



# Conversational Interaction Conference

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**The leading edge of Artificial Intelligence**

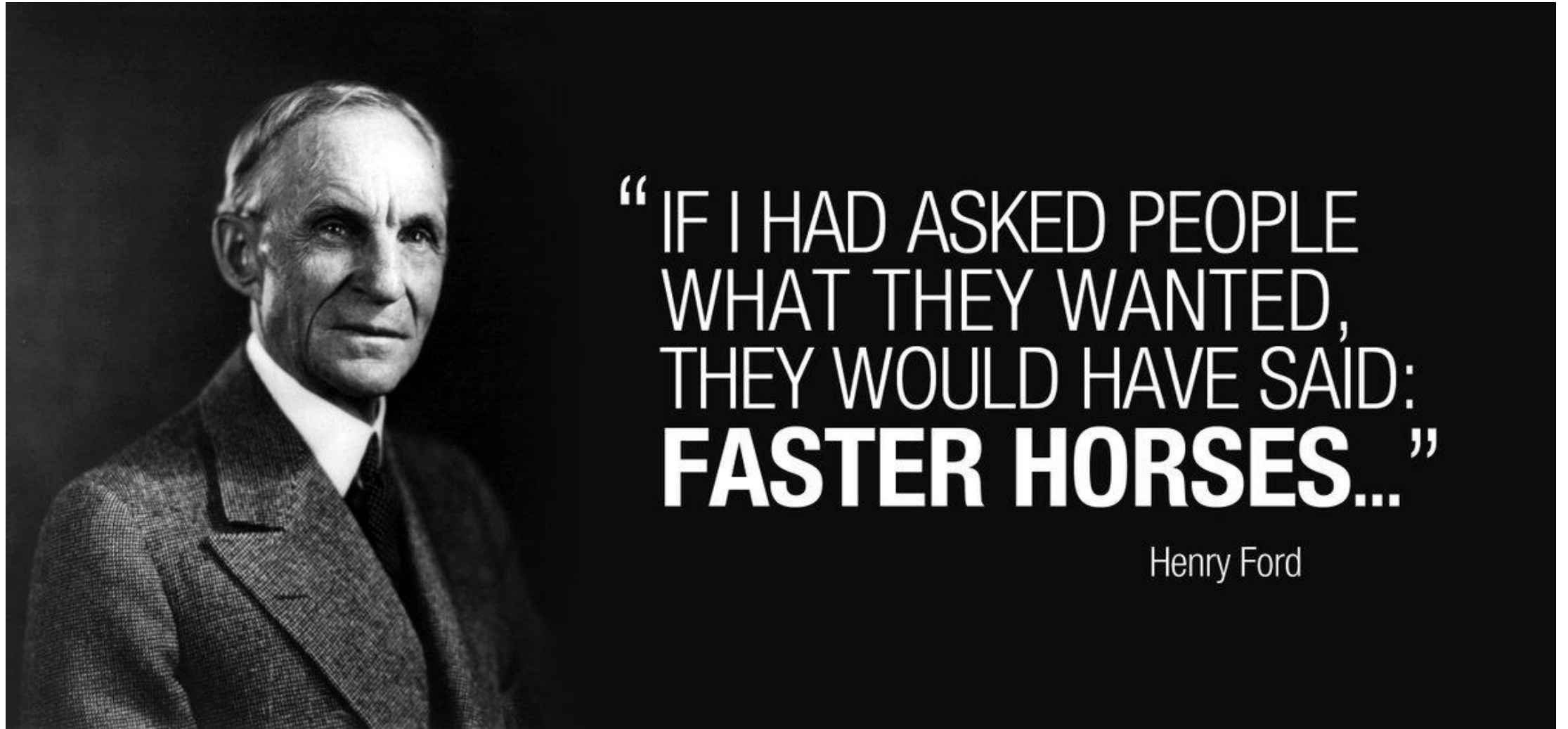
## Tell me what you want, what you really really want

Finding meaningful answers on a tight budget

Ann Thymé-Gobbel & Charles Jankowski

Director of UI/UX Design, Stealth Startup  
Conversational Systems Expert

Should we ask users what they want?

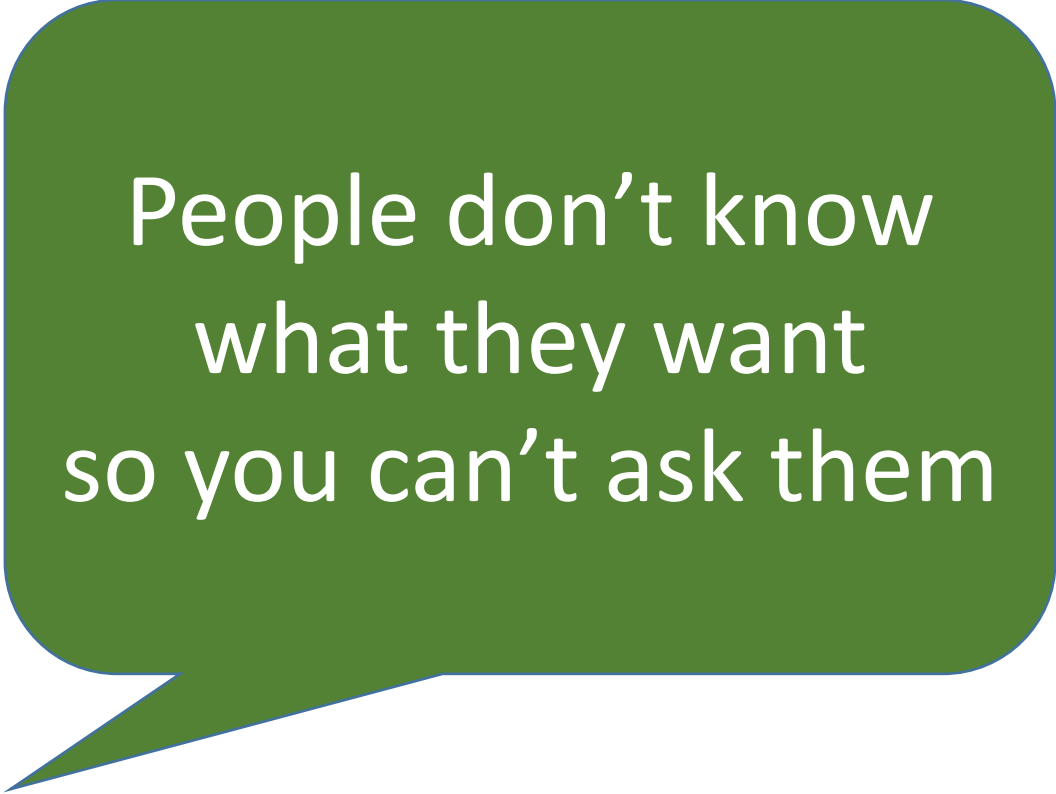


# Should we ask users what they want?

"It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them."

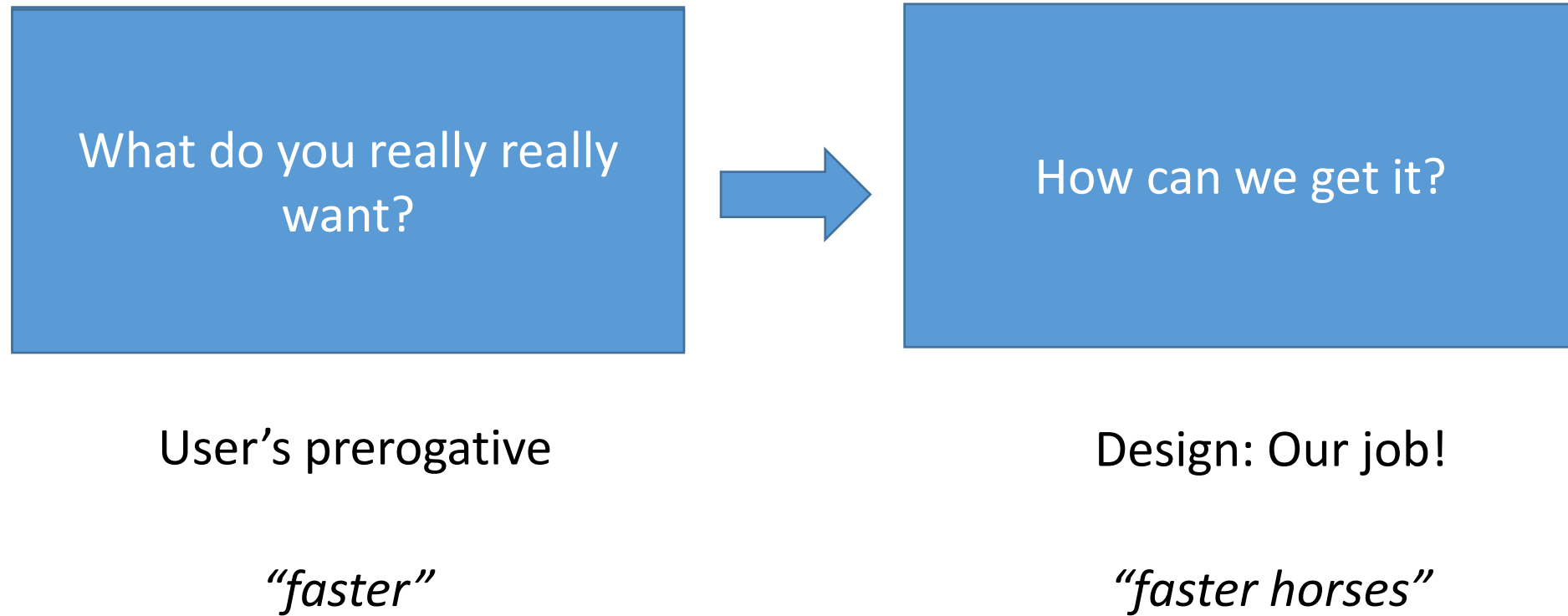
- Steve Jobs





People don't know  
what they want  
so you can't ask them

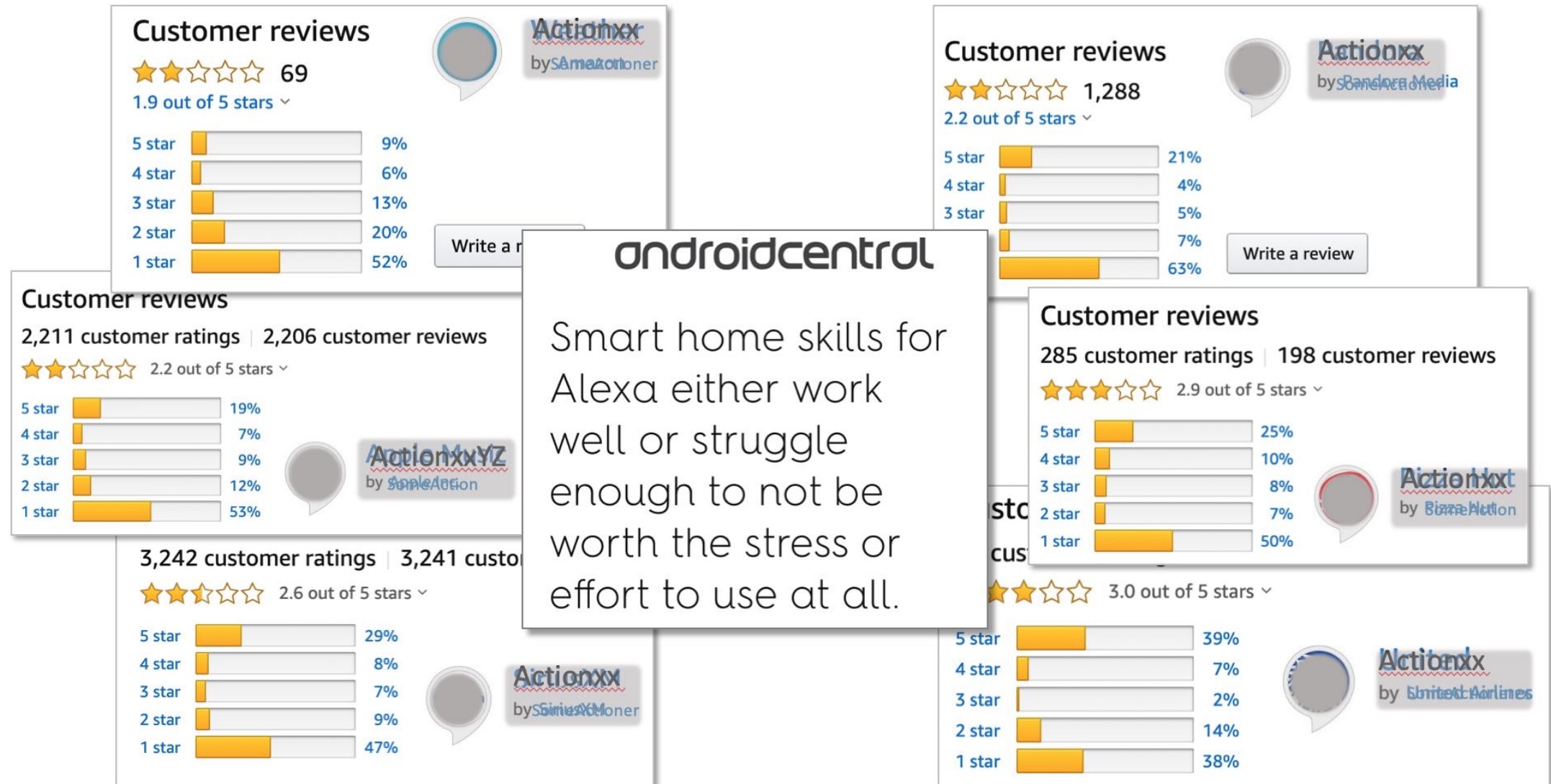
# Break it down



# They DO tell you – and you SHOULD listen

1. Product reviews
2. Surveys
  - Offline
  - In app
3. Collected utterances
  - In-grammar
  - Out-of-coverage

# 1. User product reviews



ACME just added 104 new **channels that don't have numbers only names** and **Alexa doesn't recognize** or play any of them. please fix this immediately

I've noticed that Alexa **does not understand** me when I ask her to **change a station** on my favorites list.

ACME is **not available in your region**? This “region” crap makes me mad.

The skill is **available only in the US**. Some **devices aren't compatible**. You **can't play from your library** unless you put all of the songs in a playlist.

Sometimes the **song will suddenly SKIP** to the next song. It doesn't matter if it is your playlist or a radio station. This really annoys me, and it is what prevents me from switching to ACME completely.

I wish more streaming services allow you to upload and **play local music** like ACME.

A few notes to improve the customer experience and bring this to 5 stars:

- **Shuffle feature for playlists** and albums.
- Ability to **add songs to the library** or to a specific playlist.

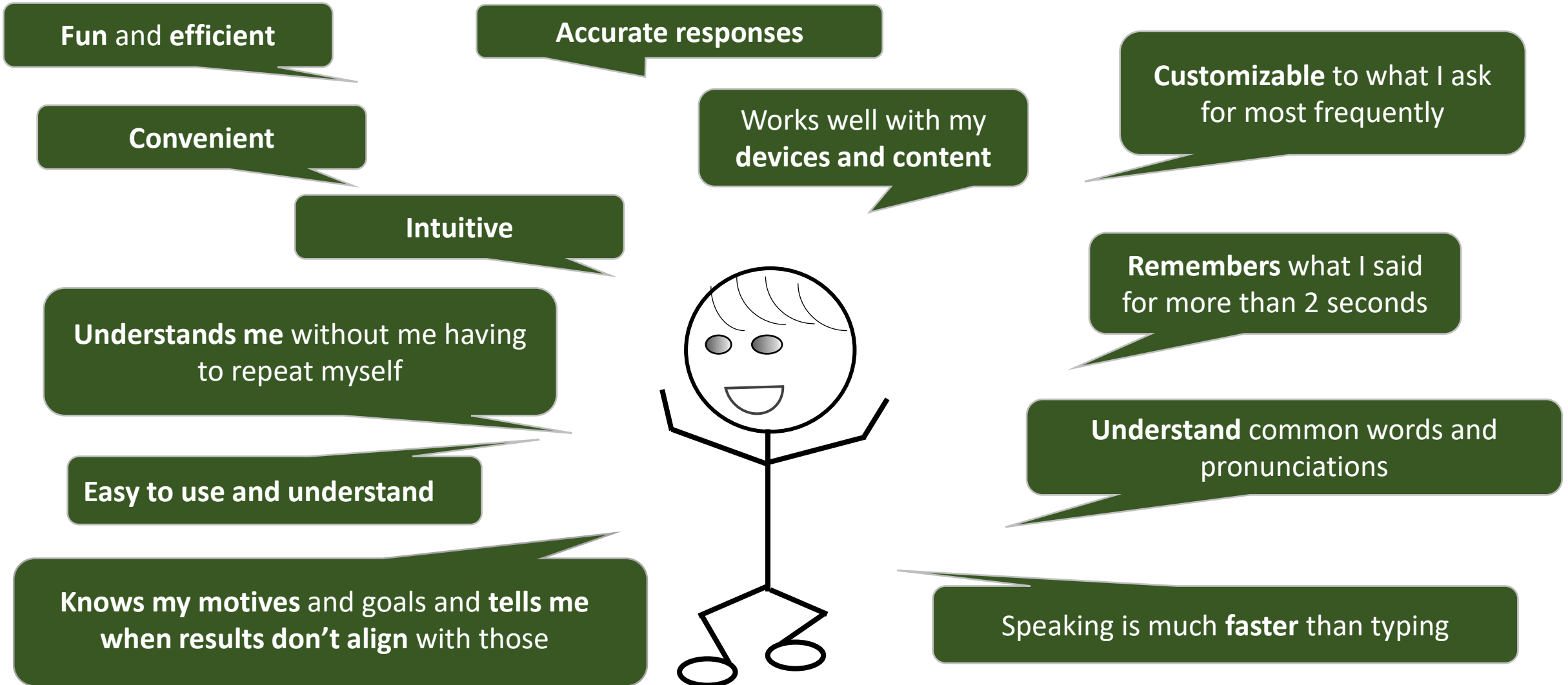
**Improve voice commands.** (Example: I say “Alexa, play Dance radio” and she says “Playing DNCE radio”). Not sure if this is a bug on Amazon or Apple. I’m speaking clearly, but the only way I can get it to work now is by spelling out the word dance.



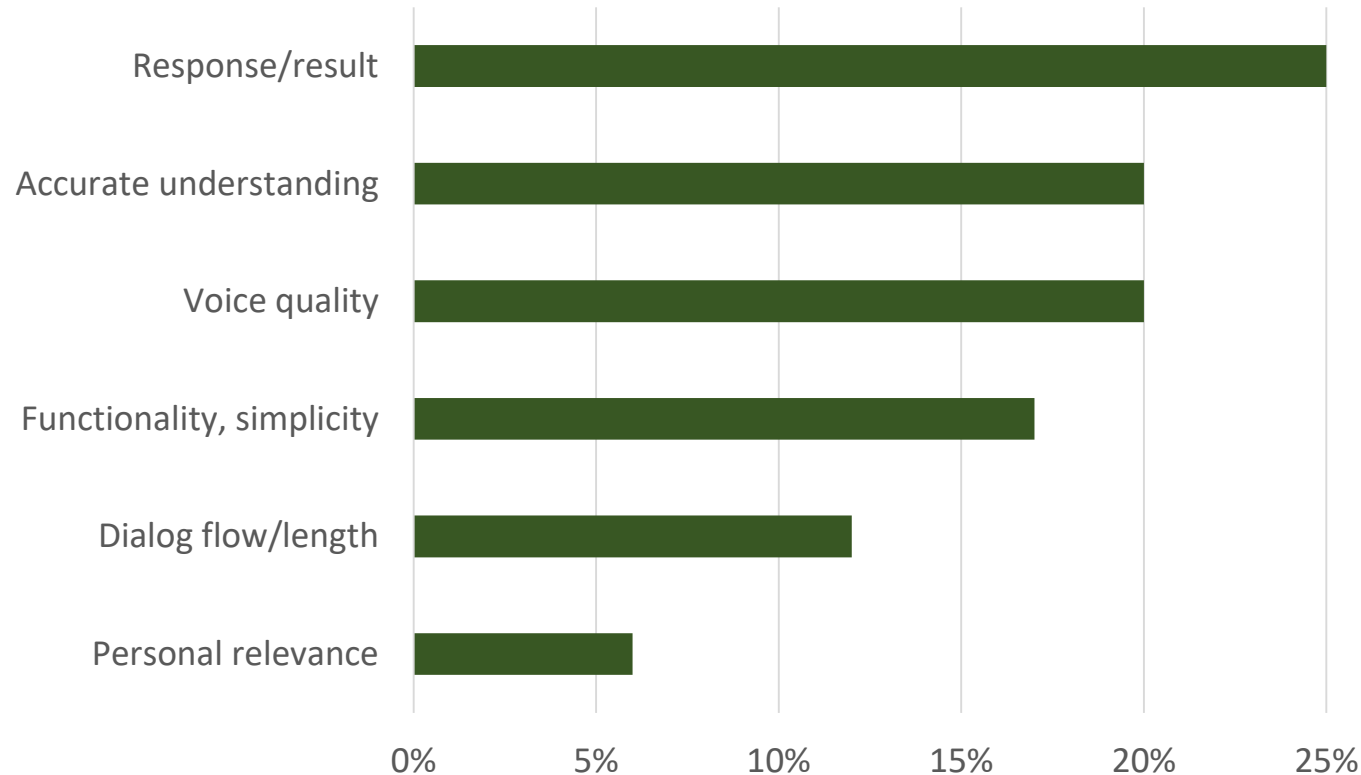
## 2. Surveys

- Offline
  - Crowdsourced
- In app
  - Thumbs up/down

# What users say they like & want



# What users say is important for voice



- Categorized 150 freeform responses “Describe the traits of your ideal voice assistant”

- Response / result
  - Correct fulfillment
  - Accurate & relevant
- Accurate understanding
  - Understand meaning
  - Recognition accuracy
  - Little/no retry
- Voice quality
  - Style, speed, intelligibility
- Functionality, simplicity
  - Expected features
  - Easy to use
- Conversation
  - Intelligent flow & follow-up
- Personal relevance

# What users say they get

*Is she spying on me?*

*Don't waste my time.  
And don't tell me about stuff  
I didn't ask about either.*

*So chatty... she doesn't listen!*

*She should know something  
about me by now*

*Give me what I want, or tell me why you  
can't. Don't act like you're giving me what  
I asked for when you're not!*

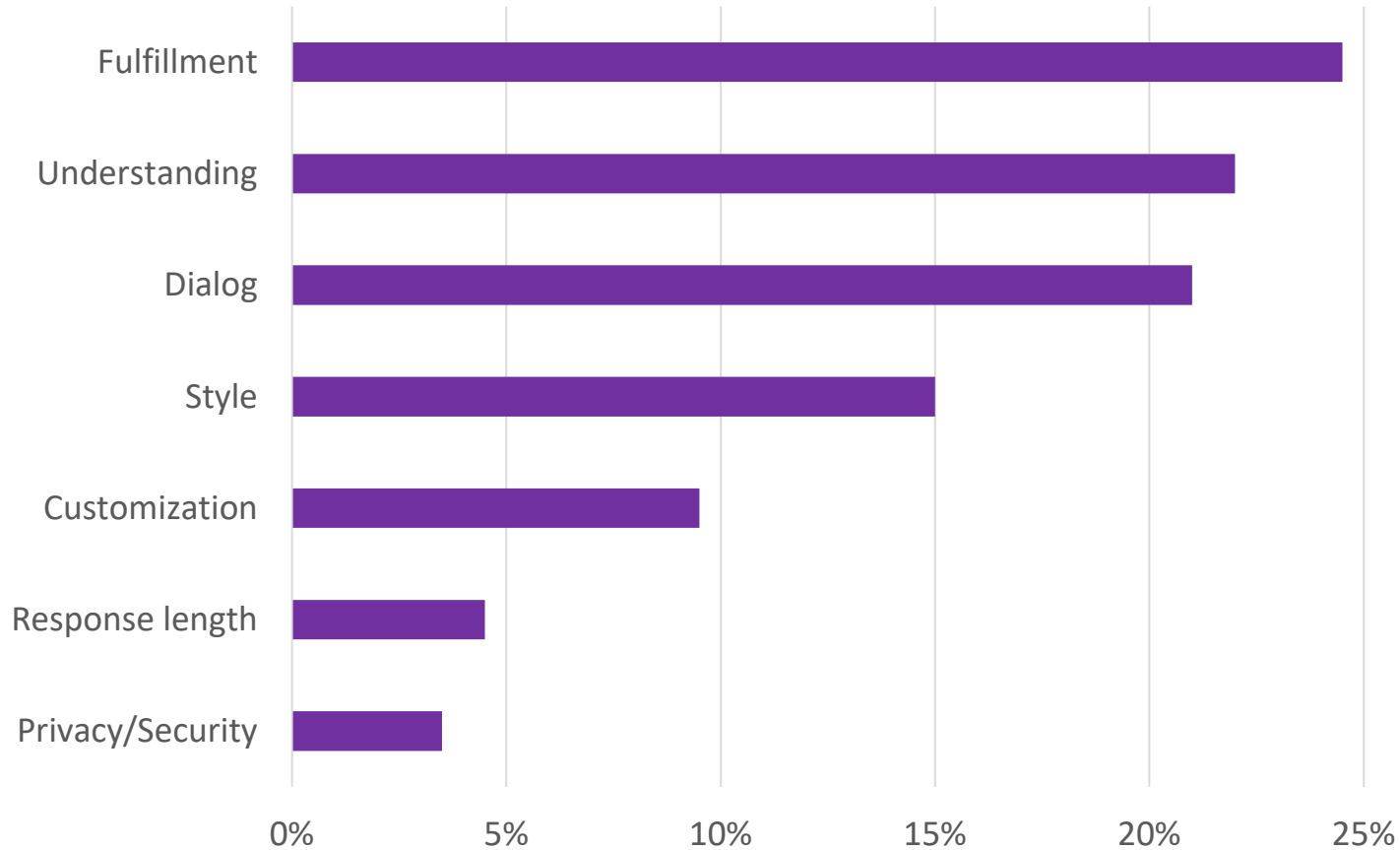
*She goes brain-dead as soon  
as she stops talking.*

*Commercials show you able to ask  
anything. But it responds with not  
knowing what I'm talking about even  
when it understands the words.*

*It doesn't understand what I say half the time.*



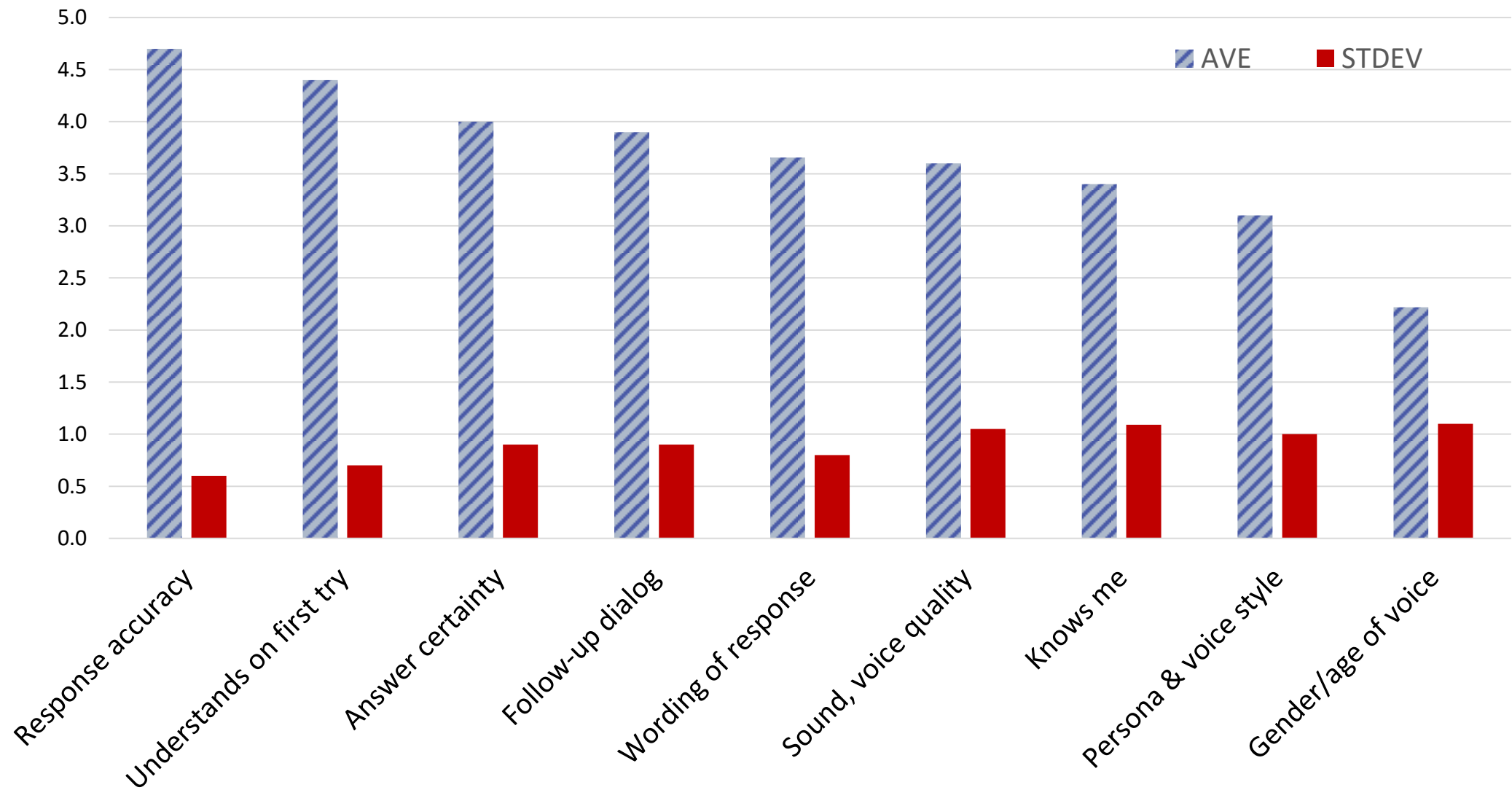
# Users' top dislikes



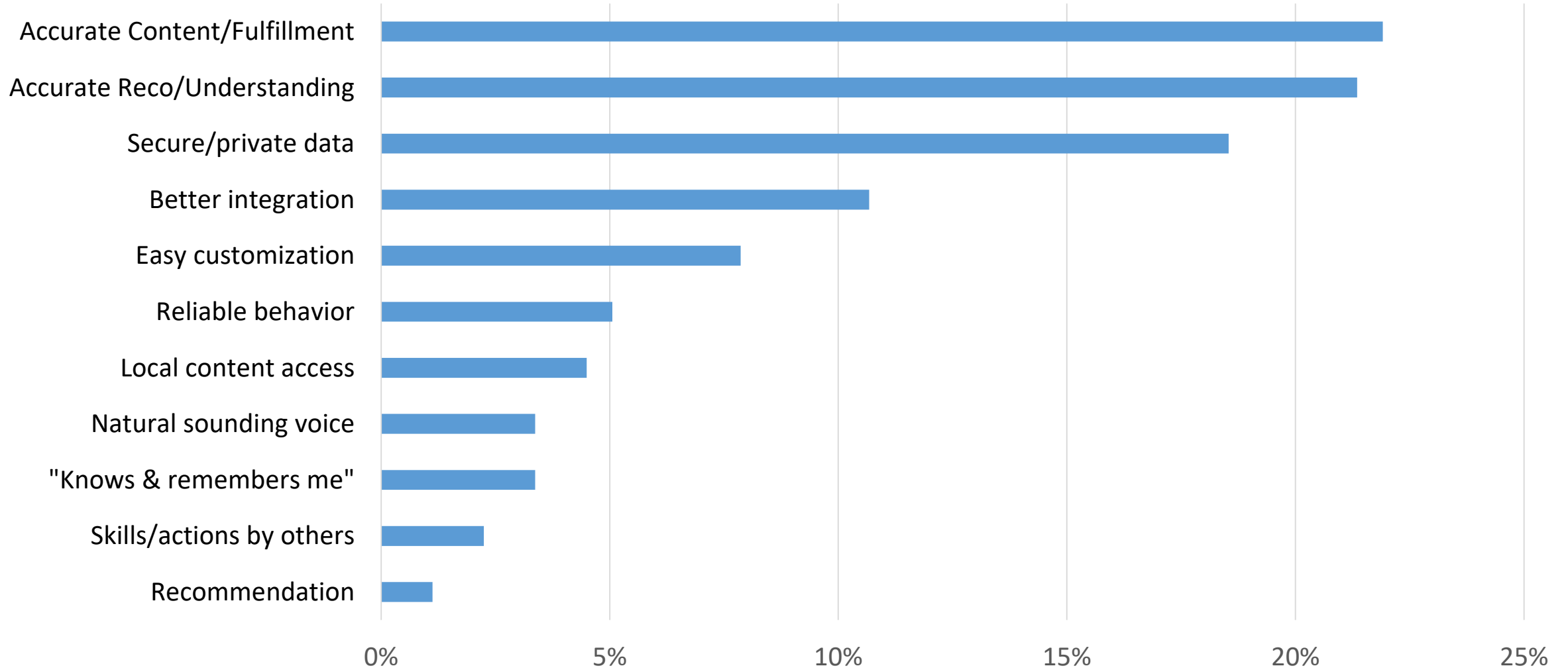
*Categorized 80 freeform responses "What do you like LEAST about voice assistants?"*

- Poor result
  - Wrong content or info
  - Unhelpful / misleading response
- Not being understood
  - Poor recognition
  - Poor mapping to meaning
  - Not knowing what to say
- Over-simplistic, unnatural dialog
- “Wrong” tone / style
- Poor customization
  - Incorrect default assumptions
  - Lack of choice
- Too wordy
- Privacy/security concerns
  - False trigger

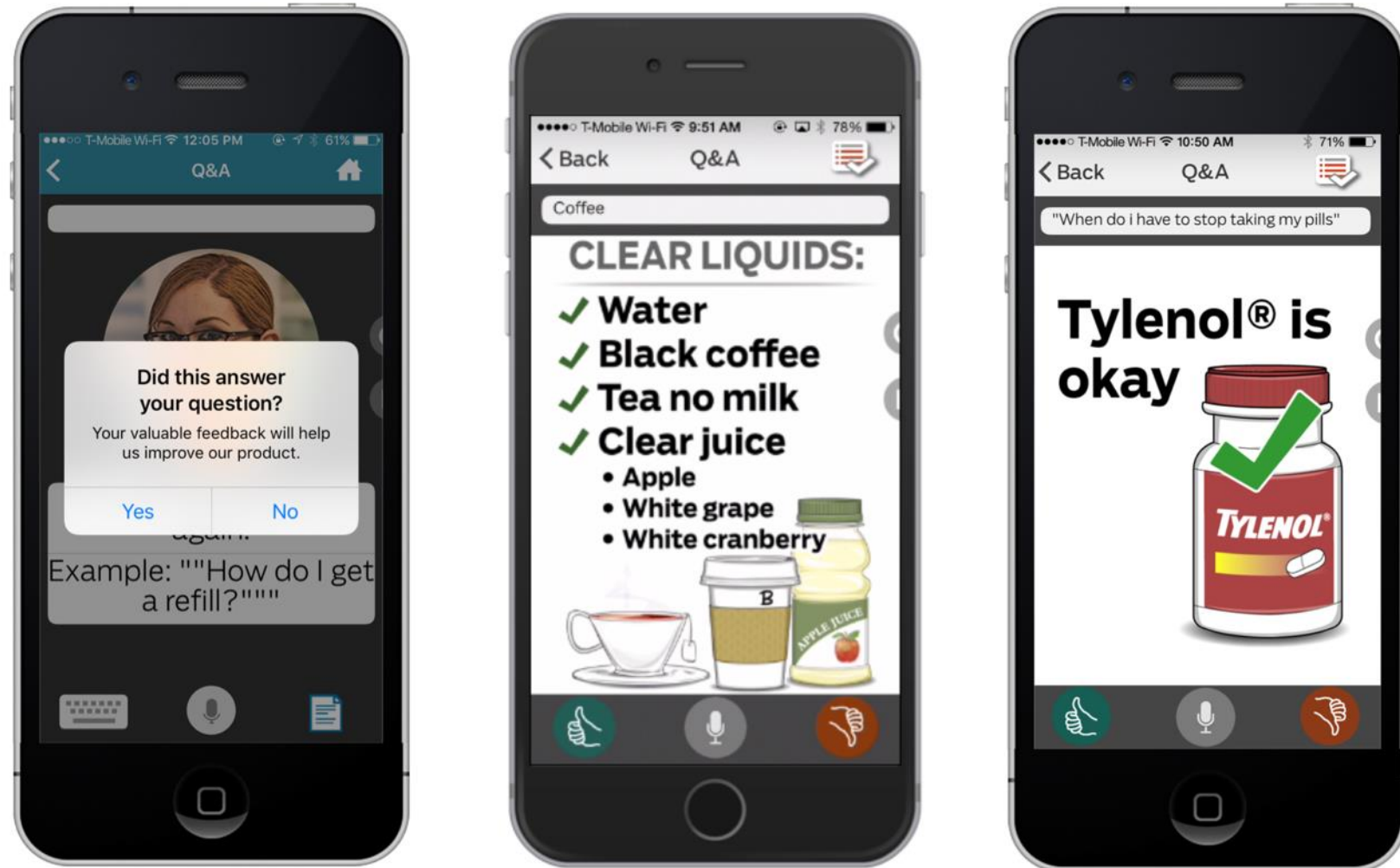
# How important is \_ to your enjoyment of voice? (1-5)



# What would make you more likely to want to speak to virtual assistants and devices?



# In app feedback





# 3. Utterances

Add trip to Mexico to calendar for July 5 at 7 am.

Adjust temperature to bedtime setting

Answer the phone.

Are there any festivals nearby this weekend?

At 7:00 PM I would like to stop the music I have going on now and play something classical for the dinner table.

Automatically mute when someone knocks on my door.

Bake at 350 degrees.

Block all R rated movies

Buy the soundtrack from Straight Outta Compton.

Buy this album

Buy this song from itunes.

Call me a taxi.

Call mom.

Call this person

Can you fast forward this song?

Cancel my appointment today

Change alarm to play Enter Sandman.

Change station to ABC after the Giants game ends

# Why it matters

- Promises and expectations are high
- Performance affects trust and future use

*“The assistant can’t answer my questions half the time but I’m supposed to trust it to help me with something involving money?”*

--Female, 26

[www.pwc.com/us/en/services/consulting/library/consumer-intelligence-series/voice-assistants.html](http://www.pwc.com/us/en/services/consulting/library/consumer-intelligence-series/voice-assistants.html)

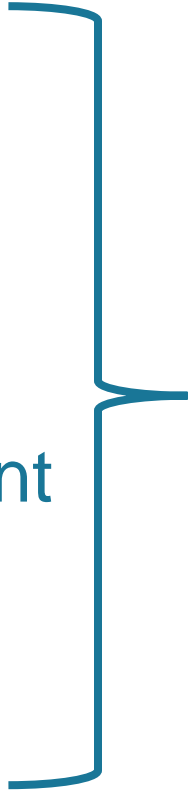
## **Alexa and Google Assistant have a problem: People aren’t sticking with voice apps they try**

Discovery and retention issues are both challenge and opportunity.

By **Jason Del Rey** | [@DelRey](#) | Jan 23, 2017, 6:00am EST

# Users expect...

- Accurate relevant results
- Information from reliable sources
- Enjoyable conversations in their language
- Easy setup, use & upkeep
- Having their needs met in their environment
- To be remembered
- Private & secure interactions



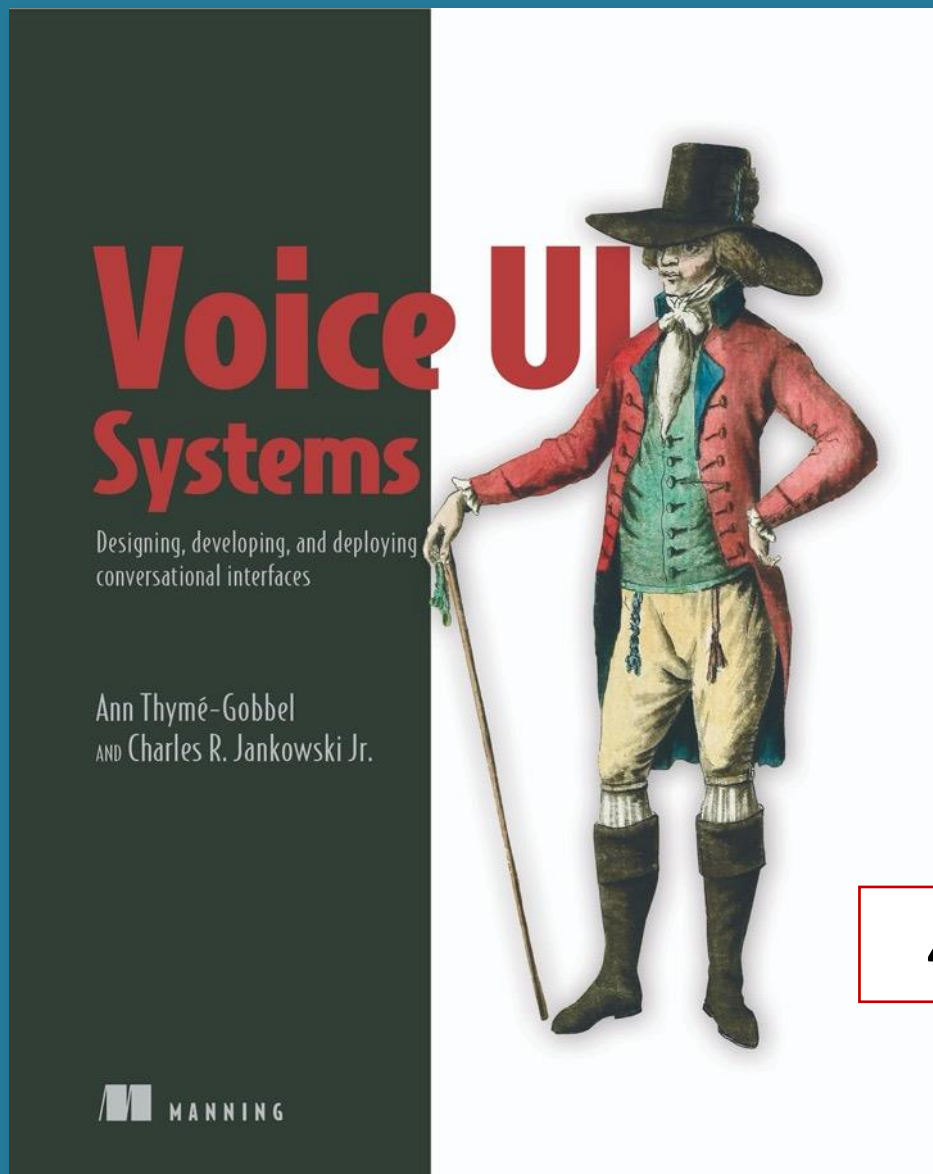
To feel  
understood  
&  
be able to  
trust

# To achieve understanding & trust...

- Identify users' pain points and goals
  - Use all valid data
    - What they tell you
    - What you observe
  - Weigh data based on source
- Analyze
- Create solution within scope of tech

# Summary

- Collect and consider all data
  - And track its source
- Observe your users
  - And ask them about their pain points and goals
- Interpret user responses
  - And ask them!



40% off code: ctwconint20

People don't know  
what they want  
so you can't ask them

People know what  
they're trying to achieve

People know that they're  
not getting what they need  
to reach their goal

You can't be with users 24/7

You don't always know better!

Alexa seems to **give the wrong weather** regularly. Today it is not supposed to rain till around 11p. 10a and we have heavy rain clouds coming in. I ask every morning and regularly it is off.

It reports information for the **wrong city** need to be fixed or give the possibilities of changing it.

Celsius not Fahrenheit - predicts and shows **temperature in wrong format** with no way to change it.

Alexa reported cloudy and 85 at 3:50 PM. Actual is clear all day and a toasty 93. Please check your weather source info.

It would be **great to know wind speed, wind chill, chance of rain** and when it may rain/sleet/snow.

I live in el Salvador central America, I **can't put any address in my country**.

Even after I type in my address, it gives me the **weather for a different city** so I'm not sure how this is supposed to be helpful to me...

We specify city and country and Alexa says **she doesn't understand**. I look in the app and the words are correct.

Would be great if we could **ask about weather in certain zip codes**. The weather is completely different from downtown San Diego, the beaches, and inland desert areas of San Diego.

She gives me the weather for a city 60 miles away. I can not change it. And when I ask for weather for my city, she can not find it.

I moved to Australia ... the weather doesn't have any option for **Australian post codes or addresses**. :(



“80% of users ask for a song by an artist”

Other  
music  
requests

Play the song \_\_by\_\_

Not  
understood  
or  
handled

Not understood  
or  
handled

“80% of users ask for a song by an artist”

Were they understood the first time,  
or did they have to ask again?

How often did they get the song they asked for?  
By the right artist?

What words did they use when they were not understood?

What were they doing right before?

What's happening in their environment?

Did they seem frustrated?

