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, Conversational Systems Expert
Stealth Startup
Should we ask users what they want?

“IF I HAD ASKED PEOPLE WHAT THEY WANTED, THEY WOULD HAVE SAID: FASTER HORSES...”

Henry Ford
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

What do you really really want?

User’s prerogative

“faster”

How can we get it?

Design: Our job!

“faster horses”
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

Smart home skills for Alexa either work well or struggle enough to not be worth the stress or effort to use at all.
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

- Accurate responses
- Fun and efficient
- Convenient
- Intuitive
- Understands me without me having to repeat myself
- Easy to use and understand
- Knows my motives and goals and tells me when results don’t align with those
- Works well with my devices and content
- Customizable to what I ask for most frequently
- Remembers what I said for more than 2 seconds
- Understands common words and pronunciations
- Speaking is much faster than typing

-- Users of voice assistants
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?

She should know something about me by now

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

So chatty… she doesn’t listen!

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!

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.

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

-- Users of voice assistants
Users’ top dislikes

- 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

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

- Accurate Content/Fulfillment
- Accurate Reco/Understanding
- Secure/private data
- Better integration
- Easy customization
- Reliable behavior
- Local content access
- Natural sounding voice
- "Knows & remembers me"
- Skills/actions by others
- Recommendation
In app feedback
<table>
<thead>
<tr>
<th>3. Utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add trip to Mexico to calendar for July 5 at 7 am.</td>
</tr>
<tr>
<td>Adjust temperature to bedtime setting</td>
</tr>
<tr>
<td>Answer the phone.</td>
</tr>
<tr>
<td>Are there any festivals nearby this weekend?</td>
</tr>
<tr>
<td>At 7:00 PM I would like to stop the music I have going on now and play something classical for the dinner table.</td>
</tr>
<tr>
<td>Automatically mute when someone knocks on my door.</td>
</tr>
<tr>
<td>Bake at 350 degrees.</td>
</tr>
<tr>
<td>Block all R rated movies</td>
</tr>
<tr>
<td>Buy the soundtrack from Straight Outta Compton.</td>
</tr>
<tr>
<td>Buy this album</td>
</tr>
<tr>
<td>Buy this song from itunes.</td>
</tr>
<tr>
<td>Call me a taxi.</td>
</tr>
<tr>
<td>Call mom.</td>
</tr>
<tr>
<td>Call this person</td>
</tr>
<tr>
<td>Can you fast forward this song?</td>
</tr>
<tr>
<td>Cancel my appointment today</td>
</tr>
<tr>
<td>Change alarm to play Enter Sandman.</td>
</tr>
<tr>
<td>Change station to ABC after the Giants game ends</td>
</tr>
</tbody>
</table>
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

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!
Voice UI Systems
Designing, developing, and deploying conversational interfaces
Ann Thymé-Gobbel and Charles R. Jankowski Jr.

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”
“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?