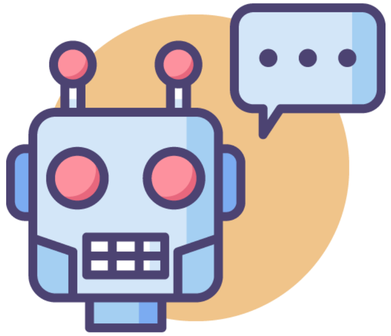


Voice Assistants Failed Us: Can Design Save Them?

Clint Miller

unlimited,
fast delivery

movies and tv
streaming

prime

livraison rapide
et gratuite

livraison rapide
et gratuite

films et séries
en streaming

prime

livraison rapide
et gratuite

films et séries
en streaming

prime

Schnelle, kostenlose
Lieferung

Filme und Serien
streamen

prime

livraison rapide
et gratuite

films et séries
en streaming

prime

consegne veloci
illimitate

prime

consegne veloci
illimitate

streaming di
film e serie tv

prime

movies and tv
streaming

livraison rapide
et gratuite

films et séries
en streaming

prime

unlimited,
fast delivery

movies and tv
streaming

prime

cine y series
online

prime

consegne veloci
illimitate

streaming di
film e serie tv

prime

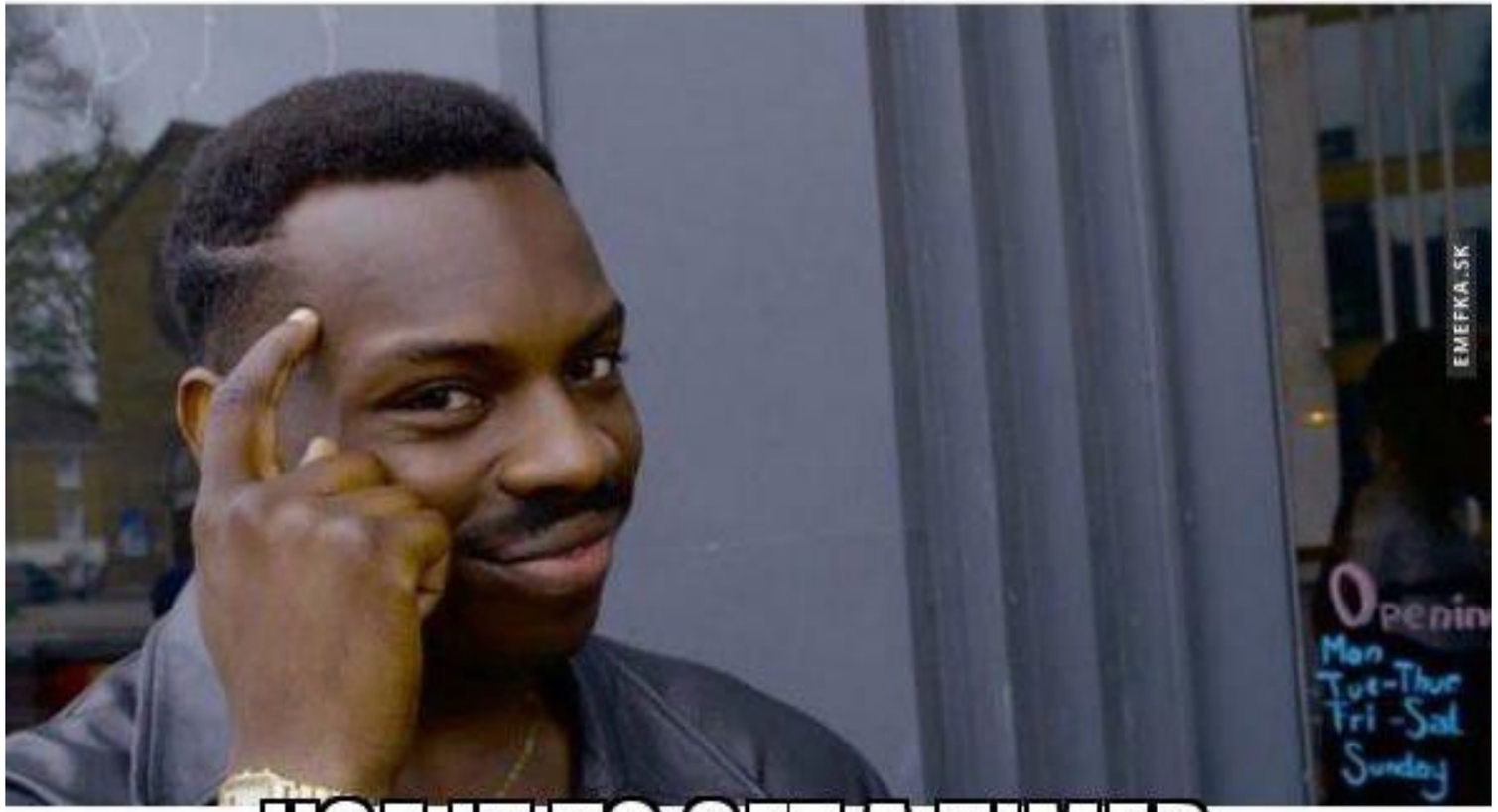
Schnelle, kostenlose
Lieferung

Filme und Serien
streamen

prime

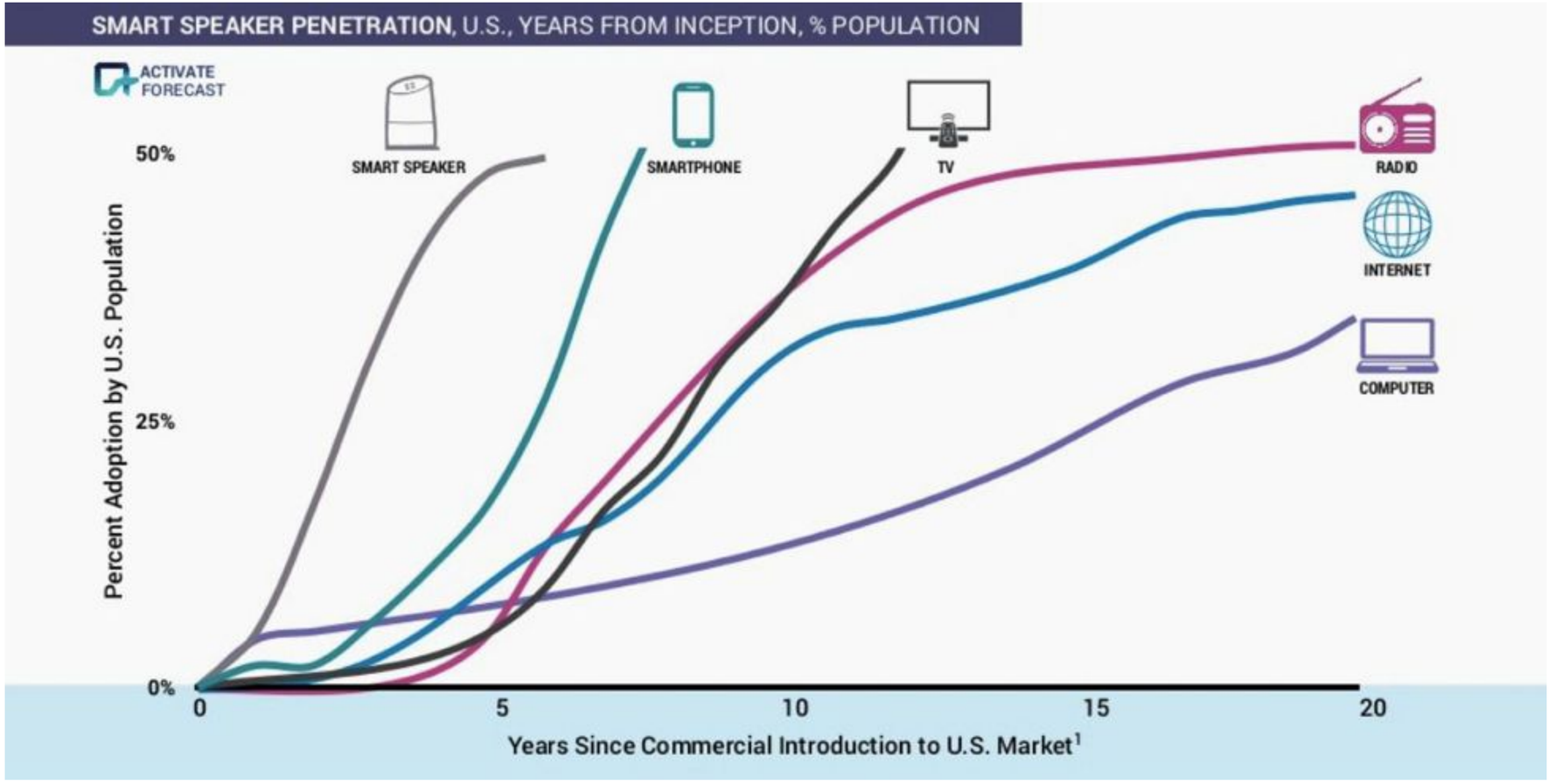
by Uber

BUY AN AMAZON ECHO



USE IT TO SET A TIMER

STORMTRACKER 2HD
SEVERE WEATHER TEAM 2
Chattanooga
Blairsville
Calhoun
Rome
Gainesville
Athens
Atlanta
Carrollton
Eatonton
Macon
Glenn Burns
AMS CERTIFIED
@GlennBurnsWSB
CHIEF METEOROLOGIST
@wsbt


SMART SPEAKER PENETRATION, U.S., YEARS FROM INCEPTION, % POPULATION
ACTIVATE FORECAST
SMART SPEAKER
SMARTPHONE
TV
RADIO
INTERNET
COMPUTER
50%
25%
0%
Percent Adoption by U.S. Population
0
5
10
15
20
Years Since Commercial Introduction to U.S. Market[1]

YEARS FROM DEBUT

0 1 2 3 4 5

Mobile

2007
iPhone Debuts

2008
App Stores Debut

2009
Square
Venmo

2011
Uber
Waze

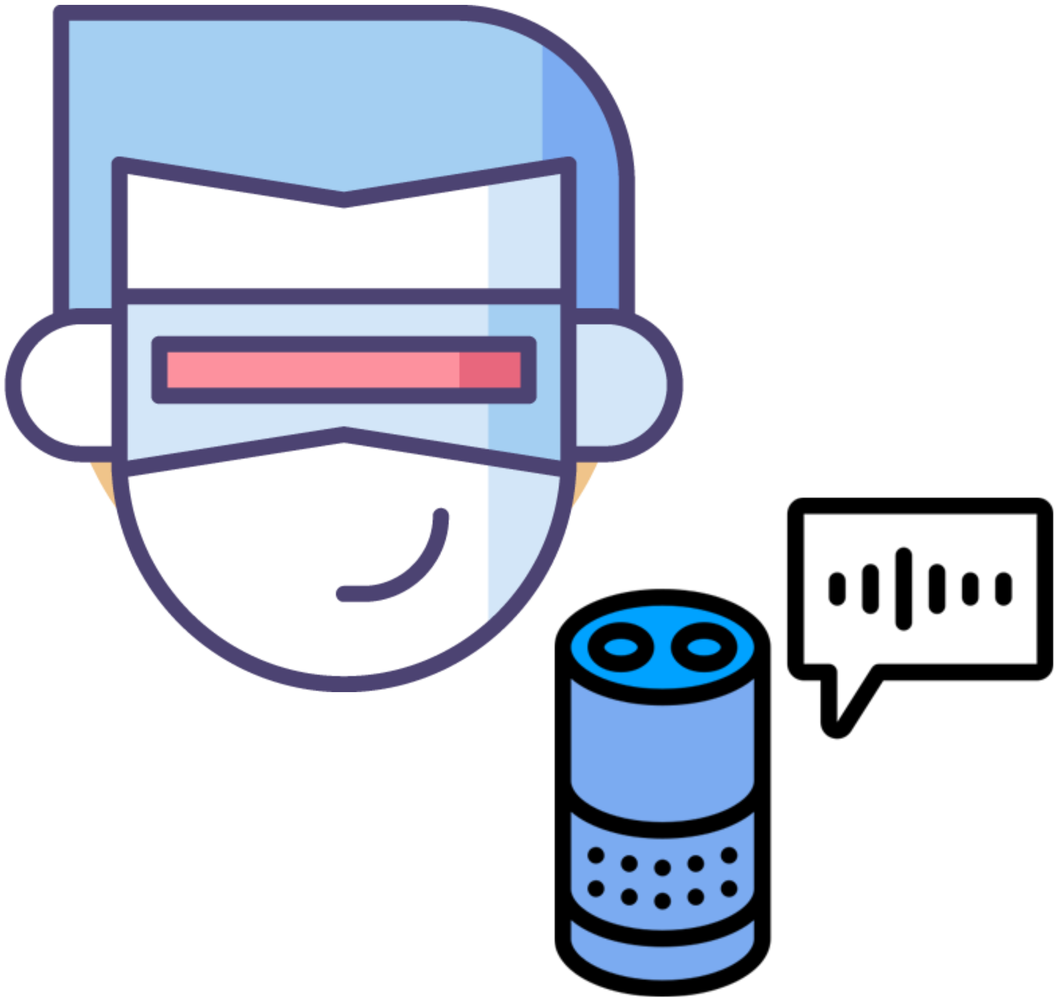
Voice

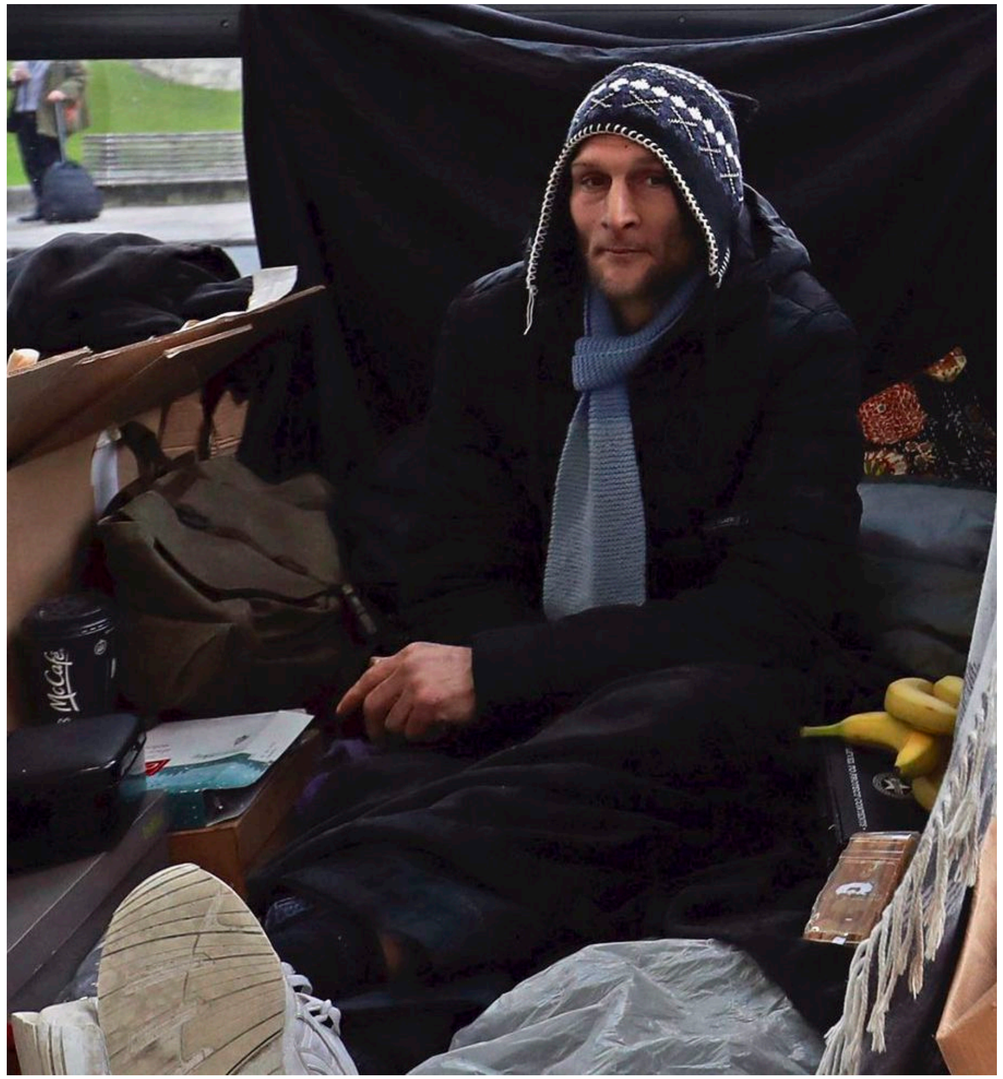
2014
Alexa Debuts

2015
Skill Store Debut

2019

Early adoption has caused conversational interfaces to be written off as a fad.





Ask Me
Anything!
SATURDAY, MAY 11, 2019
London, United Kingdom
22° 18°
Try "Alexa, show me the weather at 5PM"

About Me

Clint Miller, Lead Designer

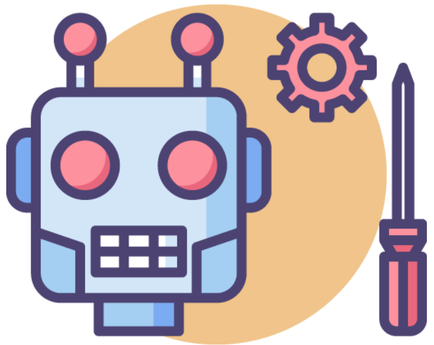
Wunderman Thompson Mobile

mrclintmiller.com

info@mrclintmiller.com

sonic
BOOM

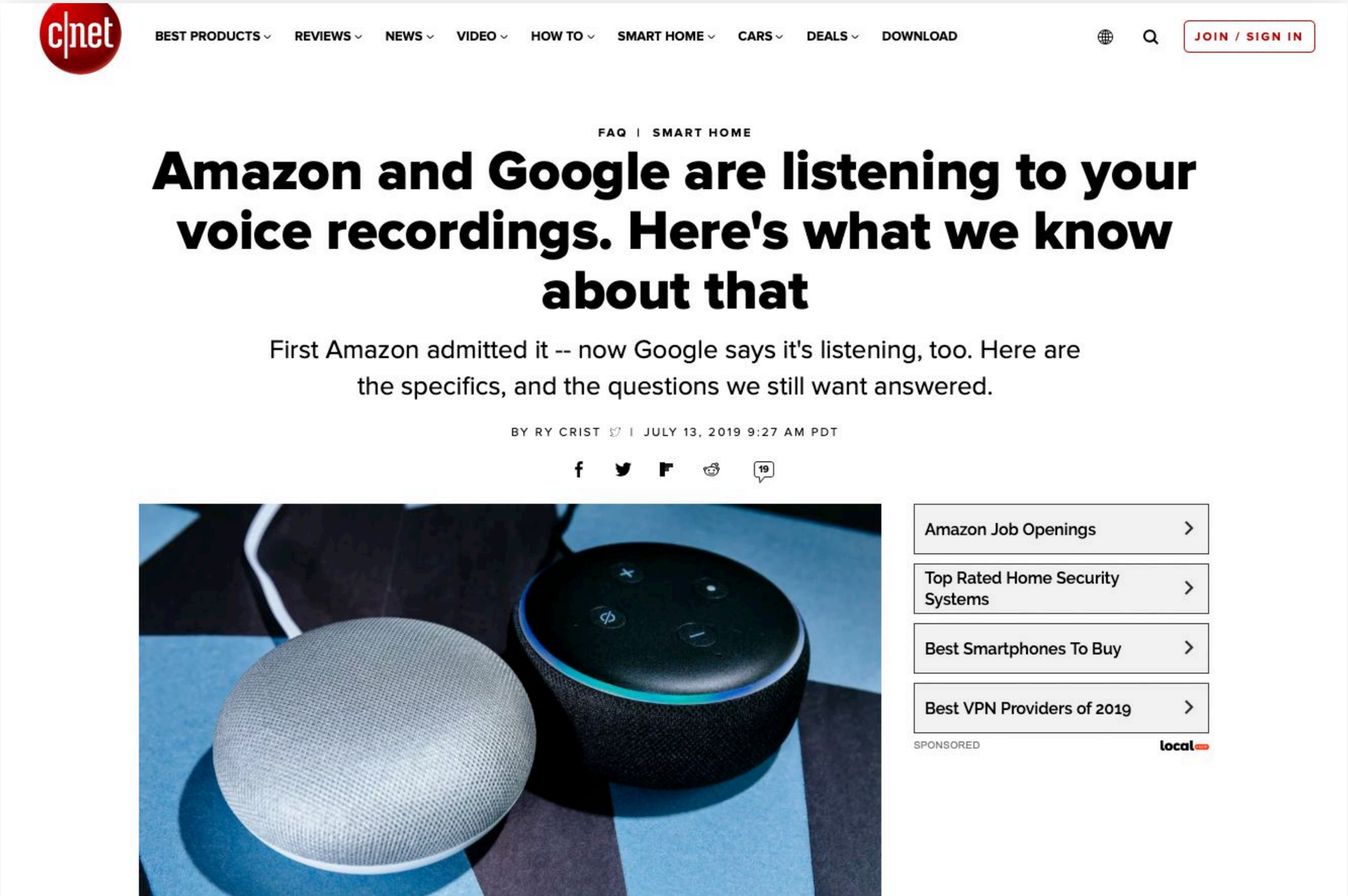
Coca-Cola



The assistant that failed you has been replaced.

Improvements aren’t readily apparent

“These things are spying on me.”



c|net

BEST PRODUCTS REVIEWS NEWS VIDEO HOW TO SMART HOME CARS DEALS DOWNLOAD JOIN / SIGN IN

FAQ | SMART HOME

Amazon and Google are listening to your voice recordings. Here's what we know about that

First Amazon admitted it -- now Google says it's listening, too. Here are the specifics, and the questions we still want answered.

BY RY CRIST | JULY 13, 2019 9:27 AM PDT

19

Amazon Job Openings

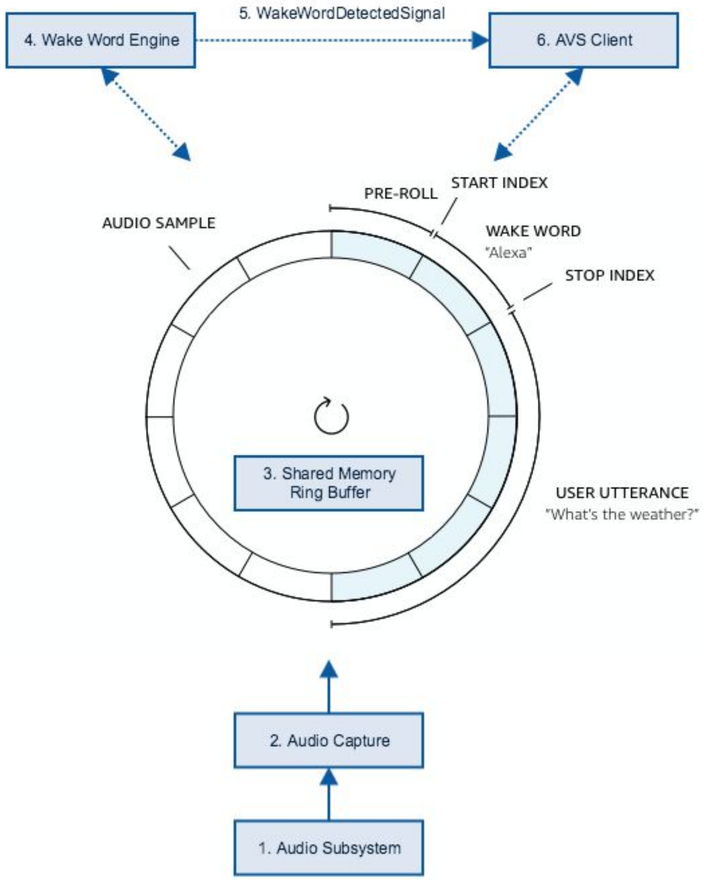
Top Rated Home Security Systems

Best Smartphones To Buy

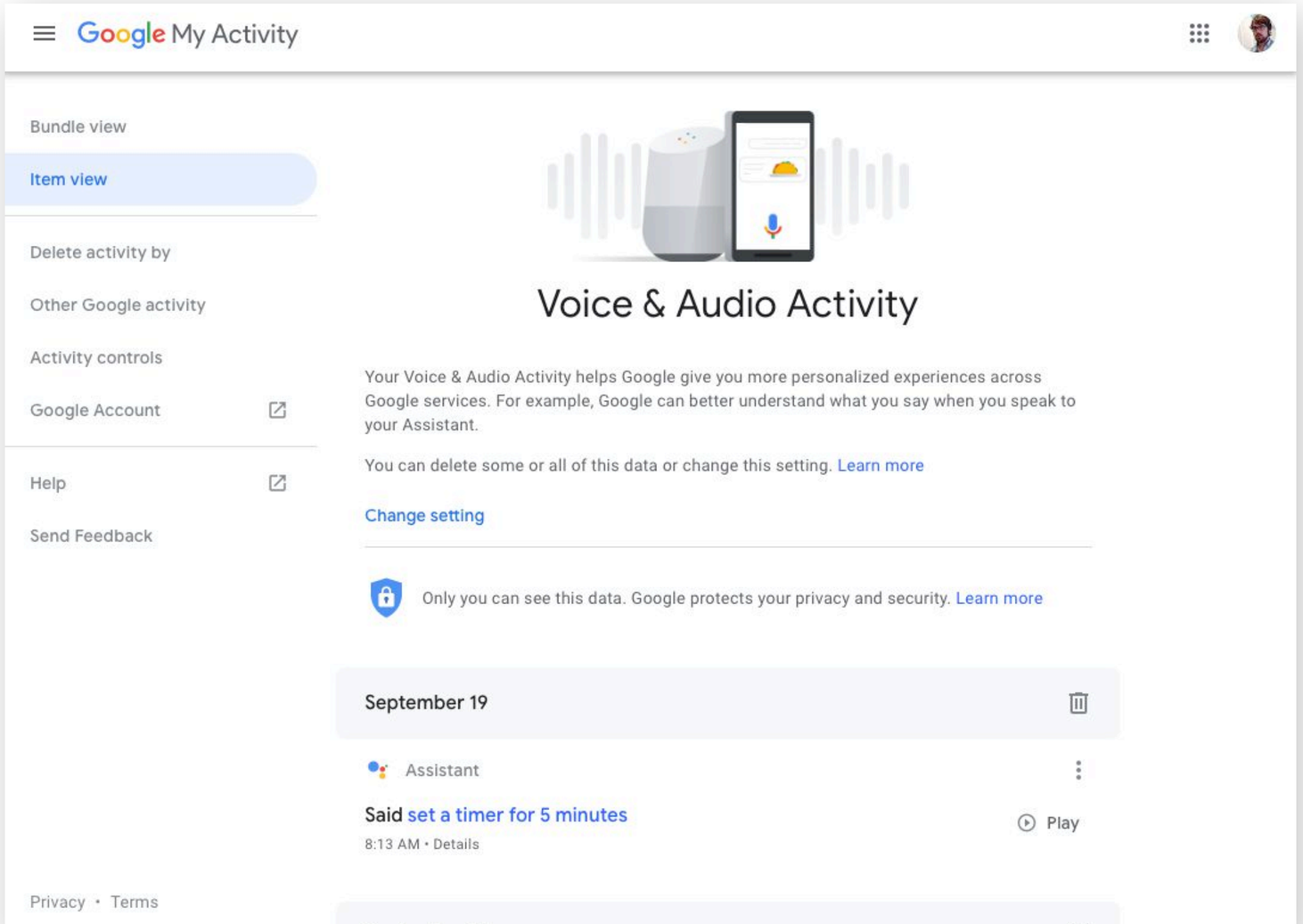
Best VPN Providers of 2019

SPONSORED

Any sufficiently advanced technology is indistinguishable from magic.



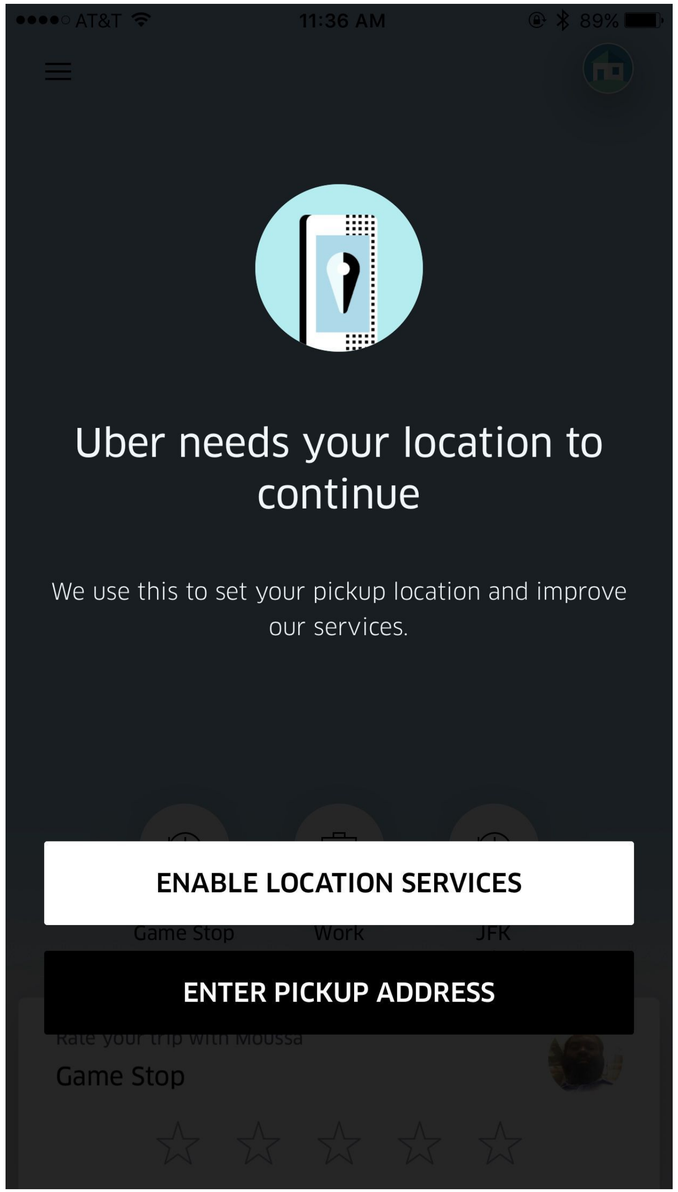
What are they doing to fix this?



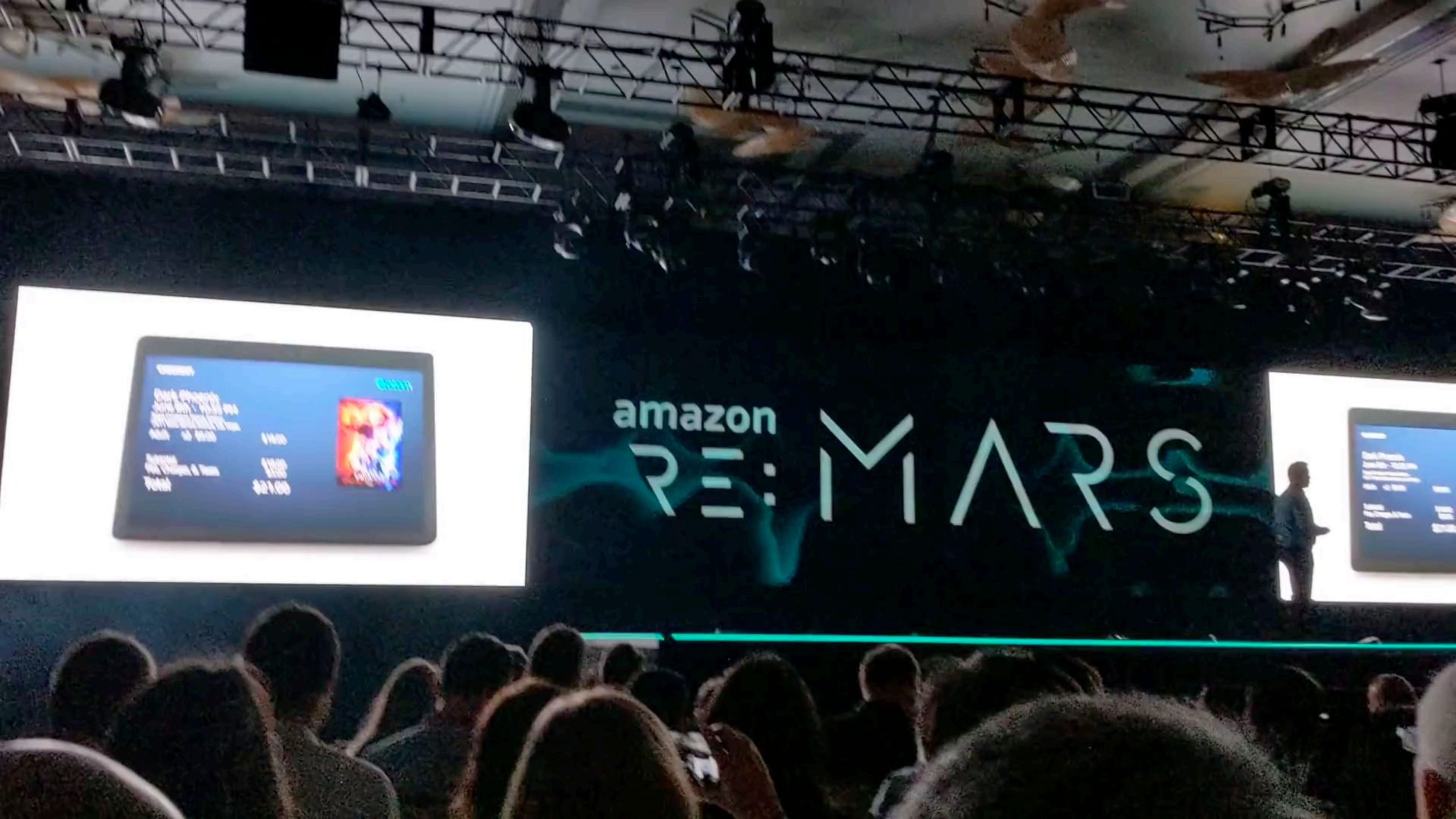
What can you do?

We need transparency over what is shared and what isn’t!

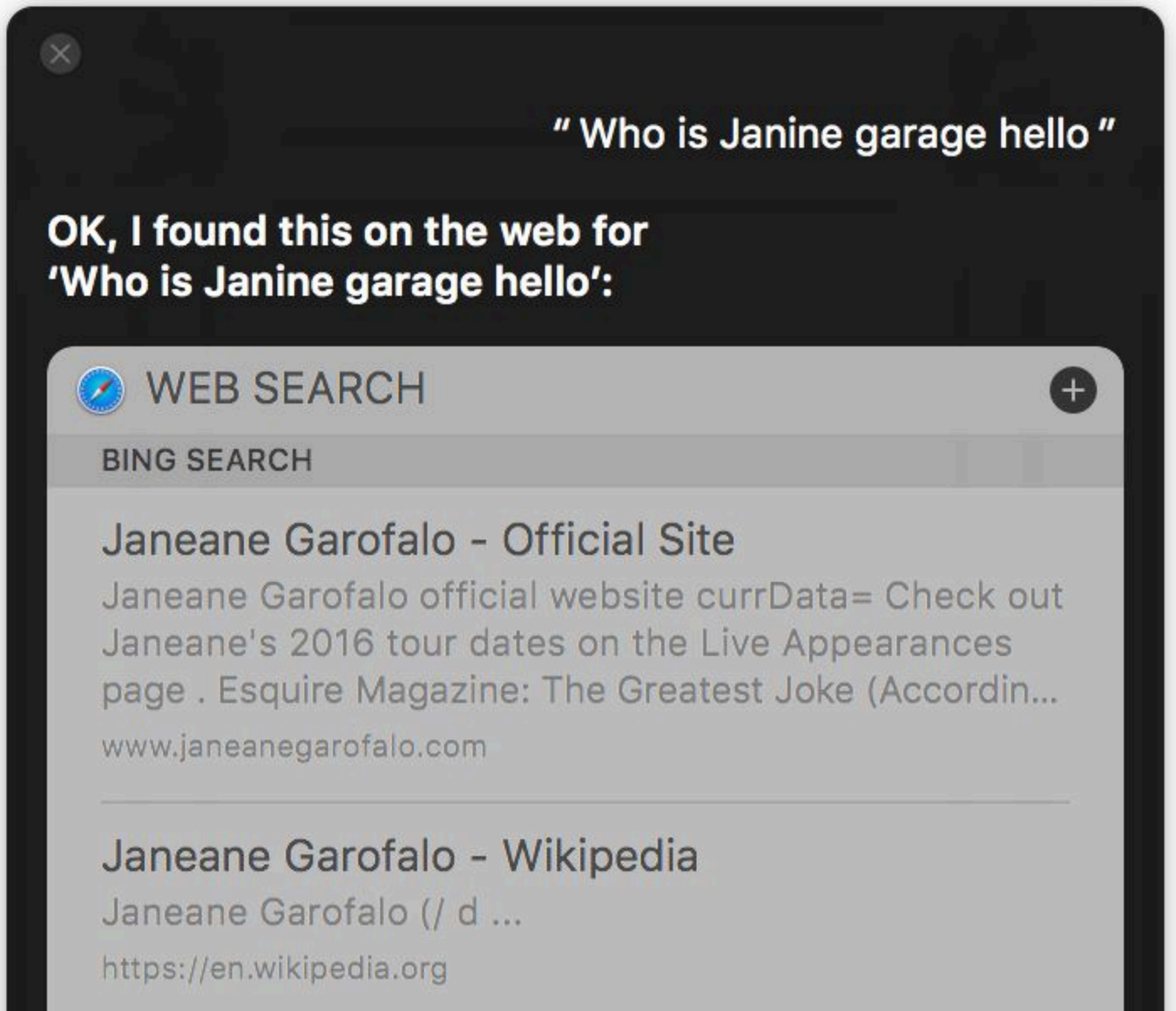
Because we want them to have as much relevant data as possible.



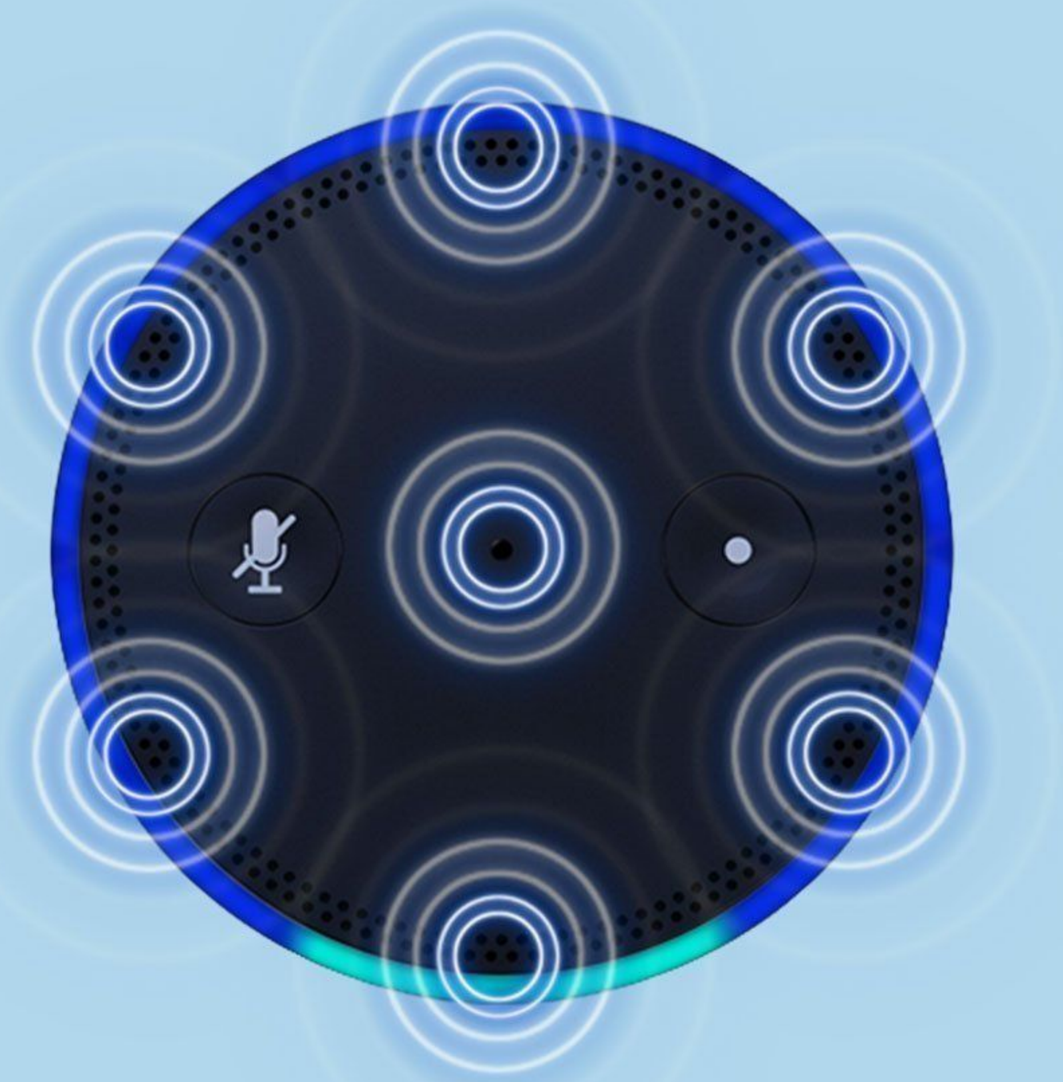
“I have to talk to it like I’m doing a google search.”


amazon
RE:MARS

“She doesn’t understand what I’m saying.”

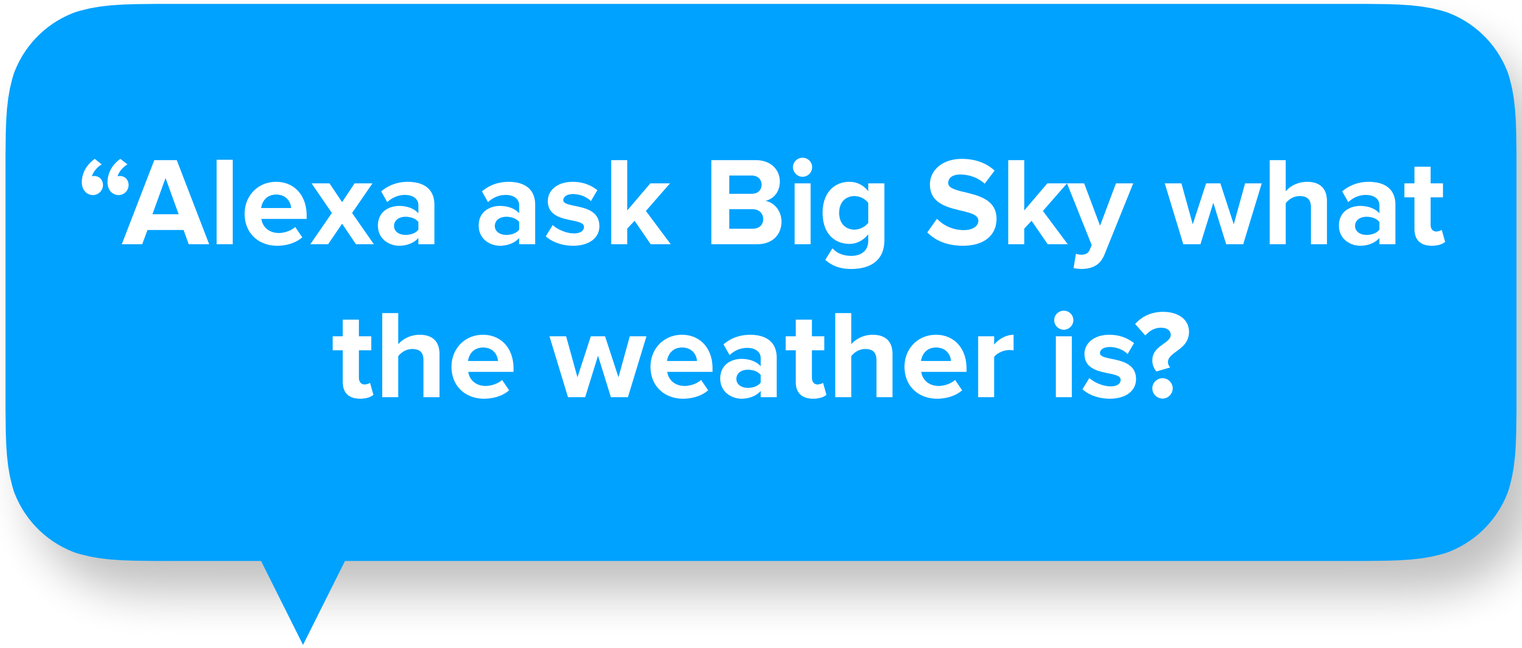


Other Advances in NLP

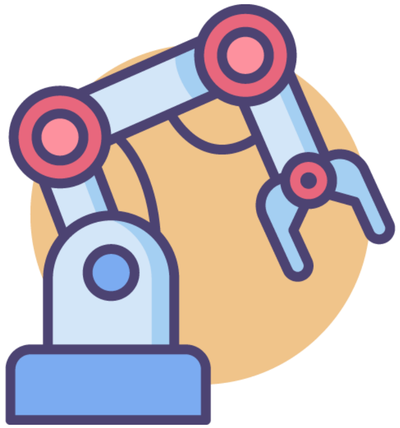


Everyone’s voice should be understood.

“Nobody uses 3rd party functionality.”



“Nobody uses 3rd party functionality.”



What would you say...you do here?

WHAT WOULD YOU SAY
YOU DO HERE?
made on imgur

Heads up

My eyes are up here.

Succinct Personalized Content

“Good Morning Clint, the weather is a bit rainy this evening at Lakewood Amphitheater. It looks like it’s about 50 bucks to upgrade your Radiohead tickets from lawn to covered seating. Would you like to do that?

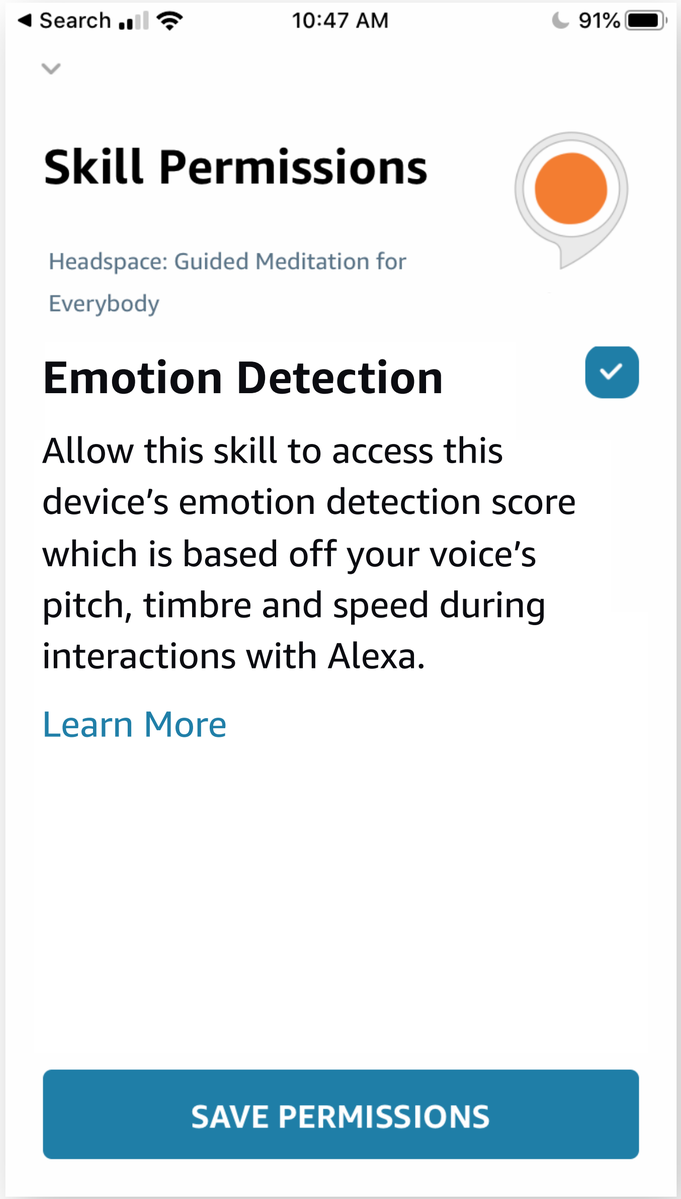
Average
45 WPM

Average

40 WPM

Average

135 WPM


Search
10:47 AM
91%
Skill Permissions
Headspace: Guided Meditation for Everybody
Emotion Detection
Allow this skill to access this device's emotion detection score which is based off your voice's pitch, timbre and speed during interactions with Alexa.
Learn More
SAVE PERMISSIONS

7:42 AM Monday Frustration 92/100

“Damn it Alexa, that’s not what I wanted”

11:06 AM Monday Frustration 65/100

“Can you PLEASE play the new Lizzo track?”

9:06 AM Tuesday

Alexa, Open Headspace.

Users Frustration Average > 75

“Good Morning Celia. Would like to try a new Acceptance meditation?

Hey, Mike. Can you make this really hot?
SURE.
Mike RoWave
FRANK MK I
Frank, do you contain any chocolate milk?
SORRY. THERE IS NO CHOCOLATE MILK. HOW ABOUT A GLASS OF ALMOND MILK INSTEAD?
Gaah, gooh gaah!!
COOKIN' COLIN
SORRY, I DO NOT UNDERSTAND.
Diana, are these dishes clean or dirty?
DIANA DISH QUEEN
MY CURRENT LOAD IS AS YET UNWASHED.
Woof! Woof?! Woof??
VAL 0.1
Tony, please open your lid.
NICE SHOT!
TONY 1
PLEASE REPEAT THAT...

D.R.E.A.M
Design Rules Everything Around Me

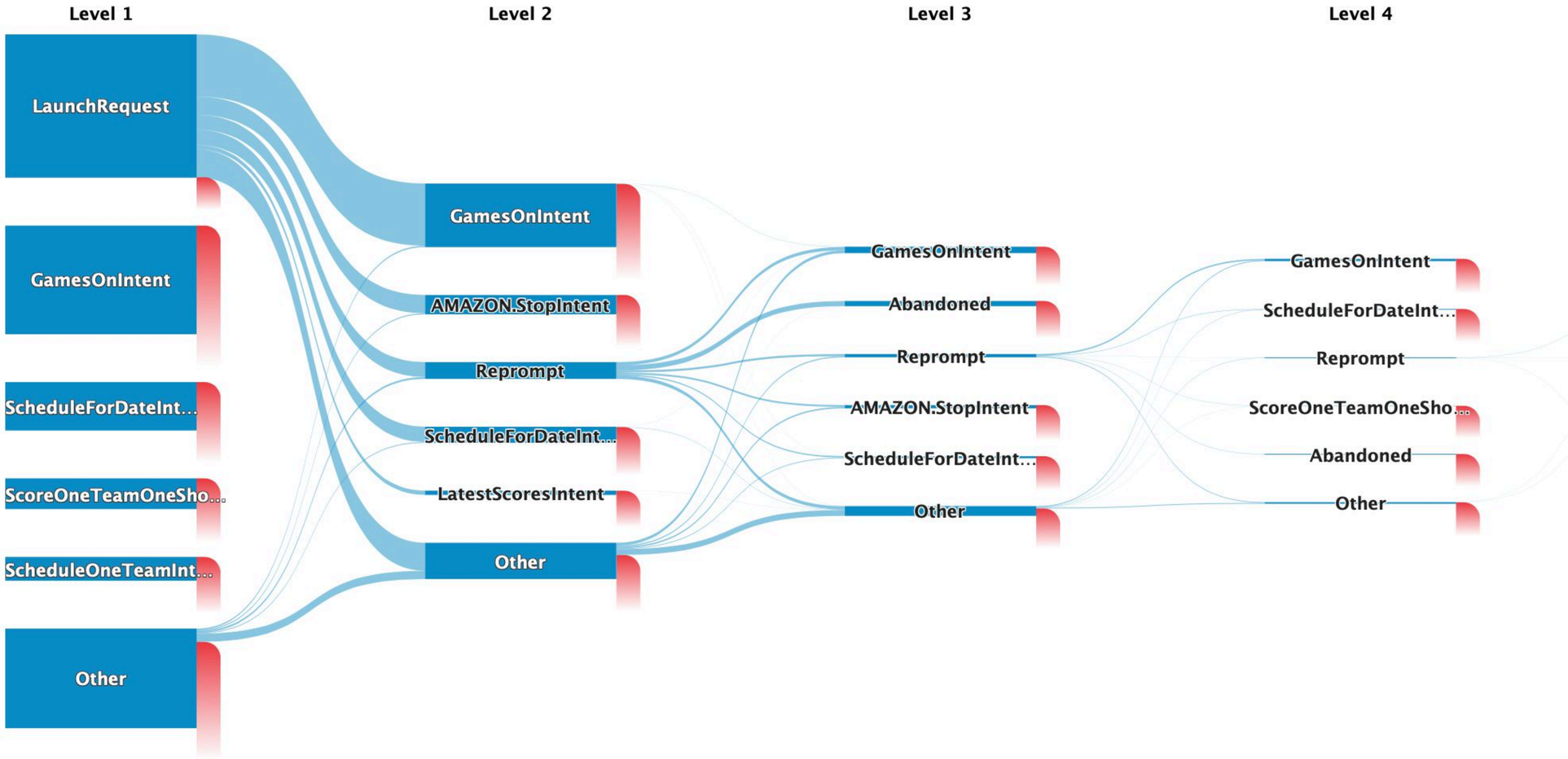
Method Man

What’s our method?

Intent	**Daily Weather Intent**
Utterances/ Training Phrases	**Ok Google, What's the temperature <today>?** **Ok Google, Tell me the weather <tomorrow>.** **Ok Google, What's it like outside <Wednesday>?**

- Wake Word
- Slot

Interaction Path Analysis



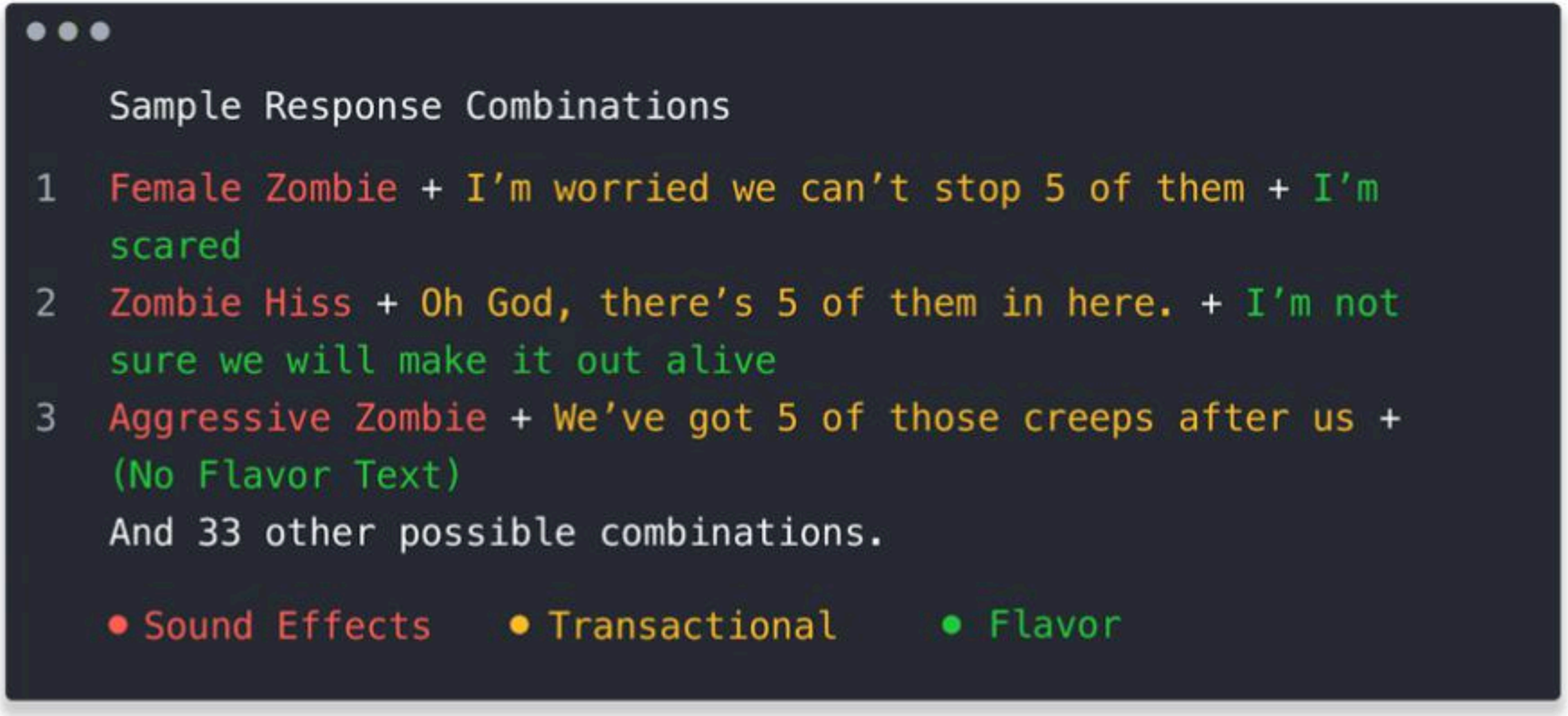
SSML

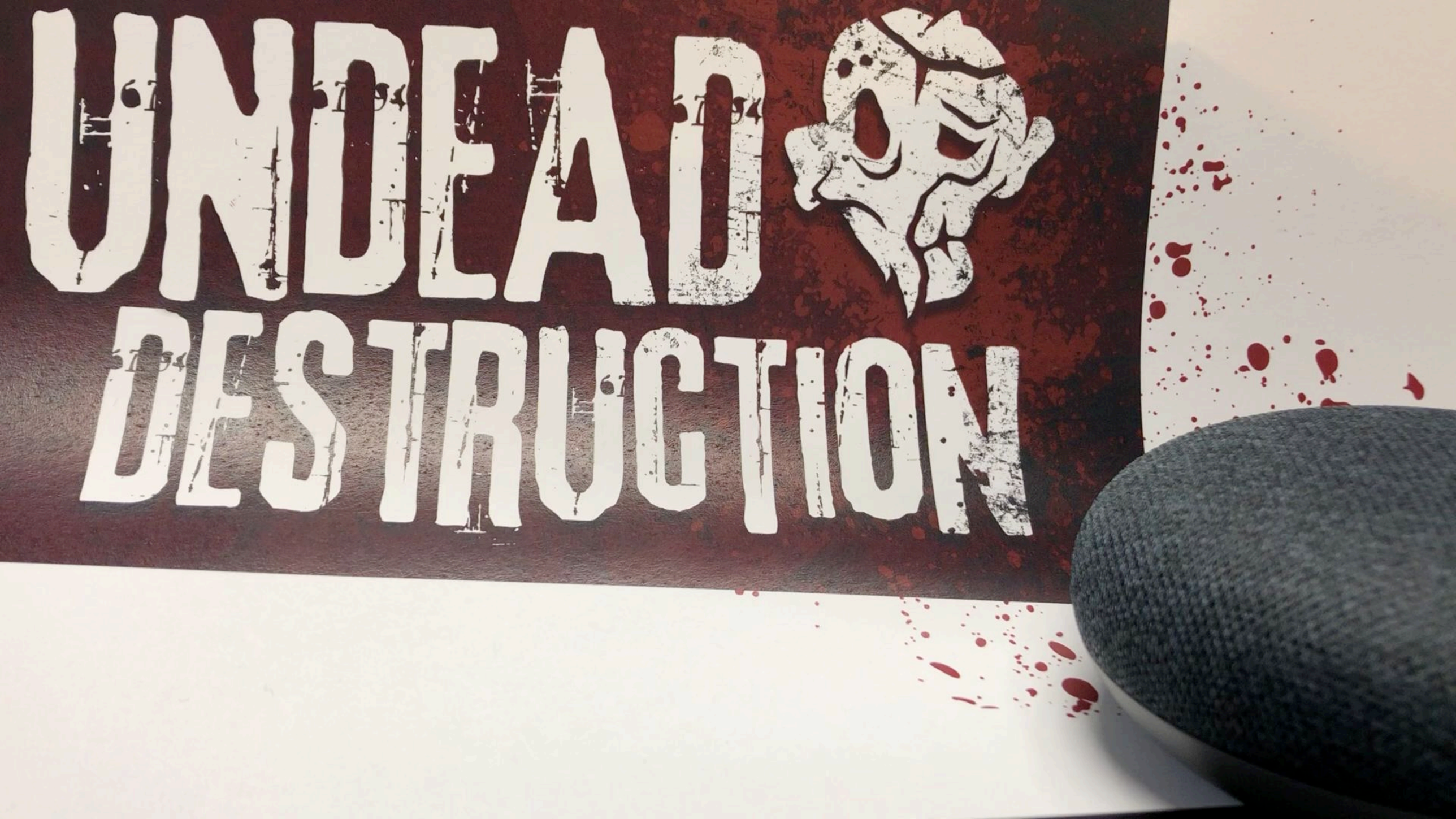
```
For instance, when speaking with others
<break strength="x-strong">
a dramatic pause conveys emotion.
```

```
<prosody rate="fast">
When I'm excited, I tend to speak very fast.
</prosody>
```

Advanced Sound Design Techniques

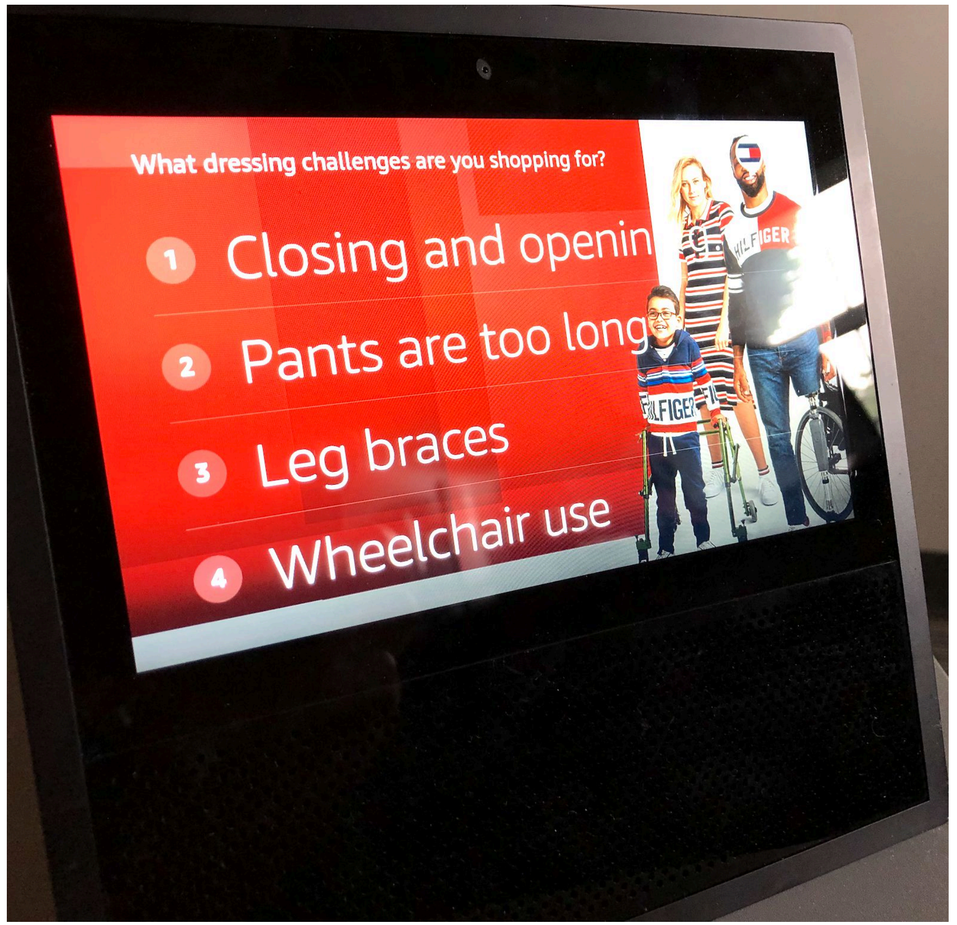
Conversation Variance

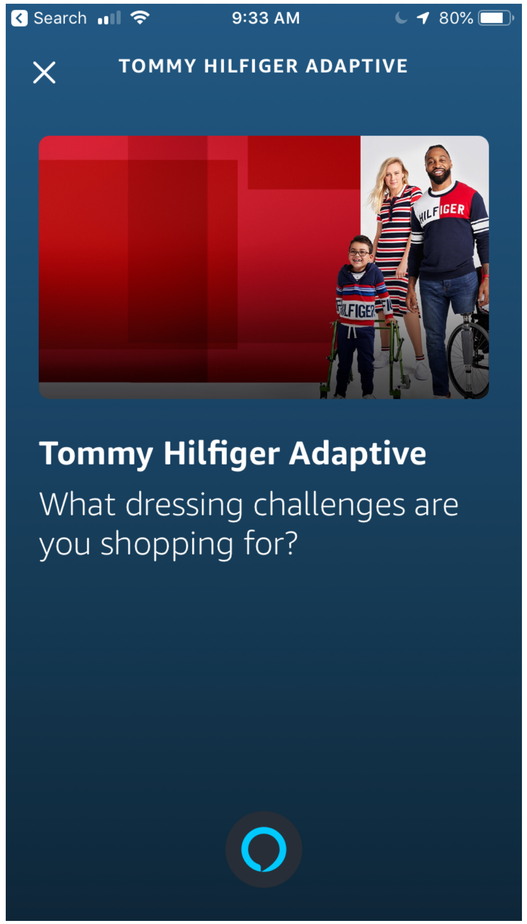



UNDEAD
DESTRUCTION

Flowcharts vs. Situational Design

Multi-modal

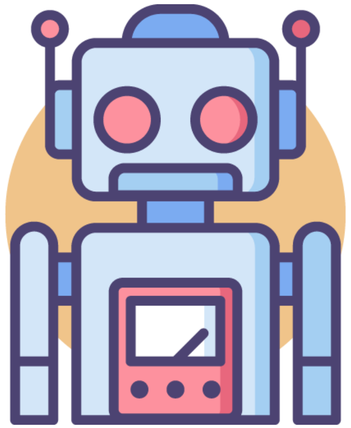

What dressing challenges are you shopping for?
1 Closing and openin
2 Pants are too long
3 Leg braces
4 Wheelchair use


Search
9:33 AM
80%
TOMMY HILFIGER ADAPTIVE
Tommy Hilfiger Adaptive
What dressing challenges are you shopping for?

“Good design is as little design as possible.”

Less, but better – because it concentrates on the essential aspects, and the products are not burdened with non-essentials. Back to purity, back to simplicity.

Dieter Rams



Welcome to the Future

Plain text
SSML
Hi! My name is Joanna. I will read any text you type here.
Show default text
Clear text
58 characters used
Engine
Standard
Neural
Language and Region
English, US
Voice
Salli, Female
Joanna, Female
Ivy, Female
Kendra, Female
Kimberly, Female
Matthew, Male
Justin, Male
Joey, Male
Listen to speech
Download MP3
Change file format
Synthesize to S3
Change S3 task settings

Conversation Design

Thank you!

Questions?

info@mrclintmiller.com

mrclintmiller.com