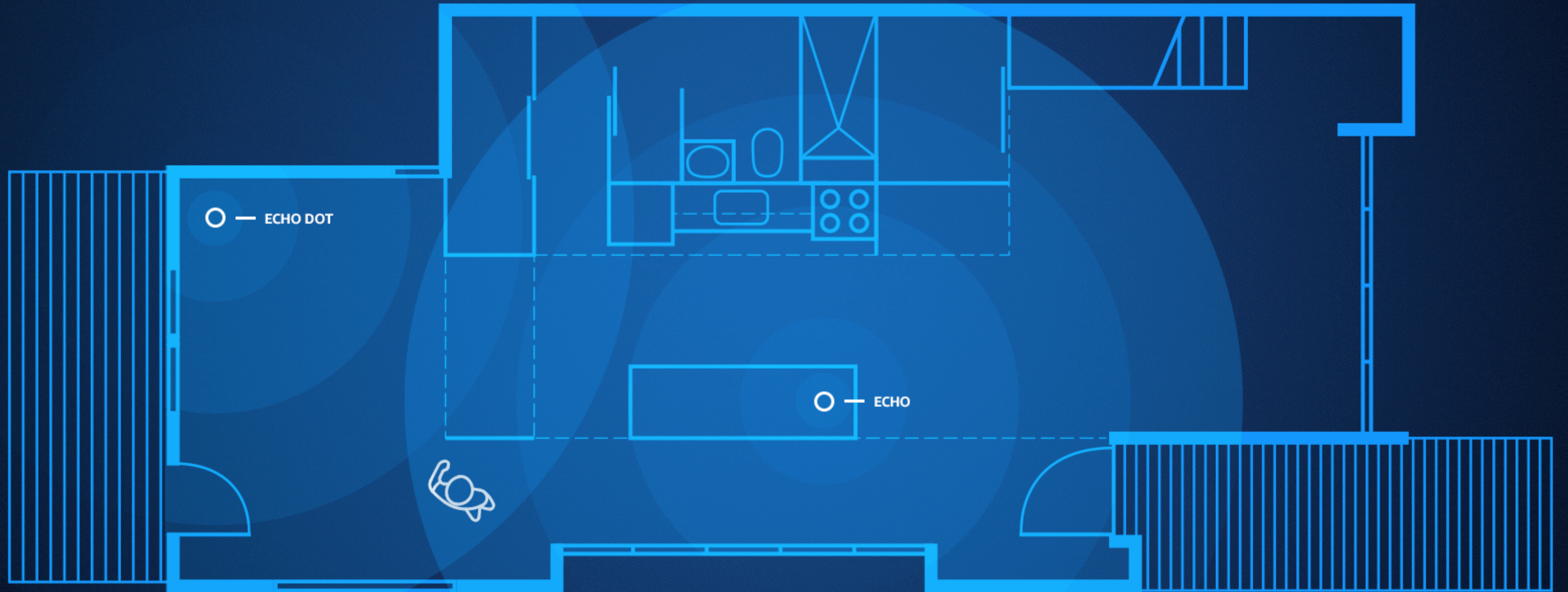
OR

BUY 10 ECHO DOTS
GET 2 FREE



ESP

(Echo Spatial Perception)



Alexa Voice Enabled Products

Wireless Speakers



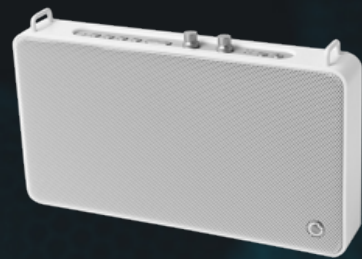
Jam Voice



Fabriq



Omaker
WoW



GGMM E5



iLuv



Lenovo
Smart Assistant

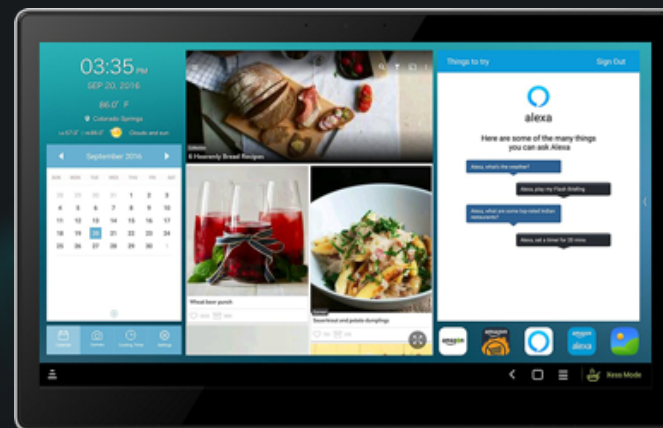
Video / Intercom



Nucleus



Triby



TCL Xess

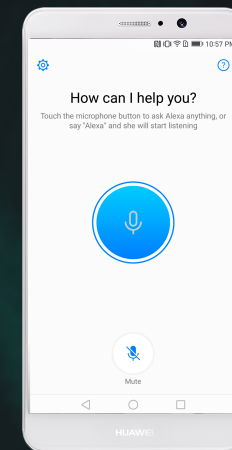
Wearables and Mobile



Cronlogics
CoWatch



Martian
mVoice



Huawei
Mate9



Astra
(iOS)



Reverb

ALEXA FRAMEWORKS

Supported by two powerful frameworks



ALEXA
SKILLS
KIT



Create Great Content:
ASK is how you connect
to your consumer



Lives In The Cloud

Automated Speech Recognition
(ASR)

Natural Language Understanding
(NLU)

Always Learning

ALEXA
VOICE
SERVICE



Unparalleled Distribution:
AVS allows your content
to be everywhere

amazon
echo

amazon
fireTV



WEATHER

CALENDAR

TIMERS

TRAFFIC

GEOGRAPHY

THERM

11,000+ skills

TO-DO LISTS

SPORTS

SCORES

AUDIBLE

JOKES

ALARMS

SPORTS SCHEDULES

MUSIC

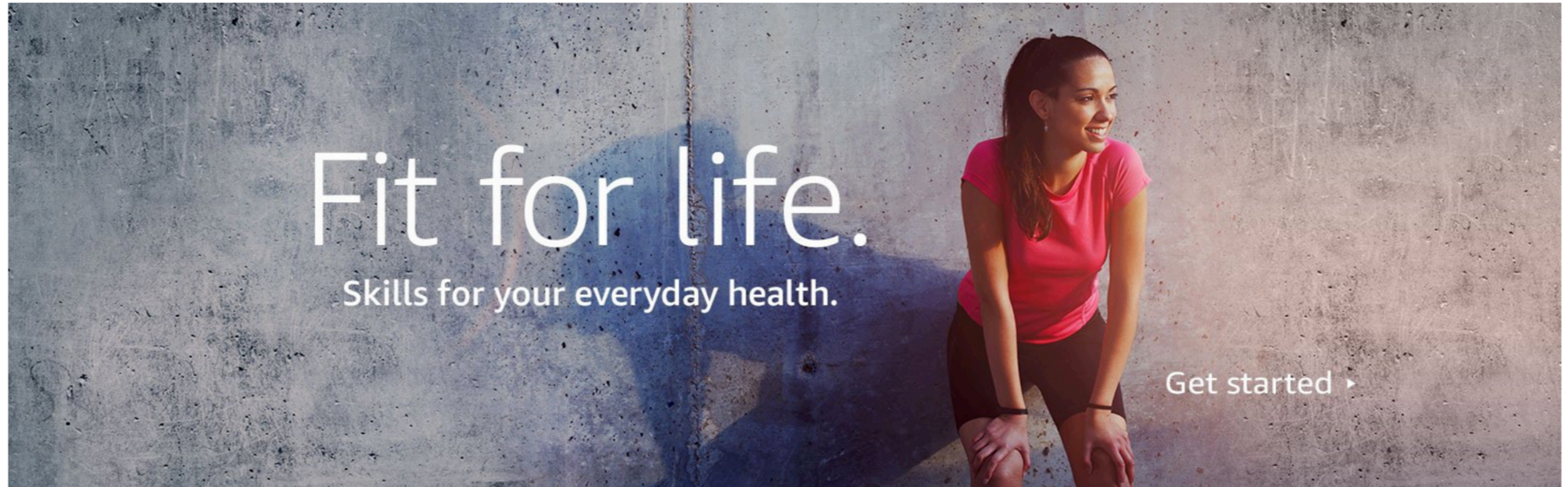
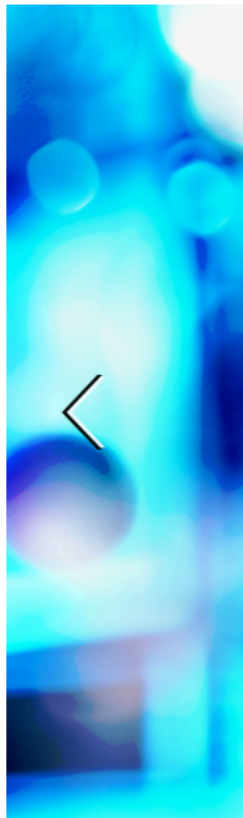
Show results for

New Arrivals

- Last 7 Days (311)
- Last 30 Days (1,142)
- Last 90 Days (4,444)

Alexa Skills

- Business & Finance (259)
- Communication (43)
- Connected Car (21)
- Education & Reference (1,706)
- Food & Drink (281)
- Games, Trivia & Accessories (2,556)
- Health & Fitness (329)
- Lifestyle (957)
- Local (235)
- Movies & TV (169)
- Music & Audio (312)
- News (2,624)
- Novelty & Humor (890)
- Productivity (410)
- Shopping (46)
- Smart Home (344)
- Social (108)
- Sports (311)
- Travel & Transportation (245)
- Utilities (177)
- Weather (533)



Get started >

Top enabled skills

"Alexa, play Rainforest Sounds"

amazon alexa

★★★★☆ 20

"Alexa Open Find Phone"

Find Phone

★★★★☆ 59

"Alexa open Sleep Sounds"

Sleep and Relaxation Sounds

★★★★☆ 677

"Alexa, ask TED Talks to play the latest talk"

TED Talks

★★★★☆ 54

"Alexa, launch This Day in History"

This Day in History

★★★★☆ 67

"Alexa, launch Fox News"

Fox News

★★★★☆ 3

Refine by

Avg. Customer Review

- ★★★★☆ & Up (1,970)
- ★★★★☆ & Up (3,102)
- ★★★★☆ & Up (3,998)
- ★★★★☆ & Up (4,805)

New skills

"Alexa, open Bosch."

BOSCH: A Detective's Case

"Alexa, ask ADT to disarm the system with PIN 1234."

ADT Pulse

"Alexa, ask Mercedes me to lock the car"

Mercedes me

"Alexa open TurboTax"

TurboTax

"Alexa, turn on the Living Room"

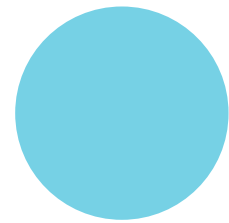
Simple Control

"Alexa, turn on the Living Room"

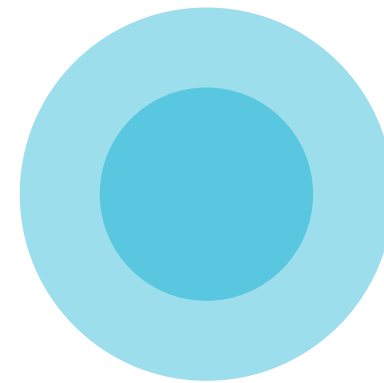
Vector Security

WHERE DO YOU START?

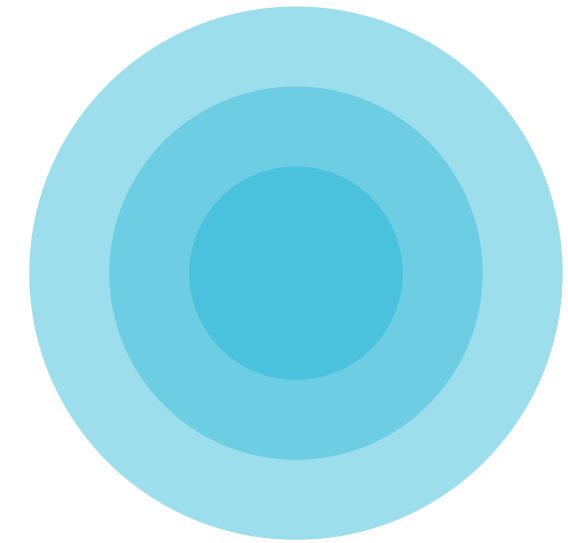
The Evolution of a Skill



ANALYZE USER FEEDBACK
& OPTIMIZE SKILL



INNOVATE FOR
CUSTOMERS



CRAWL

What's Your Core Functionality?

Traffic Skill Example

Give an estimated time of arrival from home to work.

WALK

Expand Capabilities & Features

Traffic Skill Example

Include accidents, construction and closures on route.

RUN

Evolve Over Time

Traffic Skill Example

Proactively alert user to delays and provide alternate routes.

High Utility

Low Utility

Doing

Performs a Task

“Alexa, ask Scout to arm away mode.”

“Away mode armed. You have 45 seconds to leave the house.”

Searching

Identifies specific info

“Alexa, ask Vendor if there are Pearl Jam tickets available for this weekend.”

“There are a limited number of tickets, ranging from \$49 to \$279.”

Telling

Provides a quick reference point

“Alexa, tell me a cat fact.”

“It is well known that dogs are superior to cats.”

Browsing

Gives info on a broad subject

“Alexa, ask Amazon what’s on sale.”

“The following items are on sale right now...”

Example of Automatic Learning

ALEXA SKILL

Alexa, launch Travel Buddy

Hi, I'm Travel Buddy. I can easily tell you about your daily commute. Let's get you set up. Where are you starting from?

Las Vegas

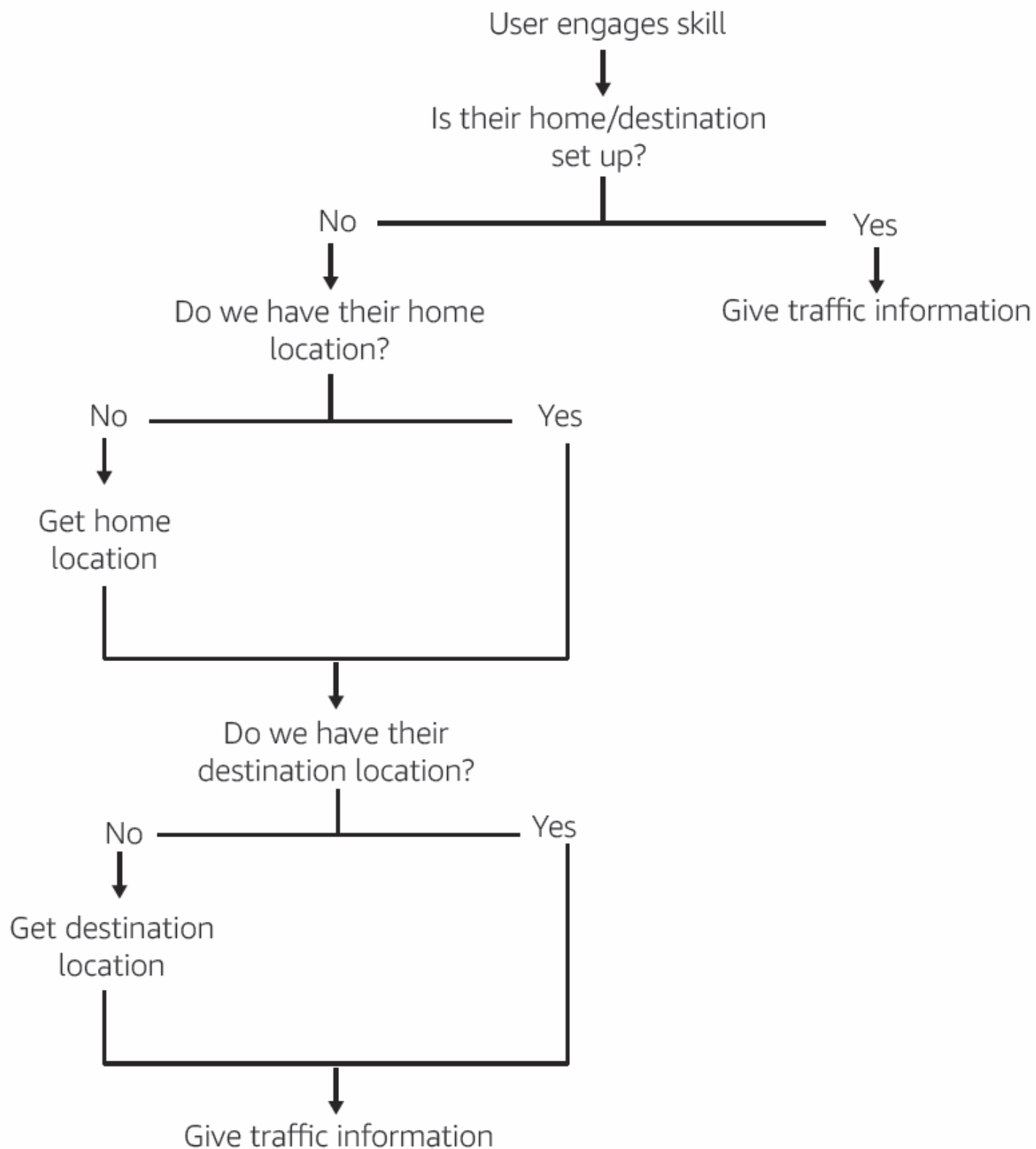
Okay, and where are you going?

Los Angeles

Great, now whenever you ask, I can tell you about the commute from Las Vegas to Los Angeles. The current drive time is four hours and forty-two minutes. There is an accident on I-15 near Pasadena.

Alexa, launch Travel Buddy

Your commute is currently four hours and two minutes.

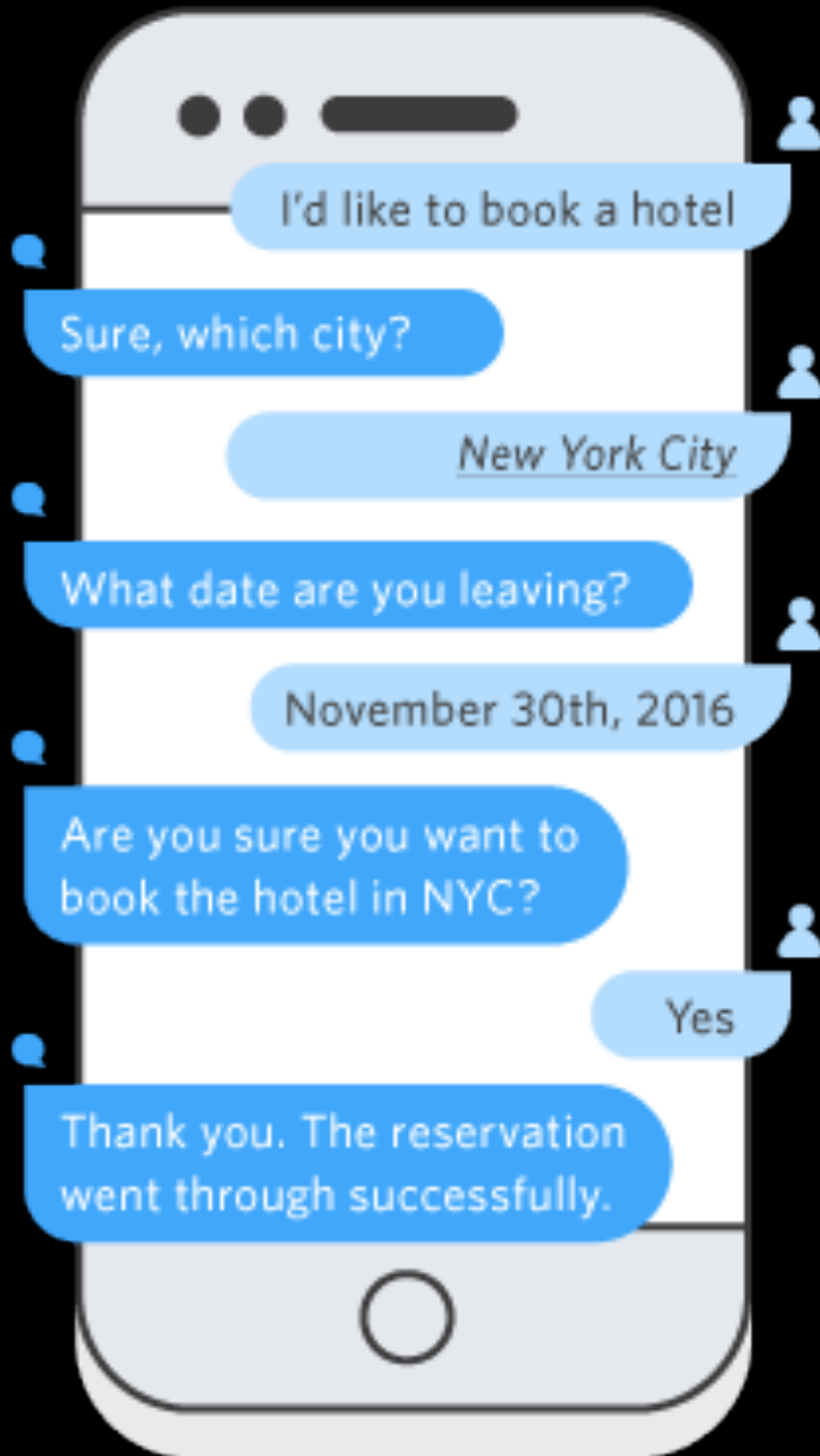




Key Design Principles for **ALEXA SKILLS**

- ✓ Skills Should Provide High Value
- ✓ A Skill Should Evolve Over Time
- ✓ Users Can Speak to Your Skill Naturally and Spontaneously
- ✓ Alexa Should Understand Most Requests to Your Skill
- ✓ A Skill Should Respond in an Appropriate Way

BookHotel



Intents

An intent performs an action in response to natural language user input

Utterances

Spoken or typed phrases that invoke your intent

Slots

Slots are input data required to fulfill the intent

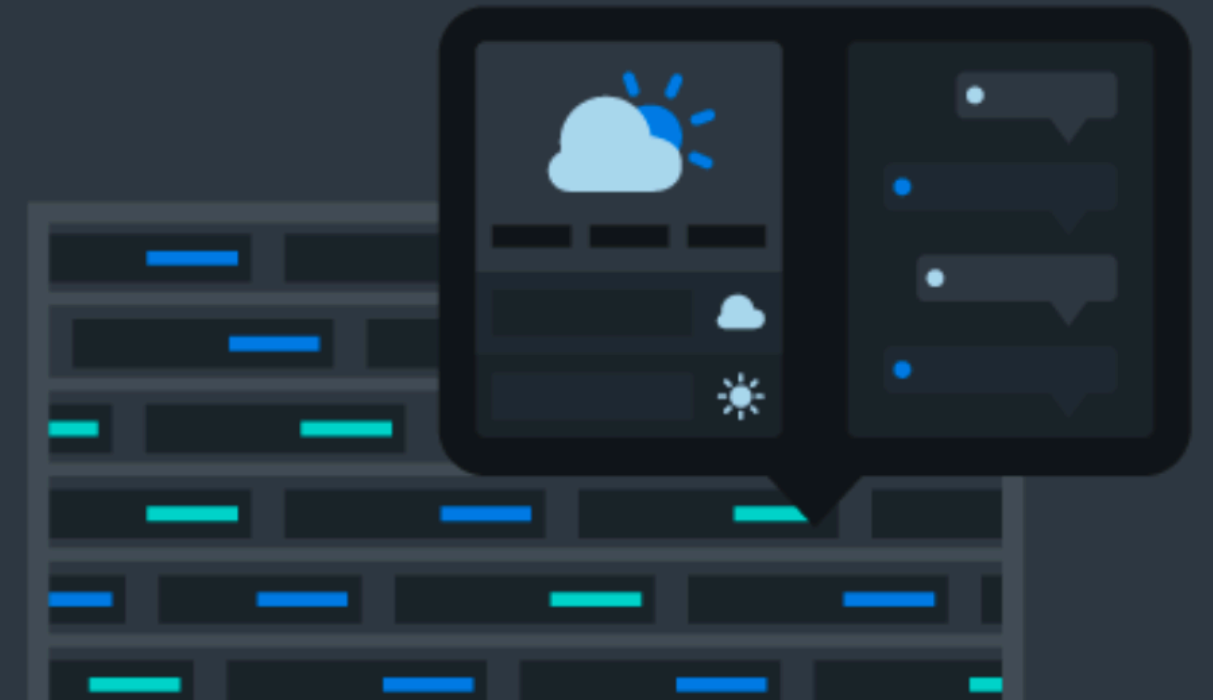
Fulfillment

Fulfillment mechanism for your intent

Introducing the ASK Built-in Library Developer Preview

Pre-Built Models for Hundreds of Slots and Intents

[Learn more »](#)



- Intents for human driven events such as: Cancel, Play, Pause, Repeat, Stop or Help
- Intents across multiple categories including: Books, Calendar, Cinema Showtimes, General, Local Search, Music, Video, and Weather
- Slots for Numbers, Dates, Times and List Types
- **AMAZON.DATE** – converts words that indicate dates (“today”, “tomorrow”, or “july”) into a date format (such as “2015-07-00T9”).

Introducing the List Skill API

Available Now in Limited Participation Beta

Create a Smarter Home with Alexa

Introducing the Smart Home Skill API

AVS Updates Existing API

With New Hands-Free Speech Recognition Capabilities

[Learn more >](#)

Alexa Skill Testing Tool

Click and **hold** to speak your command.

Ready...



Alexa Skill Builder



Intent Slots (1) ?

ORDER	REQ	SLOT
-	<input type="checkbox"/>	DiceType

DICE_TYPES ▾

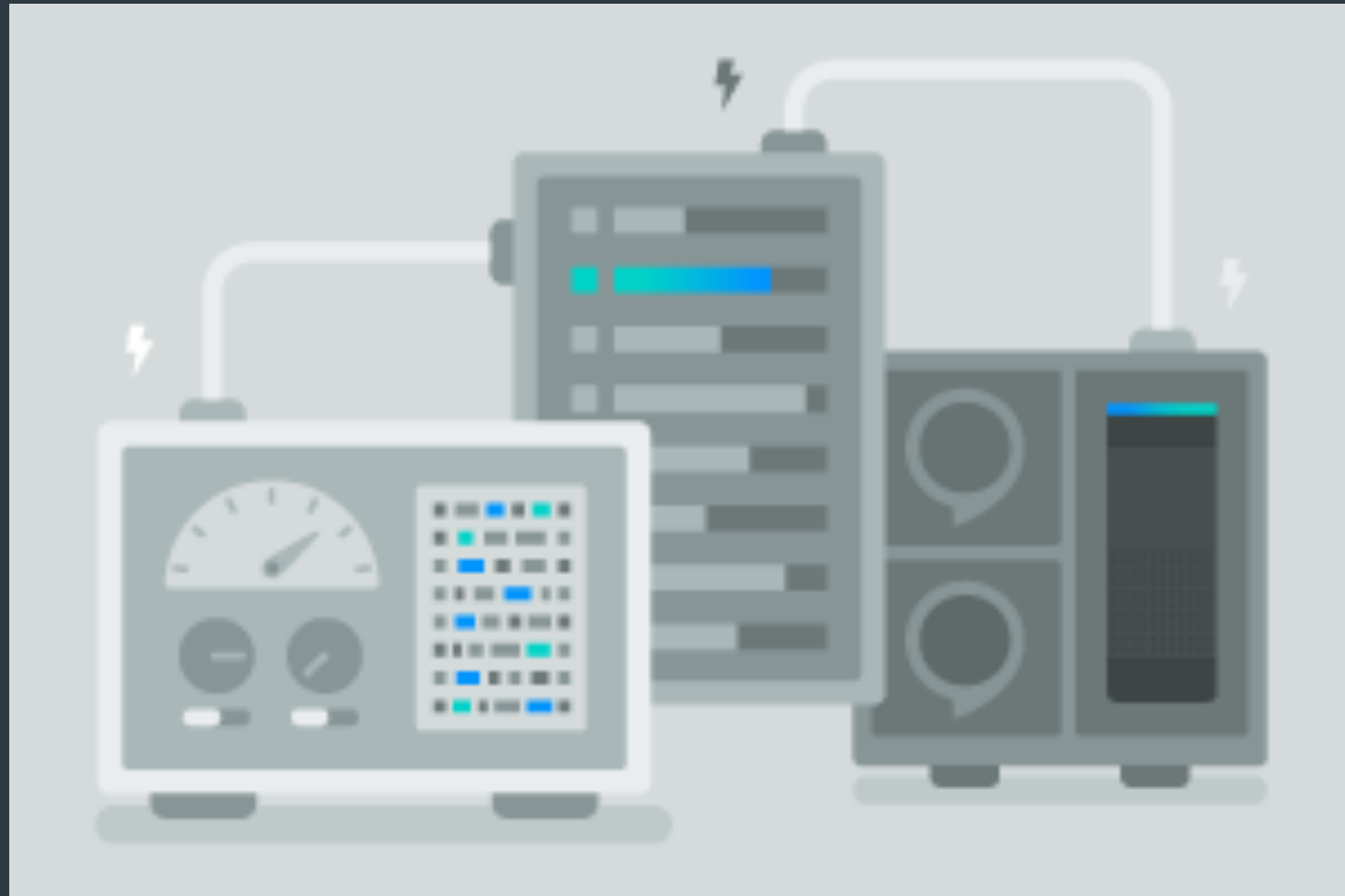
Select an option

- 📌 DICE_TYPES
- AMAZON.FinancialService
- AMAZON.AT_CITY
- AMAZON.FOUR_DIGIT_NUMBER
- AMAZON.NUMBER
- AMAZON.TIME

Create a new custom slot type... +

Add

Alexa Skill Beta Testing



Dungeon Dice

Modified 1:54 AM, Apr 11 2017

Test status: NOT STARTED

Start a test

1 Add testers by email address

The test can only be enabled by an Amazon account with an email on the list below. A

Tester emails

Delimit email addresses by semicolon or carriage return

Bulk Upload

2 Contact email (optional)

Amazon Lex – Use Cases



Informational Bots

Chatbots for everyday consumer requests

- News updates
- Weather information
- Game scores



Application Bots

Build powerful interfaces to mobile applications

- Book tickets
- Order food
- Manage bank accounts



Enterprise Productivity Bots

Streamline enterprise work activities and improve efficiencies

- Check sales numbers
- Marketing performance
- Inventory status



Internet of Things (IoT) Bots

Enable conversational interfaces for device interactions

- Wearables
- Appliances
- Auto

Amazon Polly: Life-like Speech Service



Converts text
to life-like speech



Fully managed



47 voices



24 languages



Low latency,
real time



Amazon Alexa

[A free cloud-based voice service that provides:](#)

- Natural voice control for your product
- Built-in intelligence for news, weather, music, smart home, web search, and more
- Access to more than 7,000 custom developed skills
- Software Tools and Dev Kits to build your product

[Use Alexa to differentiate your product or reach millions of Alexa-enabled homes:](#)

- Add Alexa to your device using the Alexa Voice Service (AVS)
- Publish a skill using the Alexa Skills Kit (ASK)



Amazon Lex

[A pay-as-you-use web service that provides:](#)

- Conversational interfaces for your applications
- ASR and NLU capabilities
- Access to Alexa deep learning technology
- Integration with AWS services

[Use Lex to create standalone chat bots to:](#)

- Voice-enable a mobile app or connected device
- Text and voice-enable your customer service
- Automate transactional interactions such as booking tickets or ordering pizza

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