Unchatted Territory

Future Proofing for Conversational AI

Bing

Christi Olson

Head of Evangelism

@ChristiJOlson

Source: Tonight Show starting Jimmy Fallon; 10/10/2018

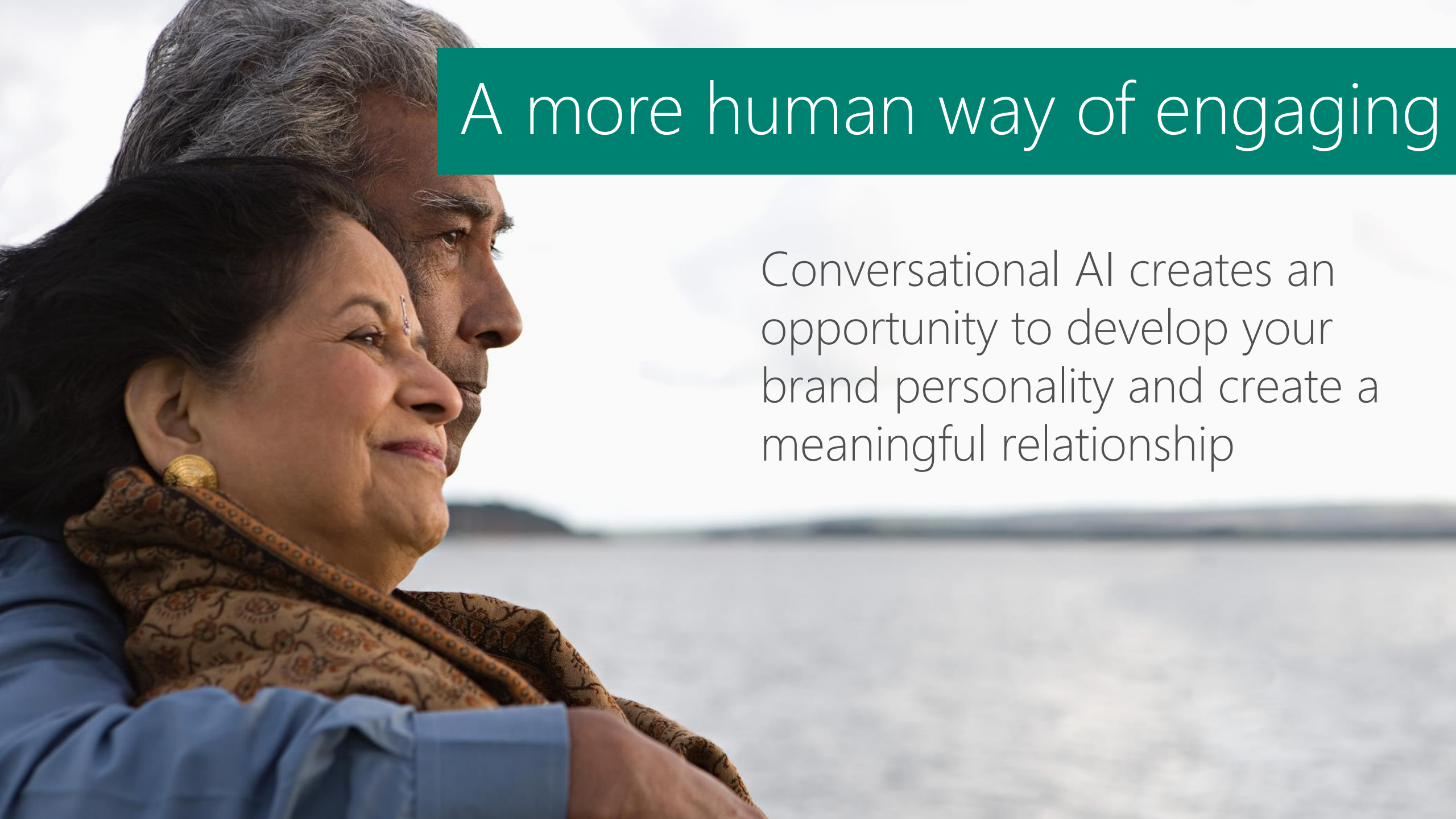
"The age of touch as the primary user interface between consumers and devices is being disrupted.

We're entering the age of conversational interfaces that are powered by our voice."

Christi Olson

@Mumbrella 360

Voice Search ISN'T the next
big disruptor.
Conversational AI is.
@ChristiJOlson #FOS18



A more human way of engaging

Conversational AI creates an opportunity to develop your brand personality and create a meaningful relationship

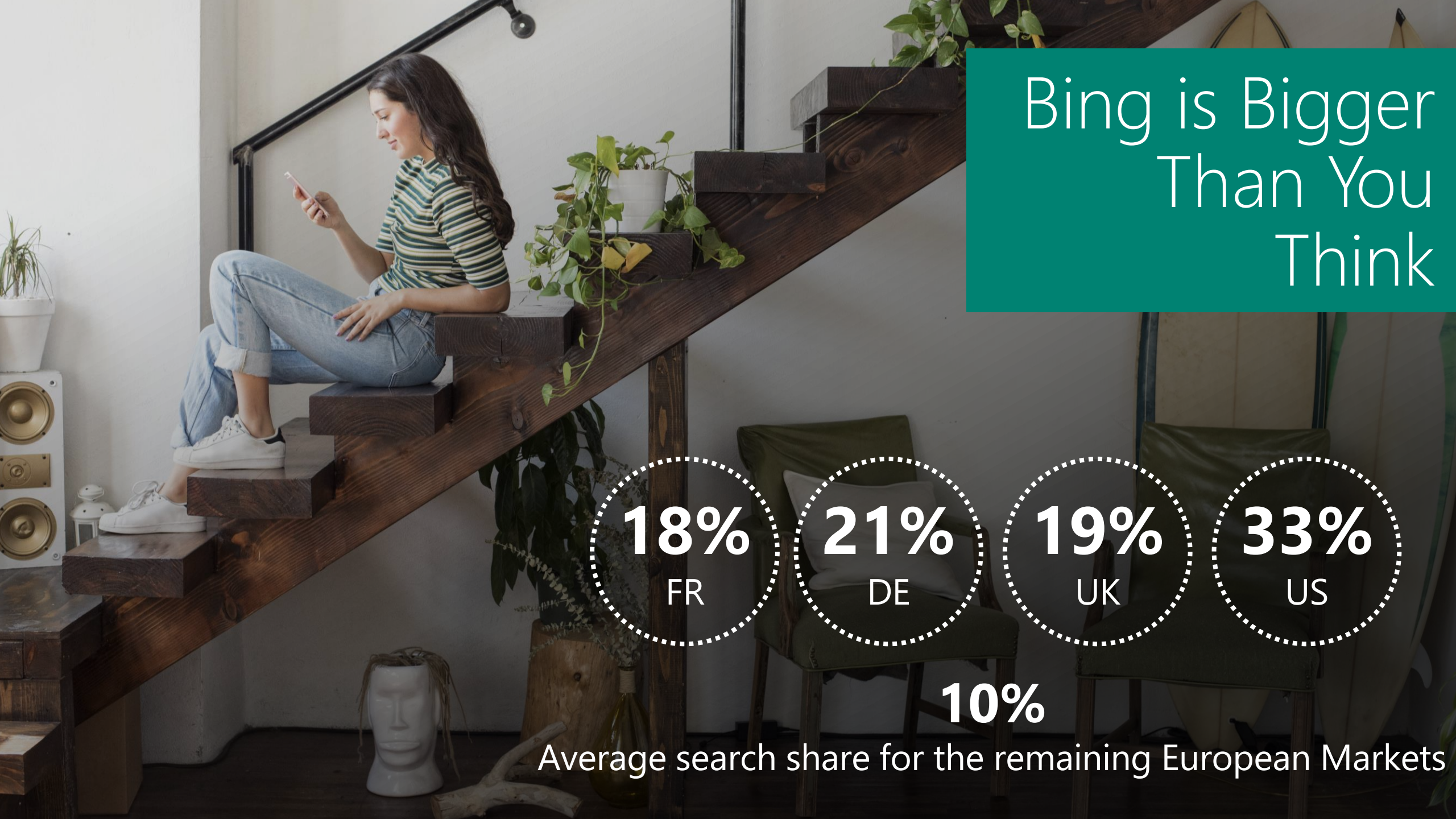
What is conversational AI?

It's technology that can hear, speak, see, understand and engage with humans.

Chatbots, Digital Assistants, Voice Skills

Intelligent Agents!

Search is the intelligence platform
Powering intelligent agents



Bing is Bigger Than You Think

18% FR

21% DE

19% UK

33% US

10%

Average search share for the remaining European Markets

Cortana has over
148M
monthly active users across 13 markets with
18B
questions asked to date

Open Framework allows for Integration

Cortana's suite of AI Cognitive Skills

Voice Assistance vs Voice Search

Voice Assistance → Skills/Actions
Intelligent Agents

Voice Search

Why should you care NOW?

Conversational AI is like “the year of mobile”

50% of
search queries coming from Smartphones

Source: ThinkWithGoogle

VOICE ASSISTANCE
WINTER
IS COMING

Source: Gartner Predicts a Virtual World of Exponential Change, Oct 2016

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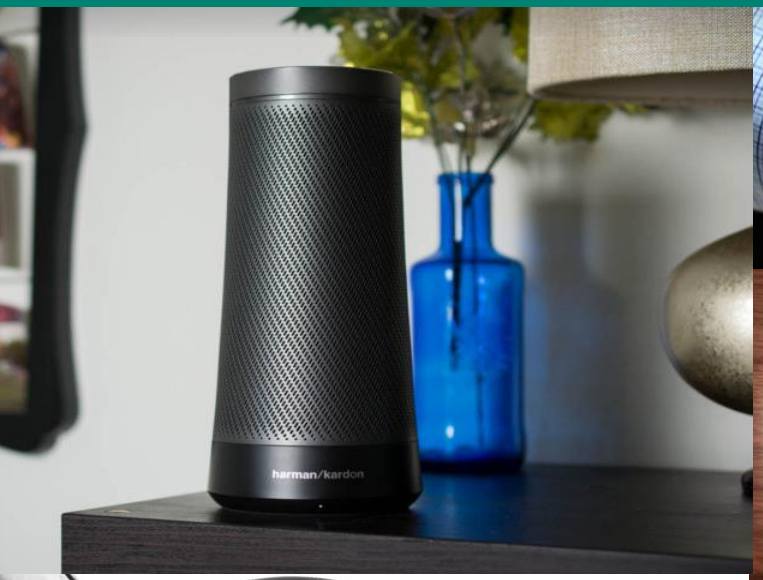
Voice Assistance Framework



Utility

What problem does it address or solve?

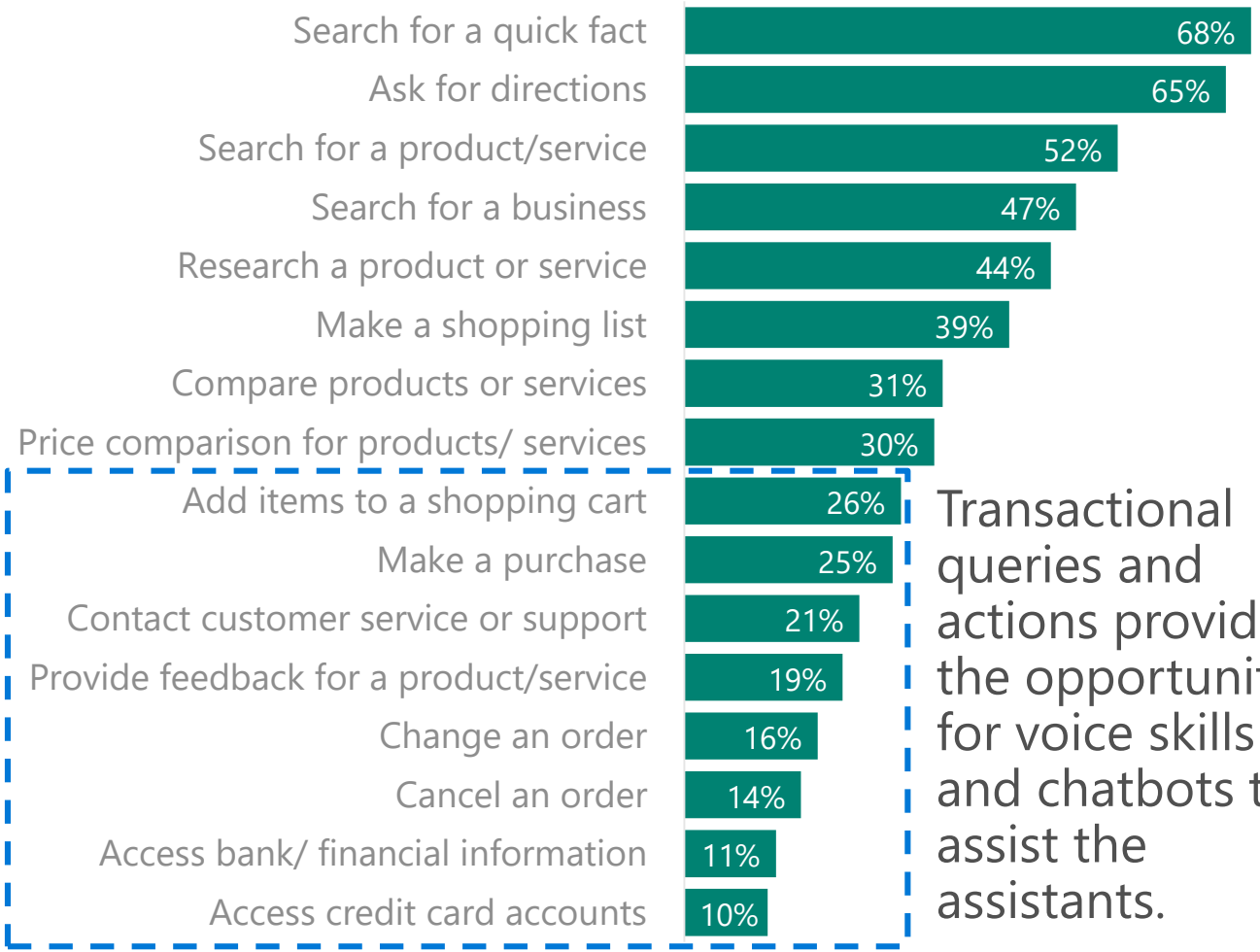
Interface / Interaction

What is the experience by device?
What is the interaction?

Discoverability

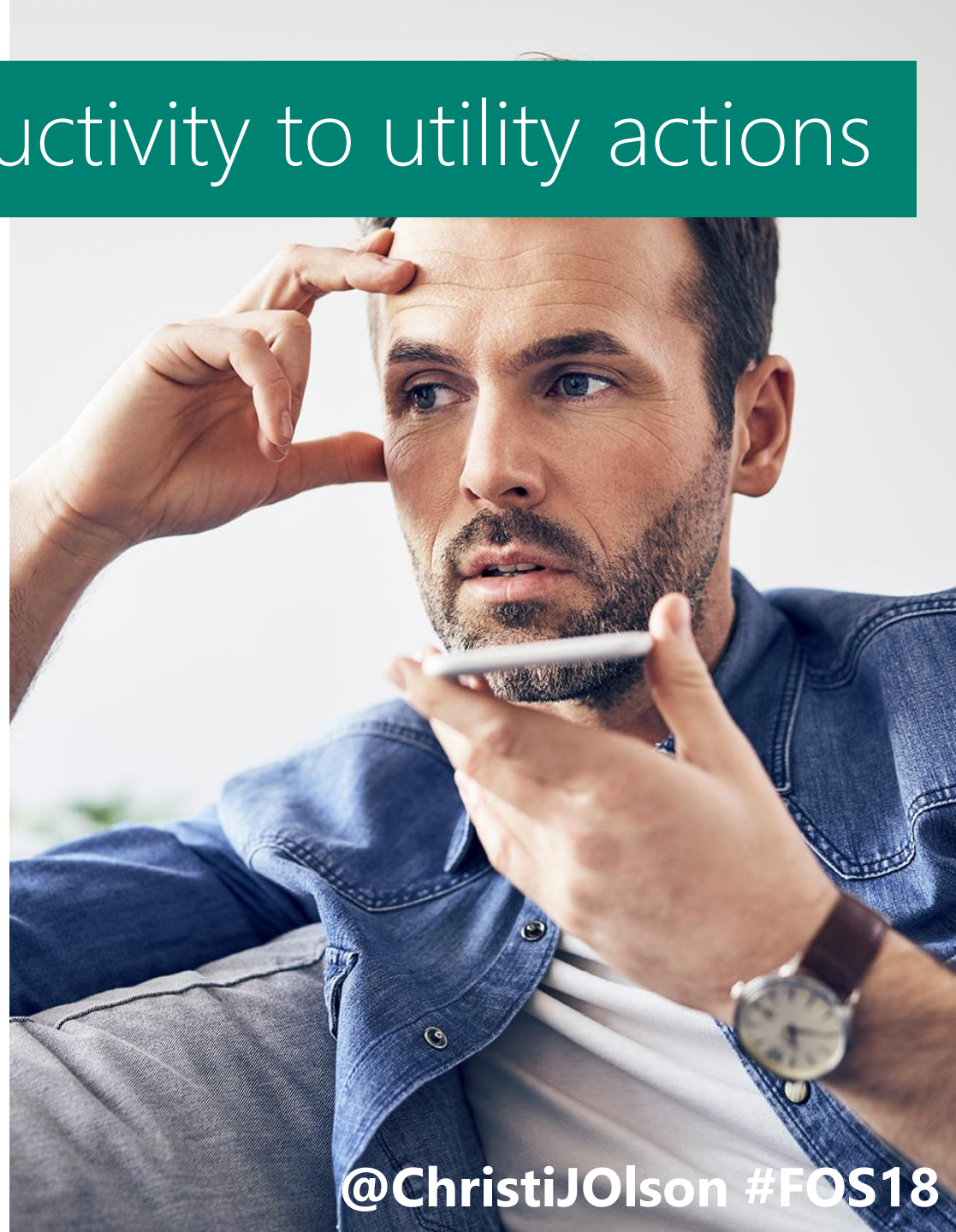
Market it!

Chatbots/Skills move from productivity to utility actions



Transactional queries and actions provide the opportunity for voice skills and chatbots to assist the assistants.

Source: Microsoft/Bing Ads: Consumer Adoption of Digital Assistants and Voice Technology, March 2018.



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The new Q&A is Question and Action

“Every brand will build intelligent conversational agents. Your brand needs to have its own agents that can talk directly to customers and to converse across multiple personal digital assistants.”
Satya Nadella, Microsoft CEO

In the next 5 years over 1/3 of consumers

expect brands to create their own **assistant** that reflects their **brand personality and voice.**

Source: Microsoft/Bing Ads: Consumer Adoption of Digital Assistants and Voice Technology, March 2018.

IQ +EQ to create an emotional connection

Emotional engagement could drive

5%

uplift In annual revenue*

Source:

Don’t create an unempathetic bot

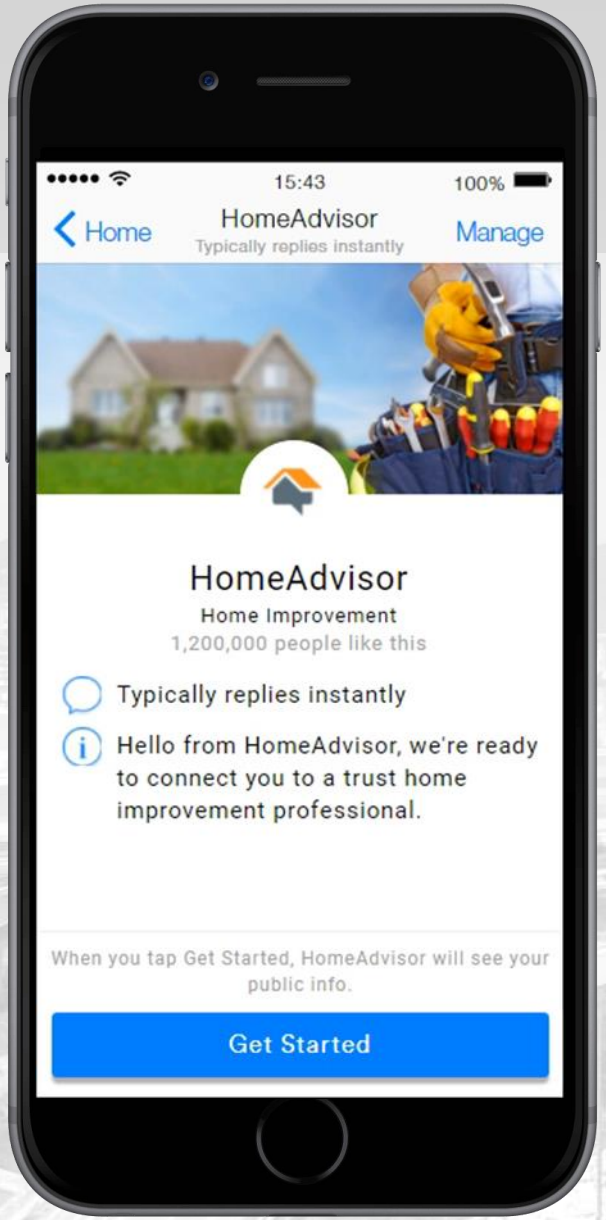
Empathy & Connections

Personality

Conversational Dialogues

Communicate with Clarity

You aren’t building a bot.
You are building a relationship



Choose an open framework for chat technology to allow you to reach your customers on the channels where they are.

Connect cross platforms

The Connector will have your bot talking in full fidelity on the most popular conversation experiences, including Skype, Slack, Facebook Messenger, Kik, Cortana, Bing, Teams, web chat, email, and many more channels.

BOT FRAMEWORK

YOUR CHANNELS

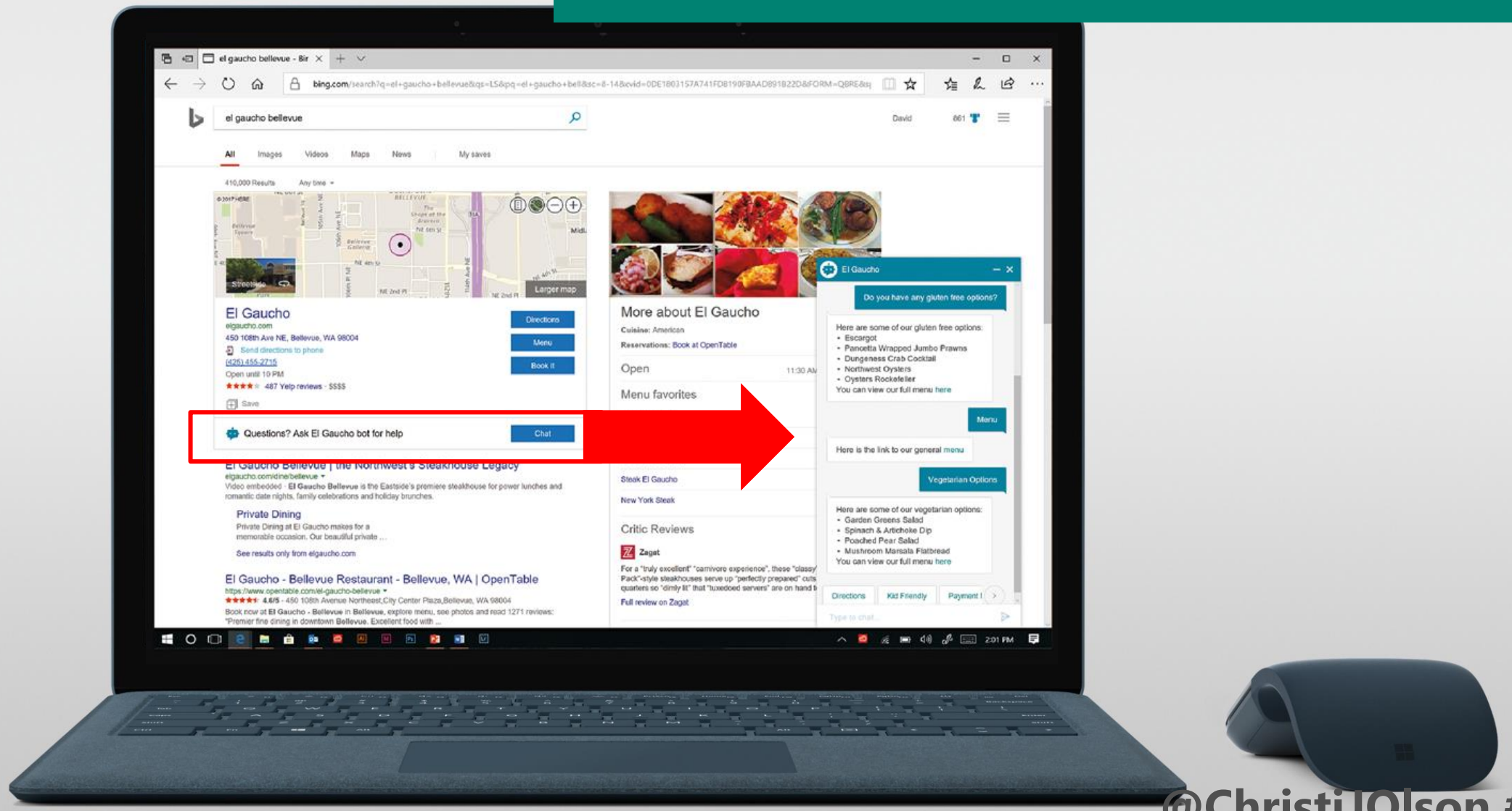
Website

MICROSOFT CHANNELS

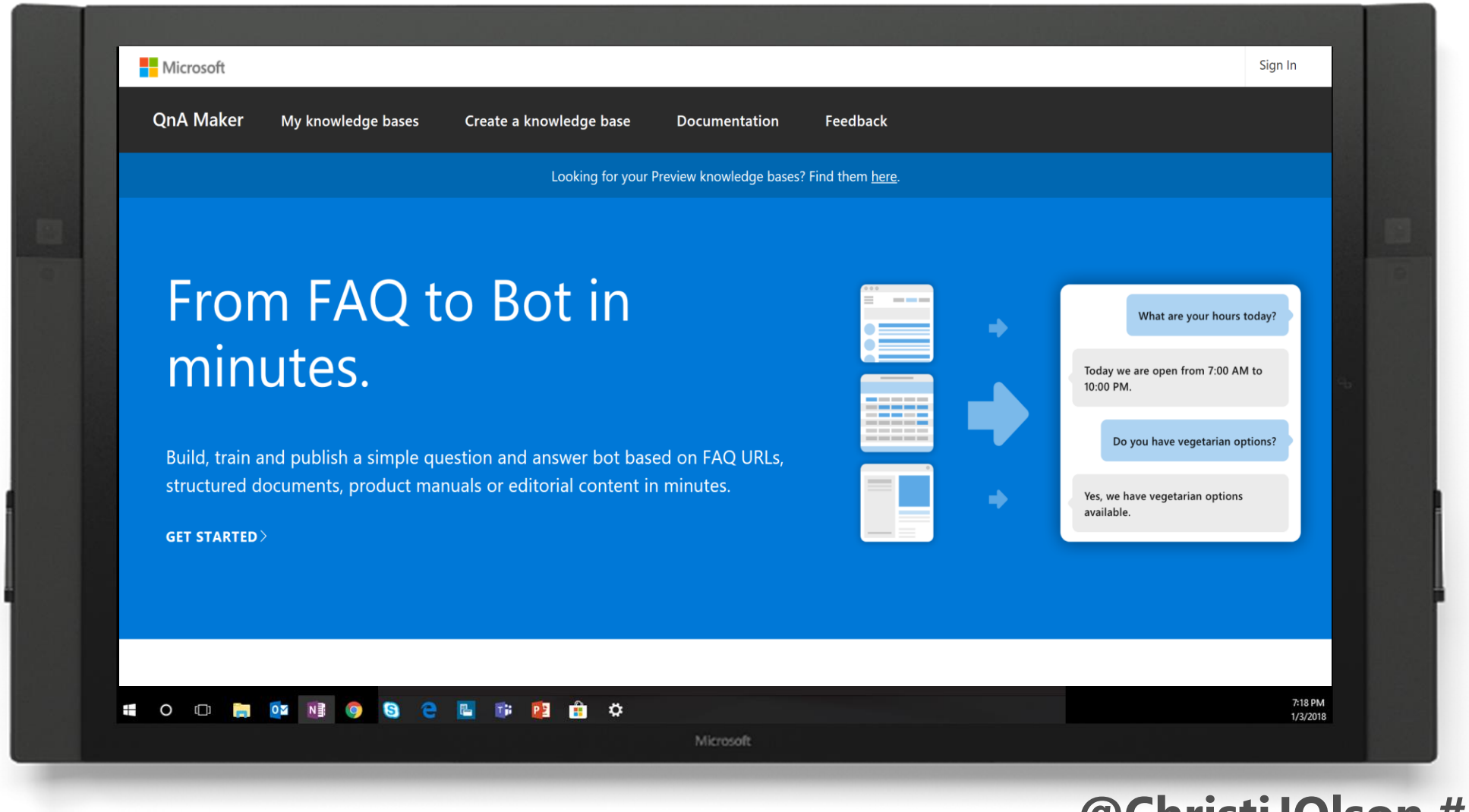
THIRD-PARTY CHANNELS

kik.

Making bots discoverable



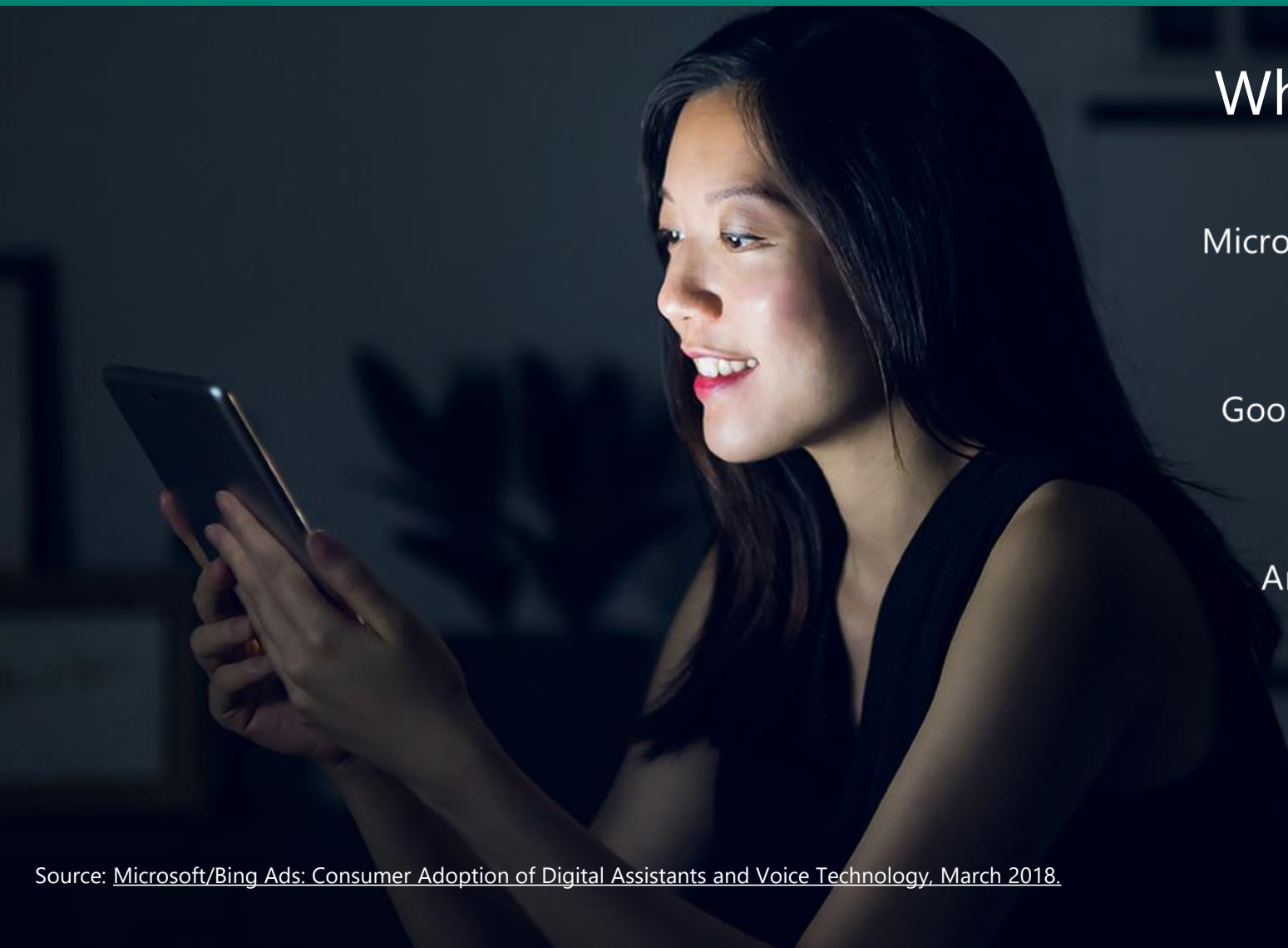
Get started (quickly) QNAmaker.ai



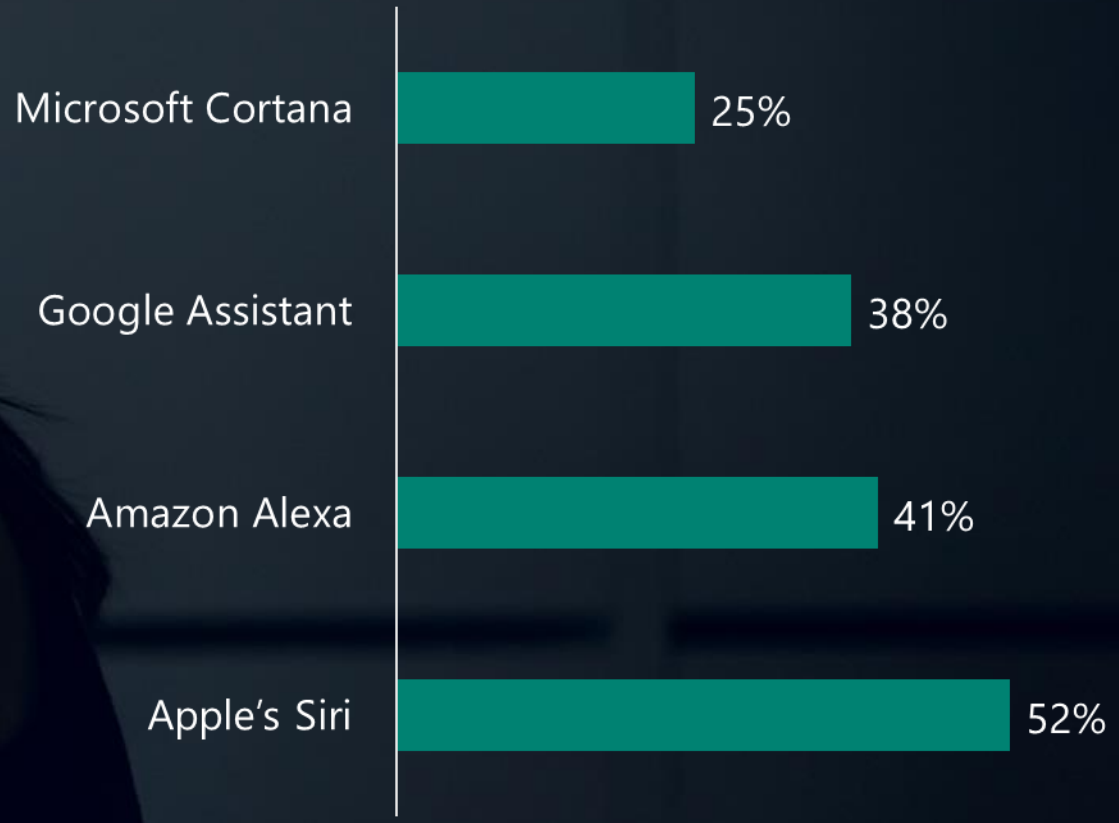
Diajio Example

Let’s talk voice trends

59% of consumers have used a digital assistant



Which assistants have you used?



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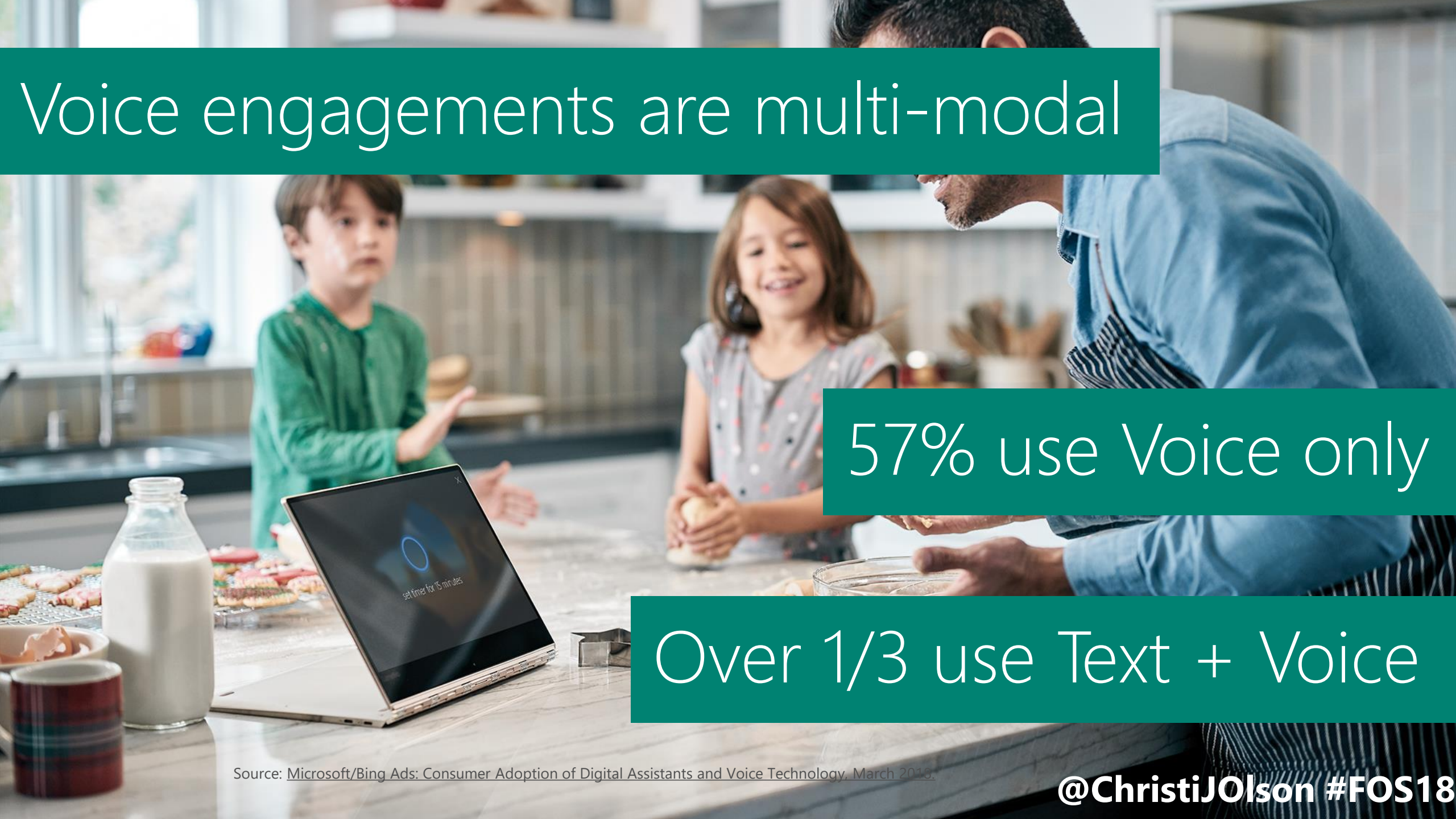
Source: Microsoft/Bing Ads: Consumer Adoption of Digital Assistants and Voice Technology, March 2018.

Voice engagements are multi-modal



57% use Voice only

Over 1/3 use Text + Voice

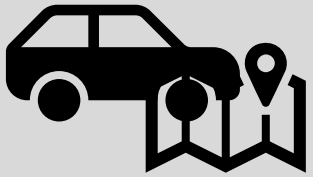
Source: Microsoft/Bing Ads: Consumer Adoption of Digital Assistants and Voice Technology, March 2018.

What activities do you use voice to do today?

68%

Find a quick fact

65%



Ask directions

52%

Search for a product/service

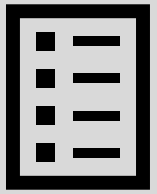
47%

Find a Business

44%

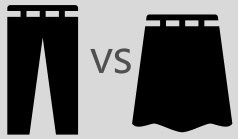
Research products/services

39%



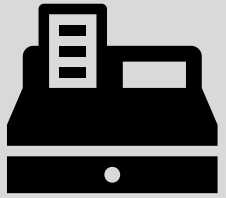
Make a shopping list

31%



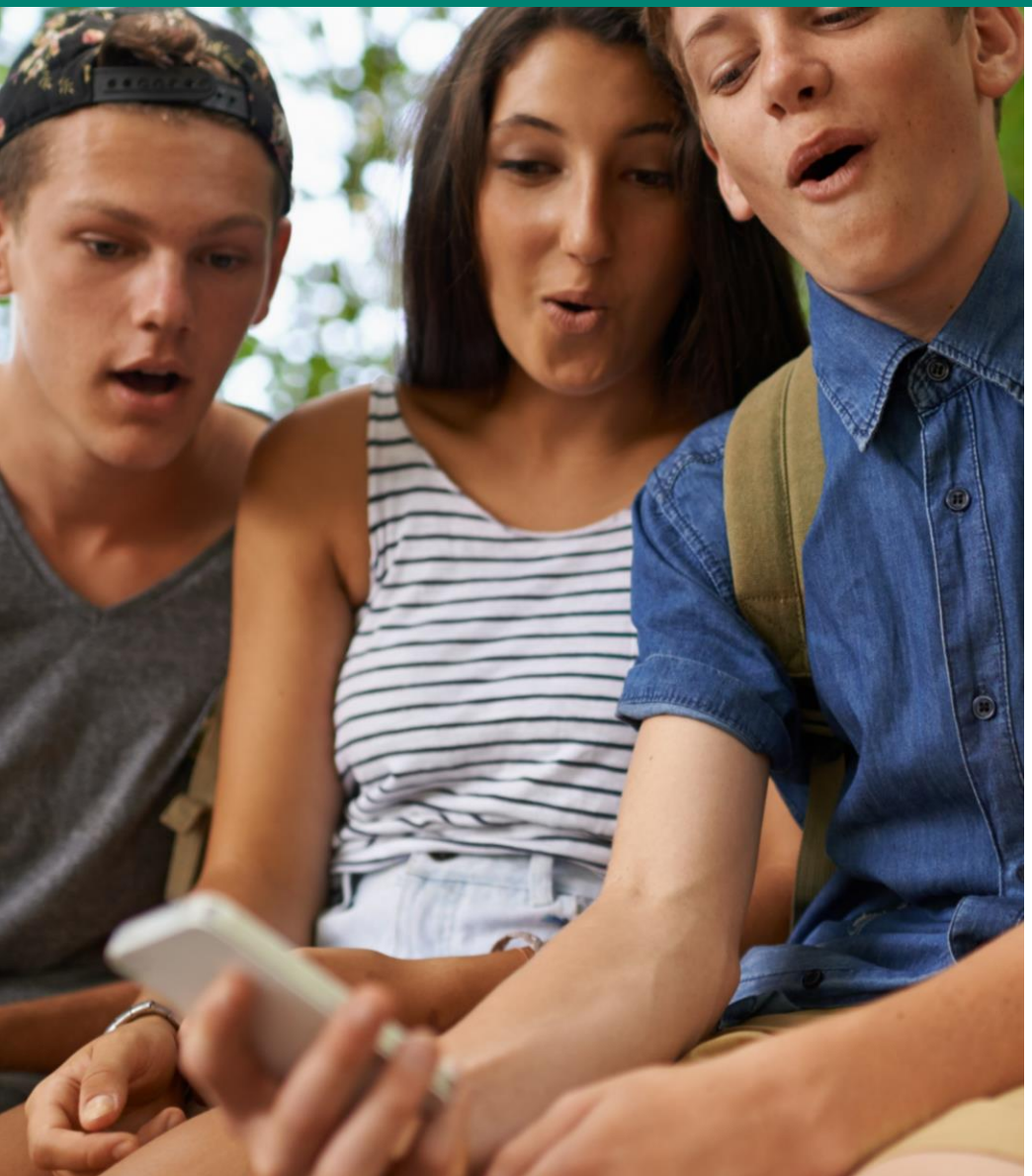
Compare products/services

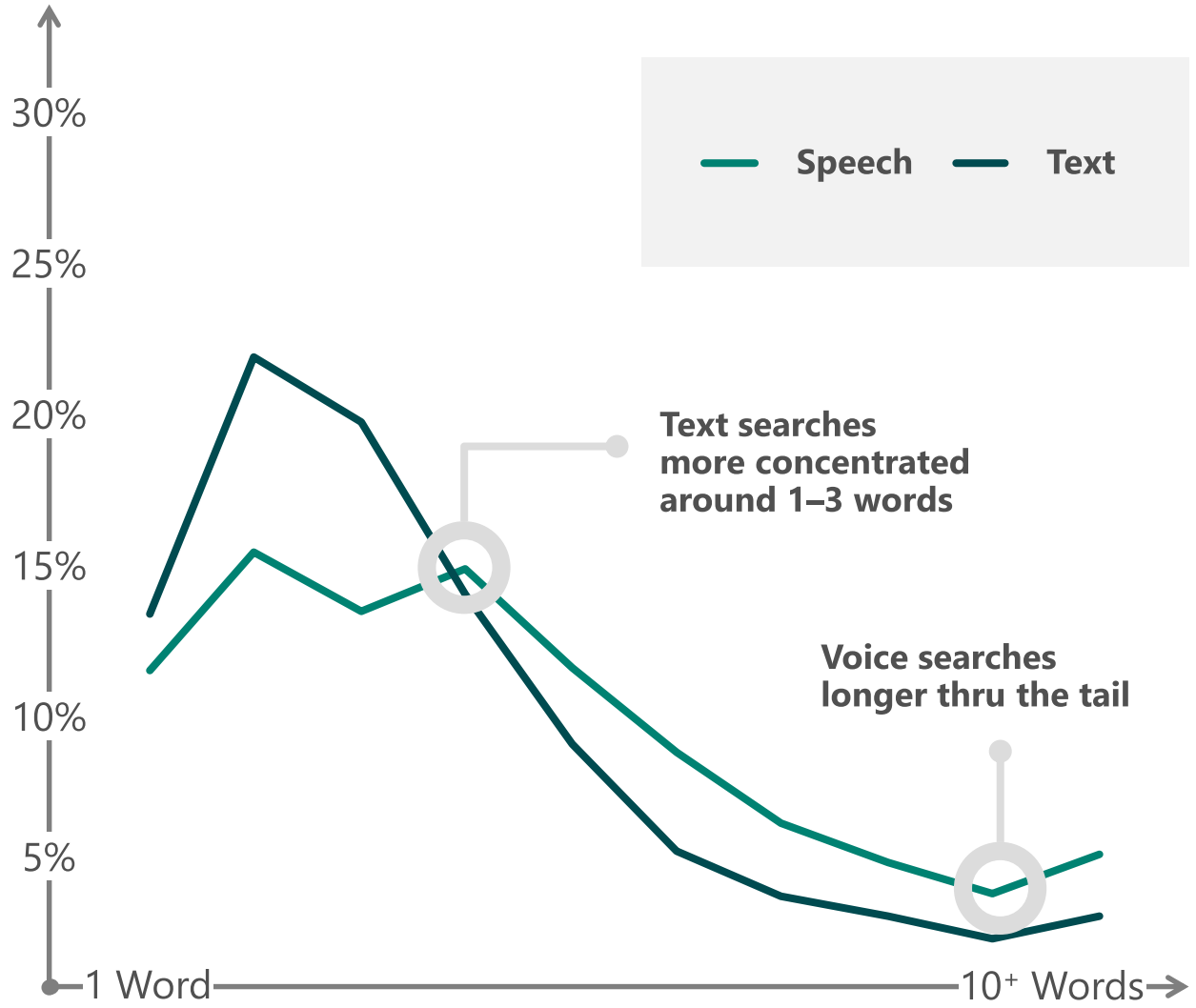
30%



Price comparisons

The conversational tone makes them longer than text





Source: Internal Microsoft Data, June 2018

Voice queries are more conversational

use natural language

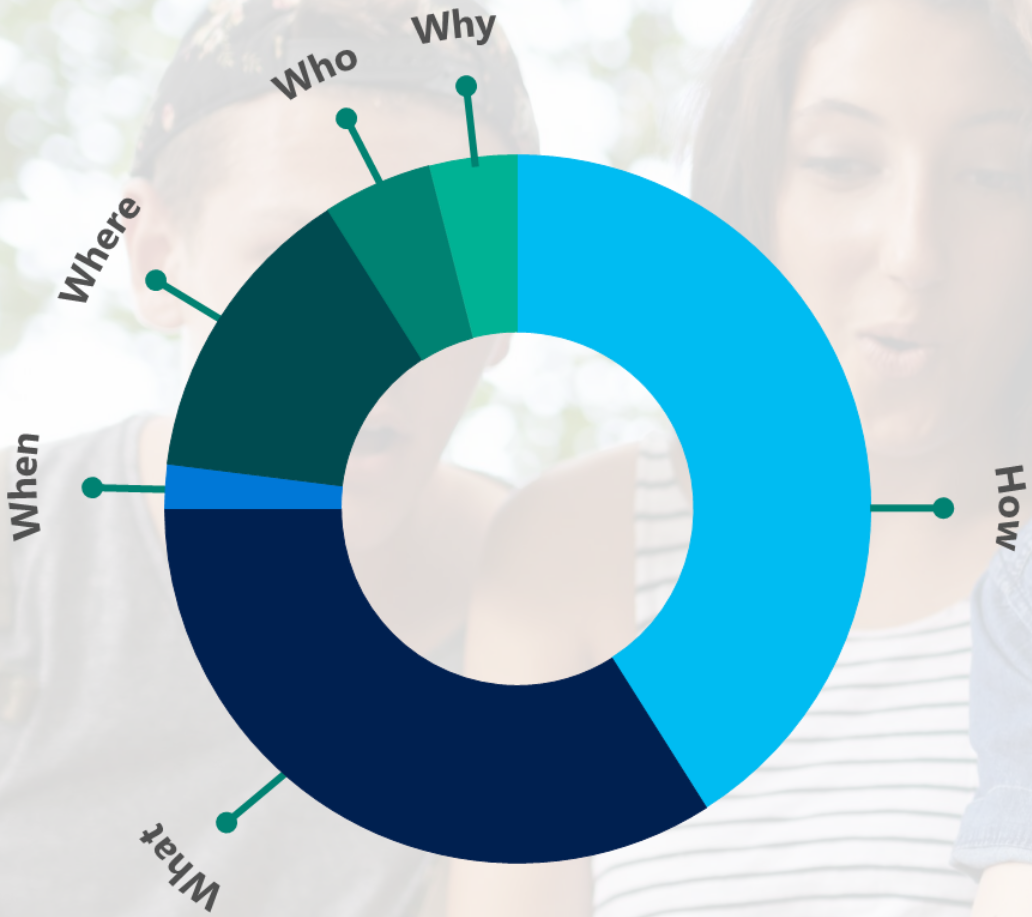
	Text	Talk
Weather		Do I need an umbrella?
News		What are todays top headlines?
Gas stations nearby		Where's the closest gas station?
Breakfast nearby		What's the best place to get breakfast nearby?
Askjfl;sadfkjl;asdfkjls		Give me cookies.

Source: Internal Microsoft Data, June 2018

Roy can’t type, he can talk…

And he knows how to make voice purchas

Natural language includes question words - level of intent



Who

Where

When

Why

What

How

Anatomy of conversational natural language queries

First Person	I / me
Permissive	Can I / Should I
Assistance	Can you / Will you / Show me
Quality	Best / Top / Highest Rated / #1
Time-Bound	Now / Today / Tomorrow / Next Week
Geo-Modifiers	[City Name], Nearby, Near, Close, Closest

Specificity

Identify natural language patterns within Cortana & Alexa Voice Skills, Google Actions

"Tell me a joke."
"Sing me a song."
"What is love?"
"Which is better, Google or Bing?"
"Send photo to my PC."
"Who was the director for (movie name)?"
"What movies are playing near me?"
"Play (artist)." Ex.: "Play Linkin Park."
"Track flight (flight number)." Ex.: "Track flight 2049."
"Is my flight delayed?" or "Is my flight on time?"
"What's the traffic like on the way home?"
"How do I get home."
"How long would it take to drive to (location)?"
"Tell me where am I?"

"Send text to (contact): (message)." "How's my schedule looking today?"
"Find food places near me."
"Find restaurants near me."
"Show me top headlines."
"Show me latest news."
"When does the sun set?"
"What's the weather like?"
"What's (percentage) of (money)?" Ex.: "What's 20% or $145.67?"
"What's the capital of (location)?" Ex.: "What's the capital of France?"
"When is Thanksgivings?“
"Find (object) photos" Ex.: "Find dog pictures."
"How tall is (known person/landmark)?"

What phrases (nGrams) do voice searchers use most often?

Add	Does	Nearby	Today
Alexa	Directions	Near me	What
Am I	Find	Need	What Is
Any	Go	Open	When
Are	Good	Play	Where
Best	Hour	Price	Which
Buy	How	Remind Me	Who
Can I	Look Up	Search	Who Has
Can You	Looking	Should	Who Sells
Do	Much	Show	Why

Source: Internal Microsoft Data, June 2018

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Meet the most commonly used assistants

Some are better at answering different types of queries

Chit chat	😊	😐	😊	😊
Informational	😐	😊	😊	😊
Commands	😊	😊	😊	😐 ☹
Navigational / Location	😐	😊	😊 😐	😊 😐
Transactional / eCommerce	😊	😊 😐	☹	☹

Sources: Performics How to Win in Voices; StoneTemple Smartest Digital Personal Assistants

Context matters as much as keywords

What should I eat?

Here are recipes you can try...

Here are local restaurants...

Have you tried staring into the fridge, closing it, then returning as if there might be something new in there? Give it a few tries, then order pizza.

Vegetables are best unprocessed, unless you put them in your own food processor.

Context matters as much as keywords

I need to buy vitamins.

Based on Christi's order history, I found NatureMade Vitamins for $13.49 on Amazon.

Sure. Vitamins. The first thing I found on Google Express is 150 vitafusion multi-vits at Target for $9.89…

I can't help with purchases right now. Here's what I found on the web.

I found this on the web…

Digital Assistants need assistance

best pizza near me

All | Maps | Images | Videos | News | Shop | My saves

Secret Pizza
Yelp (4269)
Pizza · $$$$ · The Strip
11:00 AM - 5:00 AM

Pizza Rock
Yelp (2086)
Pizza · $$$$ · Downtown
11:00 AM - 2:00 AM

Old School Pizzeria
Yelp (713)
Pizza · $$$$ · North Las Vegas
11:00 AM - 9:00 PM

Wolfgang Puck Bar & Grill
Yelp (1613)
Dessert · $$$$ · South Las
11:00 AM - 6:00 AM

Biaggio's Pizzeria
Yelp (656)
Pizza · $$$$ · Spring Valley
10:00 AM - 10:00 PM

Giordano's
Yelp (911)
Salad, Italian · $$$$ · The Strip
11:00 AM - 2:00 AM

North Italia
Pizza, Italian
11:00 AM - 10

The 10 Best Pizza Places in Las Vegas - TripAdvisor
www.tripadvisor.com › United States › Nevada (NV) › Las Vegas
Best **Pizza in Las Vegas**, Nevada: Find **TripAdvisor** traveler reviews of **Las Vegas Pizza** places and search by price, location, and more.
Pizza Rock · Giordano's · 800 Degrees · Five50 · The Naked City Pizza Shop · Project Pie

Best Pizza Las Vegas, NV - Last Updated October 2018 - Yelp
https://www.yelp.com/search?find_desc=Best+Pizza&find_loc=Las+Vegas...

Can you optimize for voice search?

Yes! It's SEO **fundamentals**

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Before you ask… SEO isn't actually dead.

Entrepreneur

SEO

The Top 4 Reasons SEO Is Dead

186 shares

Add to Queue

Tim Burd

GUEST WRITER

@ChristiJOlson #FOS18

Why voice optimization matters

"With Voice search "Position Zero" will become the "Position Only."

Dr. Pete Meyers,

Chief Data Scientist @MOZ

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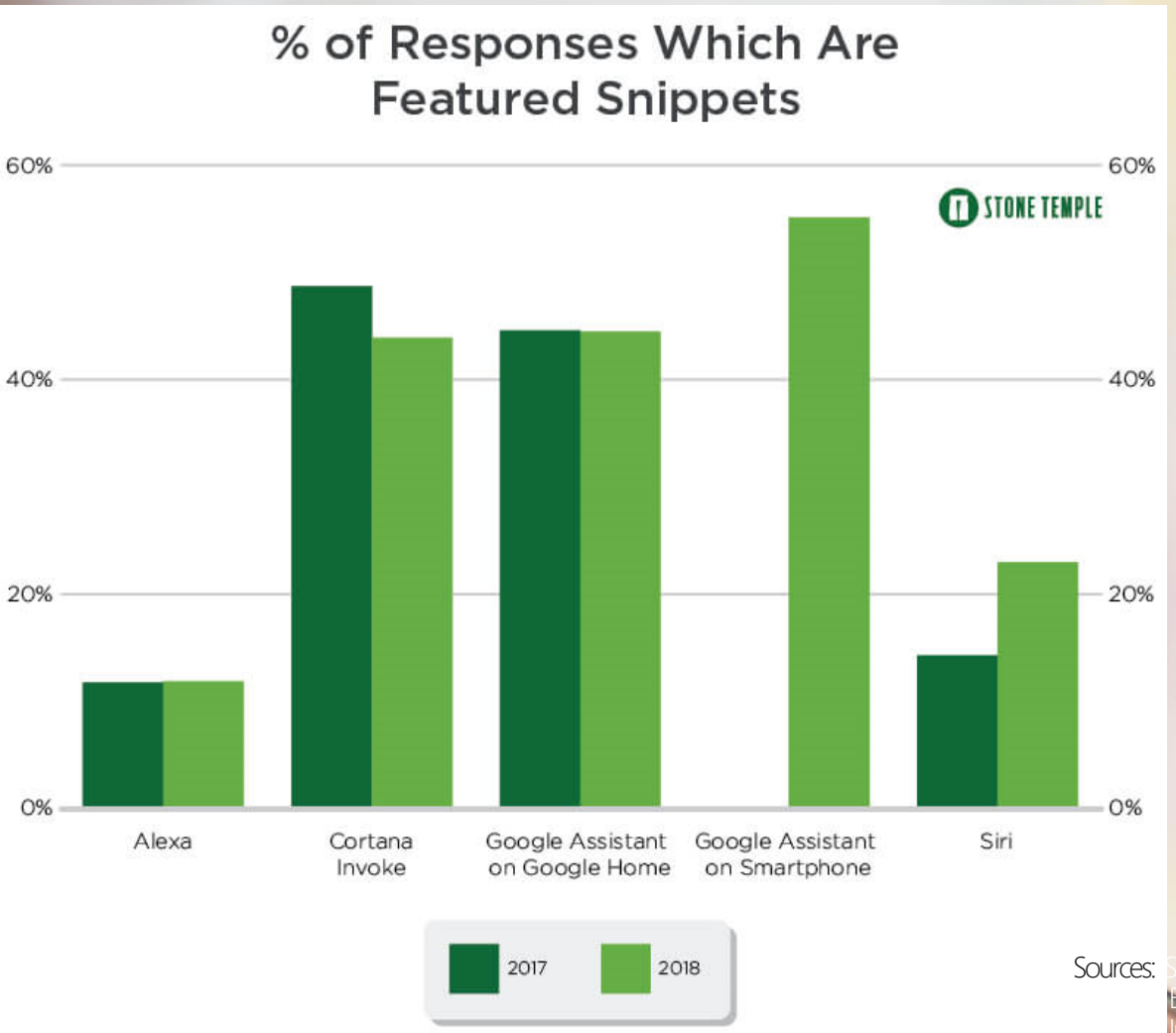
~40% of spoken responses come from featured snippets in the Search Results



Sources: Stone Temple Digital Personal Assistant Study 2018; Backlinko, Voice Search SEO Study, 2018 Internal Microsoft Data 2018

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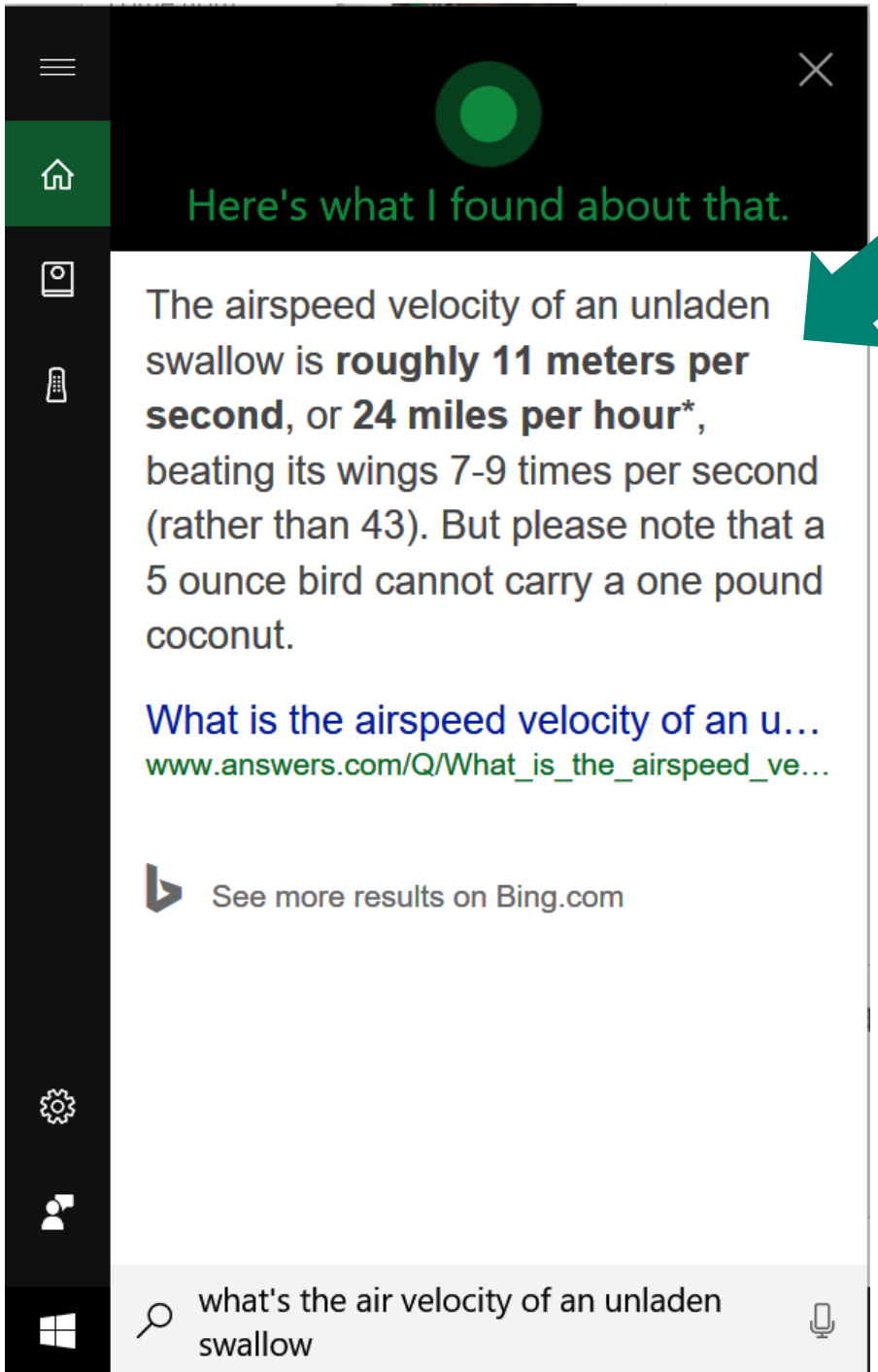
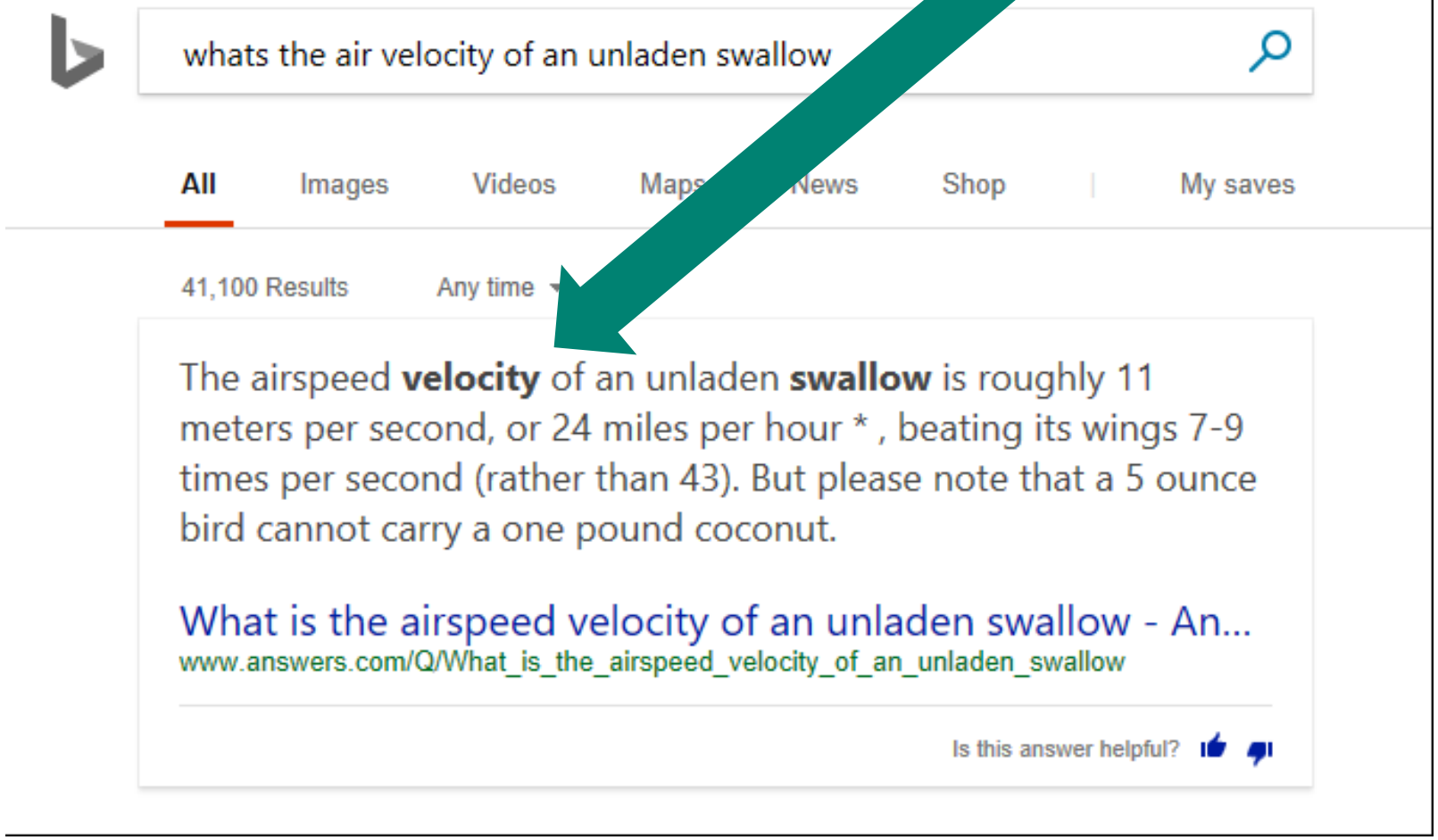
Hey Cortana....
What's the air velocity of an unladen swallow?



Spoken (and visual response)

Featured Snippet (from website)



Optimizing for Voice = Featured Snippets

1. Find queries where you are currently ranking in the top 10
2. Identify a simple question (informational queries) related to that query
3. Choose how to structure your answer (paragraph, table, list)
4. Provide a straight forward answer that adds value
5. Write the answers so it sounds natural when spoken aloud
6. Think about character count – does it fit on a mobile screen?
7. Make it easy to find – **SEO best practices + Fast Loading Pages + Schema**

Voice SEO Optimization by Query Type

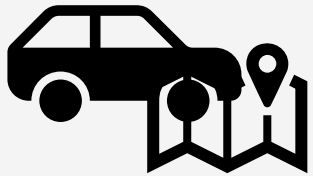
Informational

Discovery
Research / Information

- Featured Snippet Optimization
- Knowledge graph answer boxes
- Schema Mark-up
- FAQs in natural language
- Optimize for Page Speed

Navigational

Find a business
Location based



- Own your Directory Listings:
  - Apple Maps
  - Google My Business
  - Bing Places
- Location optimized site-content
- Customer Reviews

Transactional

eCommerce
Purchase / Orders

- Product Schema Mark-up
- Product Pages
- FAQs in natural language
- Customer Reviews
- Voice Skills / Chatbots to assist with purchase process

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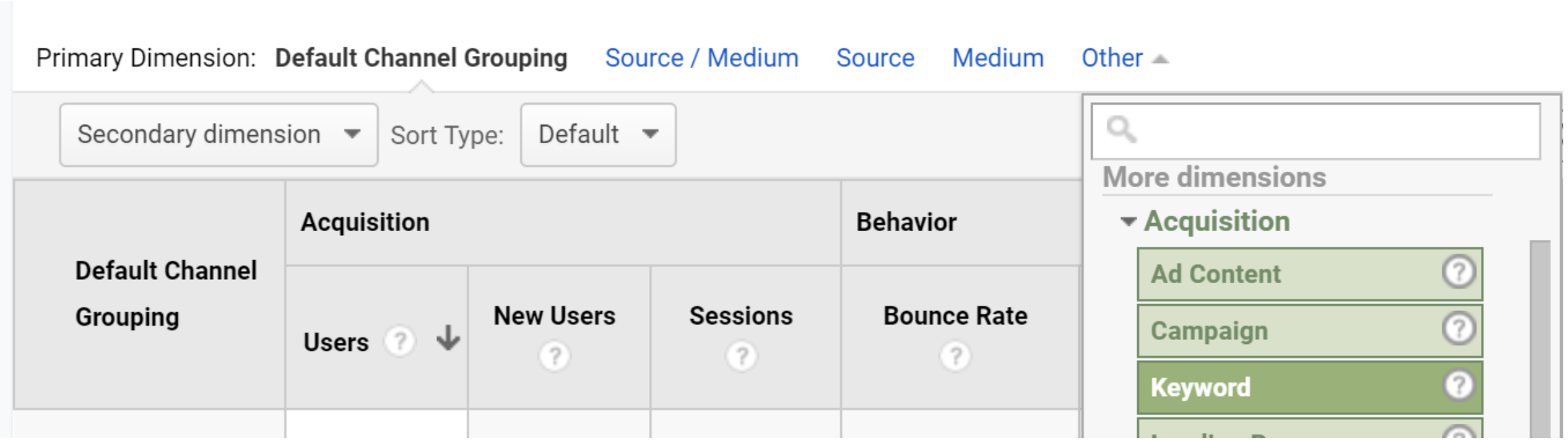
I acknowledge that Voice Data isn't public

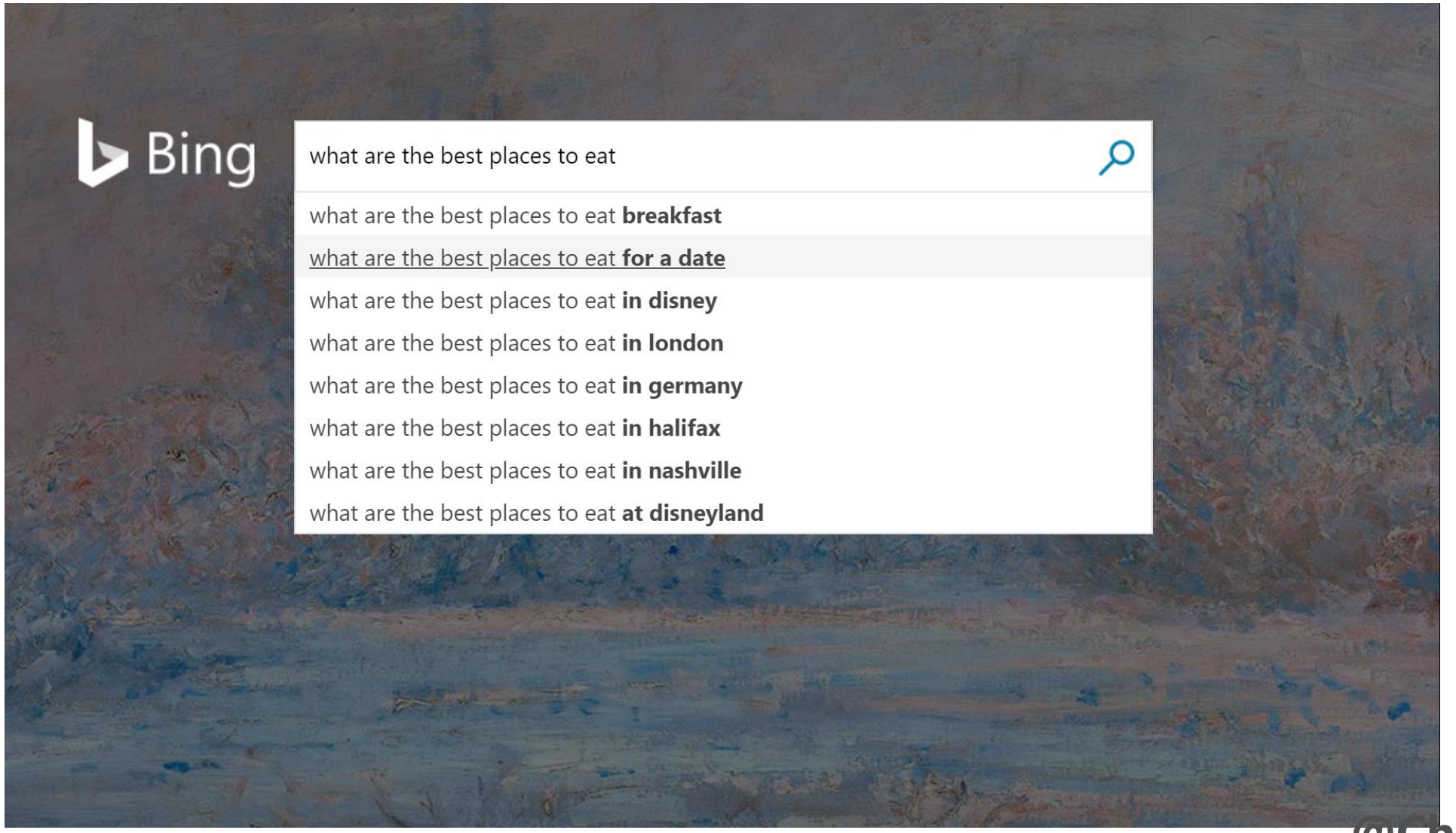
So then how can we find what our customers are asking?

Use your analytics or third party platforms

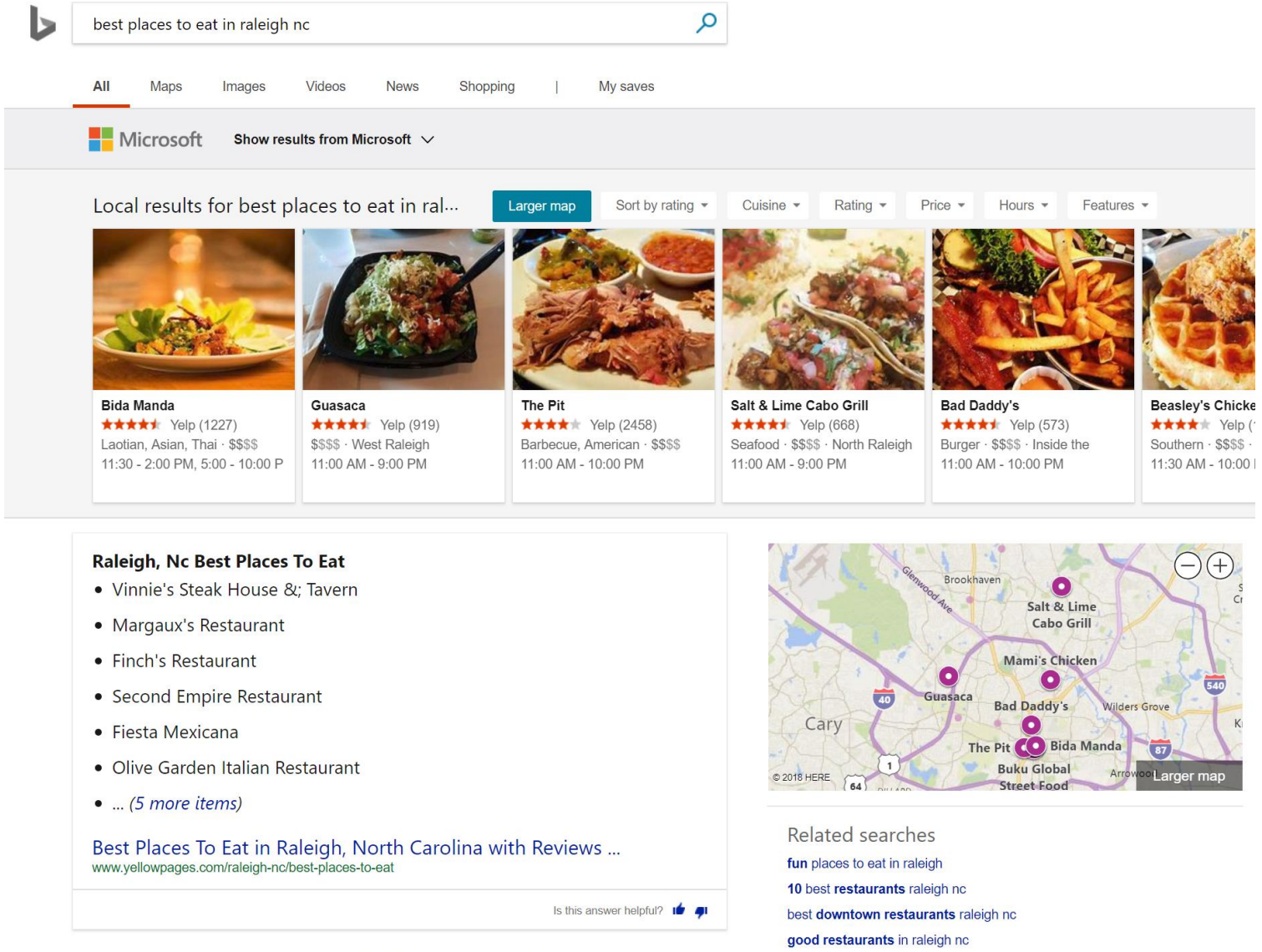


Then filter the queries and keywords by: Question Words, First Person, Permissive Phrases, etc

You could mine Suggested Queries



You could mine related searches



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You could mine Suggested Queries

Related searches

fun places to eat in raleigh

10 best **restaurants** raleigh nc

best **downtown restaurants** raleigh nc

good restaurants in raleigh nc

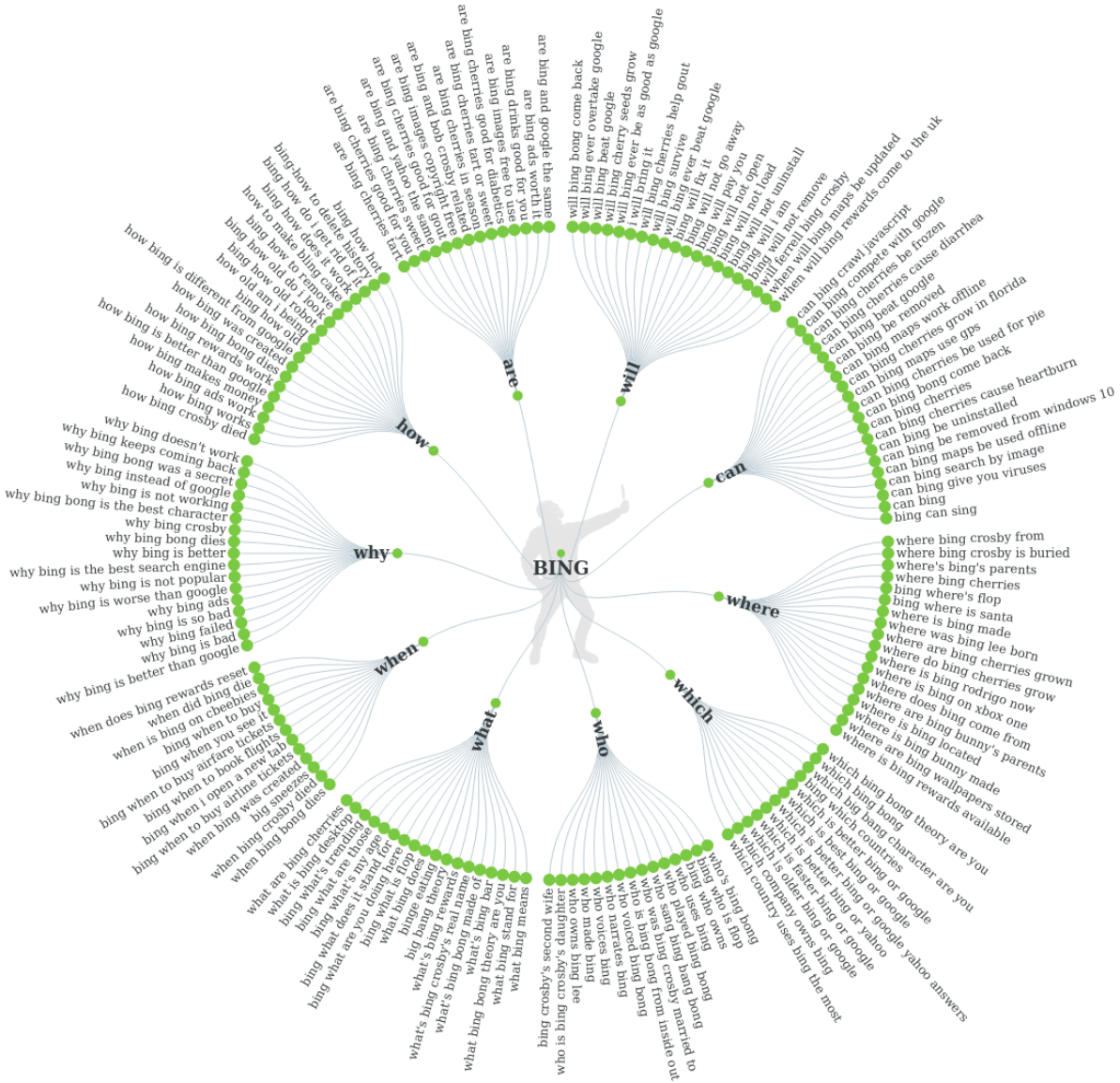
nice restaurants in raleigh nc

best **restaurants** in raleigh nc

best **restaurants north** raleigh

downtown raleigh **restaurants**

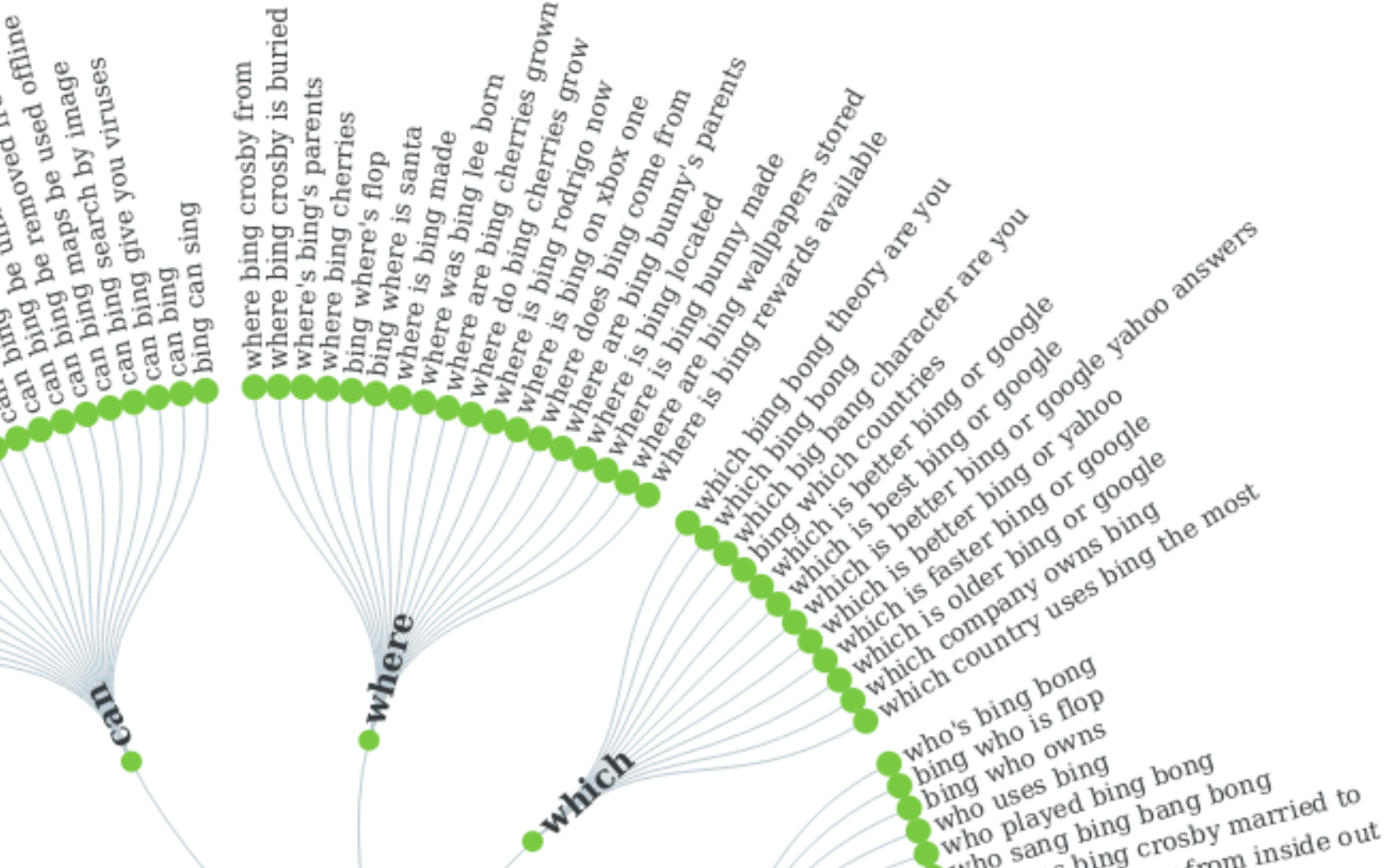
Or use public tools to get insights



AnswerThePublic.com

@ChristiJOlson #FOS18

Answer the public visualizes question queries



AnswerThePublic.com

@ChristiJOlson #FOS18

Answer the public visualizes question queries

AnswerThePublic.com

@ChristiJOlson #FOS18

Use your Search Query Report data

Dig through query logs OR paid search query reports

Check Query Length – Long tail more likely to be conversational

```
=IF(LEN(TRIM(B2))=0,0,LEN(TRIM(B2))-LEN(SUBSTITUTE(B2," ",""))+1)
```

B2=The cell where the query is

Use your Search Query Report data

Identify the Question words

B2=The cell where the query is

```
=IF(B2="","",
IF(ISNUMBER(SEARCH("show",B2)),"",
IF(ISNUMBER(SEARCH("how",B2)),"how",
IF(ISNUMBER(SEARCH("what",B2)),"what",
IF(ISNUMBER(SEARCH("where",B2)),"where",
IF(ISNUMBER(SEARCH("when",B2)),"when",
IF(ISNUMBER(SEARCH("why",B2)),"why",
"")))))))
```

Voice data is within your paid search

and webmaster tools accounts.

You just have to know how to find it.

Search is the Intelligent Platform powering Conversational AI.

- Conversational AI is more than voice search. It's technology that assists consumers in their every day life.
- Create Voice Skills and Chatbots to assist with actions
- Identify the questions your customers are asking
- Create amazing and concise answers to the questions that add value
- Prioritize SEO best practices & fundamentals
- Use your Paid Search campaign to answer voice queries without a featured snippet

Find me online and Say Hi!

@ChristiJOlson

Getting Voice Right.

How you can start taking advantage of voice today in paid search:

What Voice Queries exist today?

- Pull a search term report
- Analyze the long tail queries, in order to understand how your audience is using natural language.
- Analyze what questions your audience is asking, and how.

Optimize your Campaigns

- Create new campaigns/ad groups based on the conversational queries
- Use Broad, Broad Modified and Phrase Match

Be Prepared for your Audiences Questions

- Offer compelling extensions such as call extensions, product ads, location extensions
- Offer compelling ad copy responding to your questions
- Understand the device and the situational context by device. Evaluate using mobile bid modifiers to target based on device
- Create on-site content to provide answers for their questions.

@ChristiJOlson #voicesearch

Getting Voice Right.

How you can start taking advantage of voice today for SEO:

Use structured data & schema mark-up

- Use schema to provide context around your content
- Use Speakable schema mark-up

Page Speed Matters

- Page speed is a voice optimization ranking factor

Structure content appropriately – Optimize snippet content for voice

- Evaluate where to compete, start with queries ranking on pages 1-2
- Do your Research. Mine search suggestions and people also ask.
- Compete for the featured snippets – ones feature 3 lines of text
- Evaluate the type of content – tables vs text

Write in conversational natural language

- Write content so that it sounds natural when read aloud.
- Think about keeping it conversational in tone and nature.

Create useful and valuable content

- Don’t create single paragraph gateway pages in attempt to optimize for voice search.
- Think about user experience and make it easy for the user to read and understand. It may be useful to make it easy for search engines and the users to understand that content is the answer to a specific question.

Optimizing for Voice = Featured Snippets

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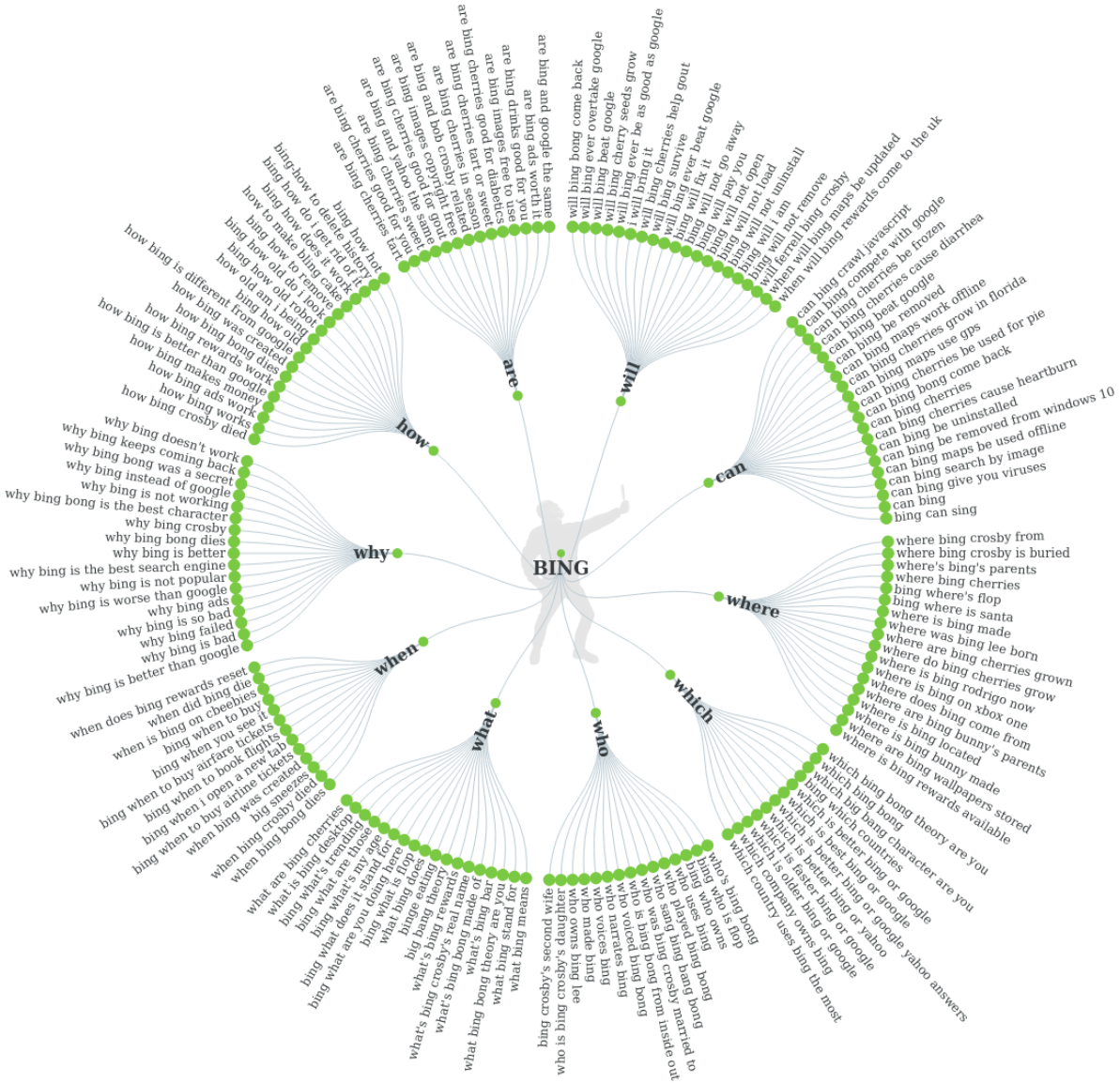
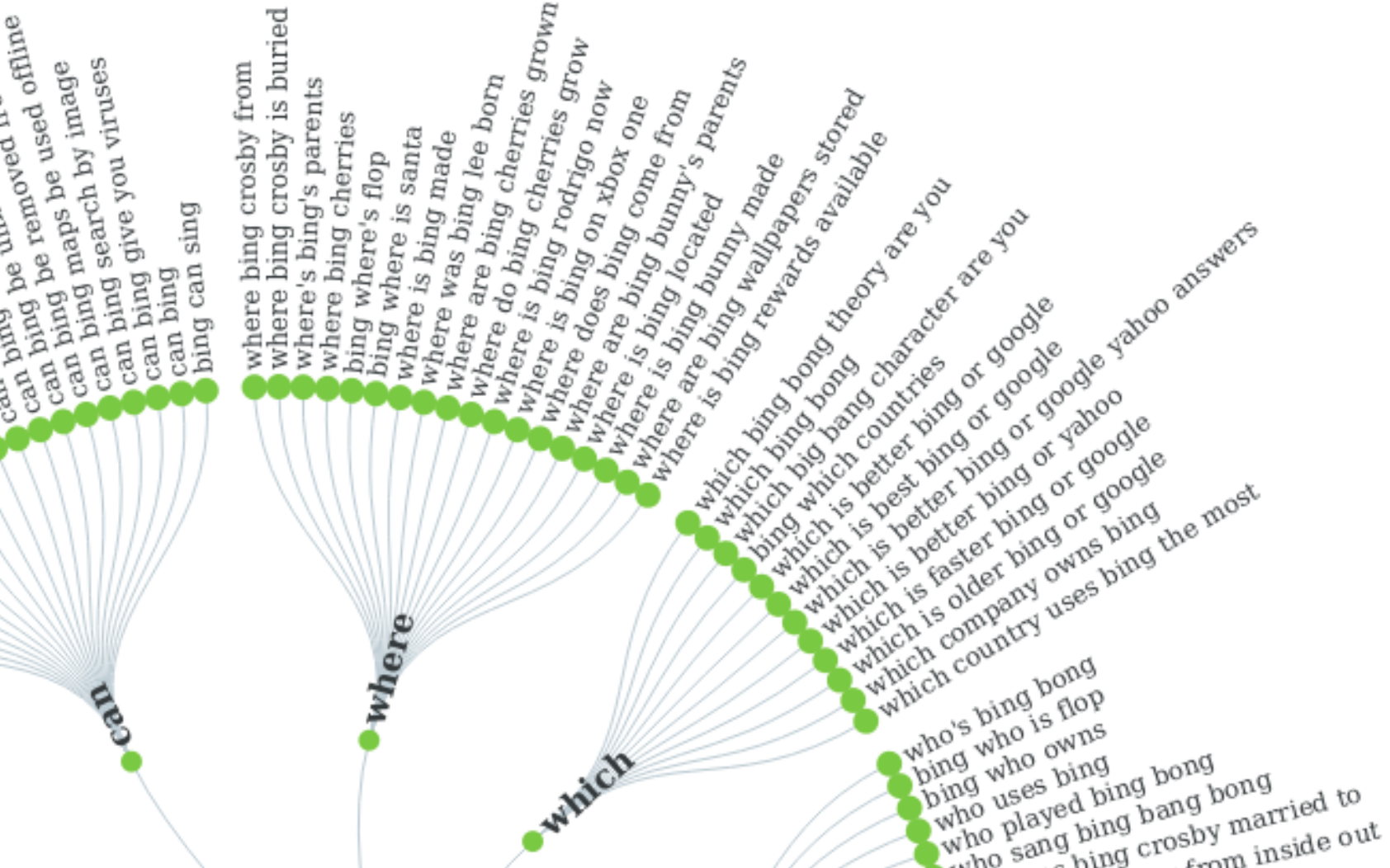
3. Choose how to structure your answer (paragraph, table, list)
4. Provide a straight forward answer that adds value
5. Write the answers so it sounds natural when spoken aloud
6. Think about character count – does it fit on a mobile screen?
7. Make it easy to find – **SEO best practices + Fast Loading Pages + Schema**

Step 1: Identify the questions



AnswerThePublic.com

Step 1: Identify the questions



AnswerThePublic.com

Step 1: Identify the questions

why bing is better than google
why bing is bad
why bing failed
why bing is so bad
why bing is worse than google
why bing ads
why bing is not popular
why bing is the best search engine
why bing bong dies
why bing crosby
why bing is not working
why bing bong is the best character
why bing was a secret
why bing instead of google
why bing bong was a secret
why bing bong keeps coming back
why bing doesn't work
why bing crosby died
how bing works
how bing crosby
how bing ads work
how bing makes money
how bing is better than google
how bing rewards works
how bing was bong created
how bing from google
how bing is different
how old am i being
how old do i look
how to remove cake
how to make bing cake
how to get rid of it
how does it work
how do i delete history
how to delete history
bing how hot
are bing cherries good for you
are bing cherries sweet
are bing cherries good for gout
are bing and yahoo the same
are bing images copyright free
are bing and bob crosby related
are bing cherries
are bing cherries tart
bing how to delete history
bing how do i get rid of it
bing how does it work
bing how to make bing cake
bing how to remove cake
bing how old do i look
bing how old am i being
bing how old am i robot
bing was created from google
how bing rewards works
how bing is better than google
how bing makes money
how bing is different from google
how bing was created
how bing is not working
how bing bong is the best character
how bing instead of google
how bing bong was a secret
how bing bong keeps coming back
why bing doesn't work
why bing died
why bing works
why bing ads work

Use your Search Query Report data

Dig through query logs OR paid search query reports

Check Query Length – Long tail more likely to be conversational

=IF(LEN(TRIM(B2))=0,0,LEN(TRIM(B2))-LEN(SUBSTITUTE(B2," ",""))+1)

B2=The cell where the query is

Use your Search Query Report data

Identify the Question words

B2=The cell where the query is

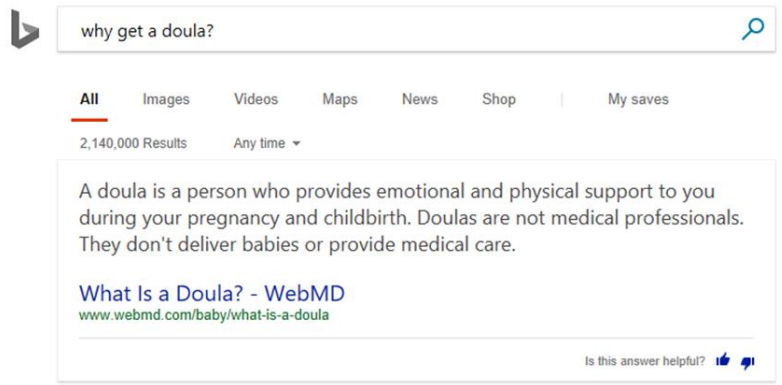
```
=IF(B2="","",
IF(ISNUMBER(SEARCH("show",B2)),"",
IF(ISNUMBER(SEARCH("how",B2)),"how",
IF(ISNUMBER(SEARCH("what",B2)),"what",
IF(ISNUMBER(SEARCH("where",B2)),"where",
IF(ISNUMBER(SEARCH("when",B2)),"when",
IF(ISNUMBER(SEARCH("why",B2)),"why",
"")))))))
```

Identify your business opportunity

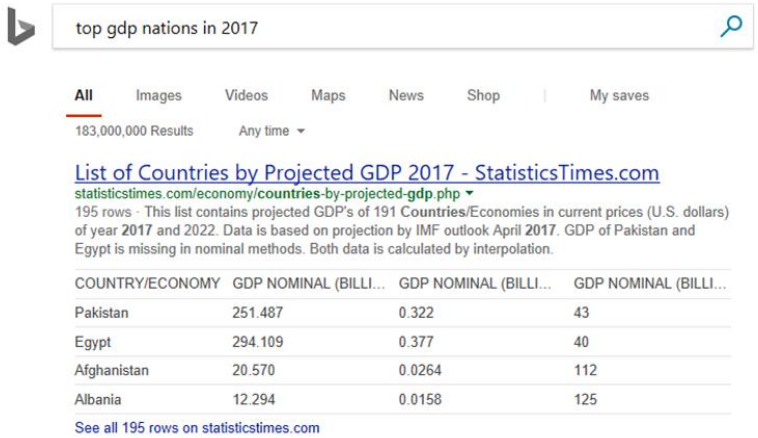
What questions make the most sense based on your business, products and services?

Step 2: Choose how to structure your answers

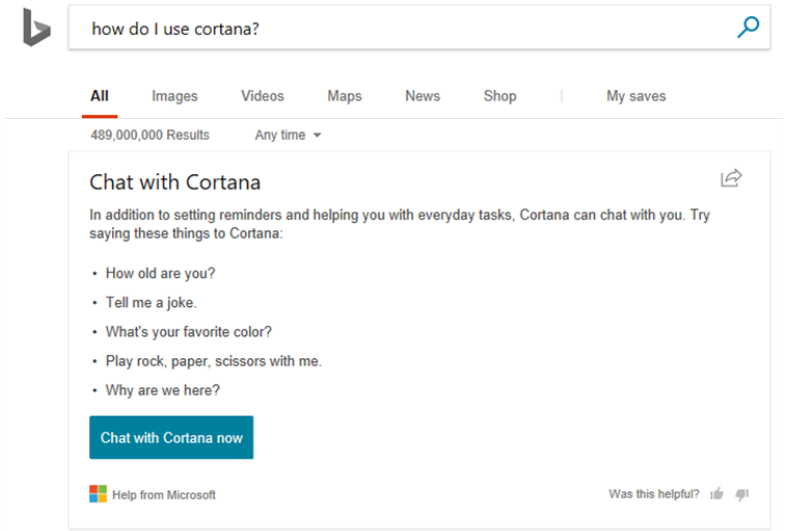
Paragraph



Table



Lists (Ordered/ Bulleted)



Step 2: Choose how to structure your answers

If you are trying to rank for:

- Questions, use a paragraph.
- prepositions, use a list.
- For pricing comparisons, use a table.

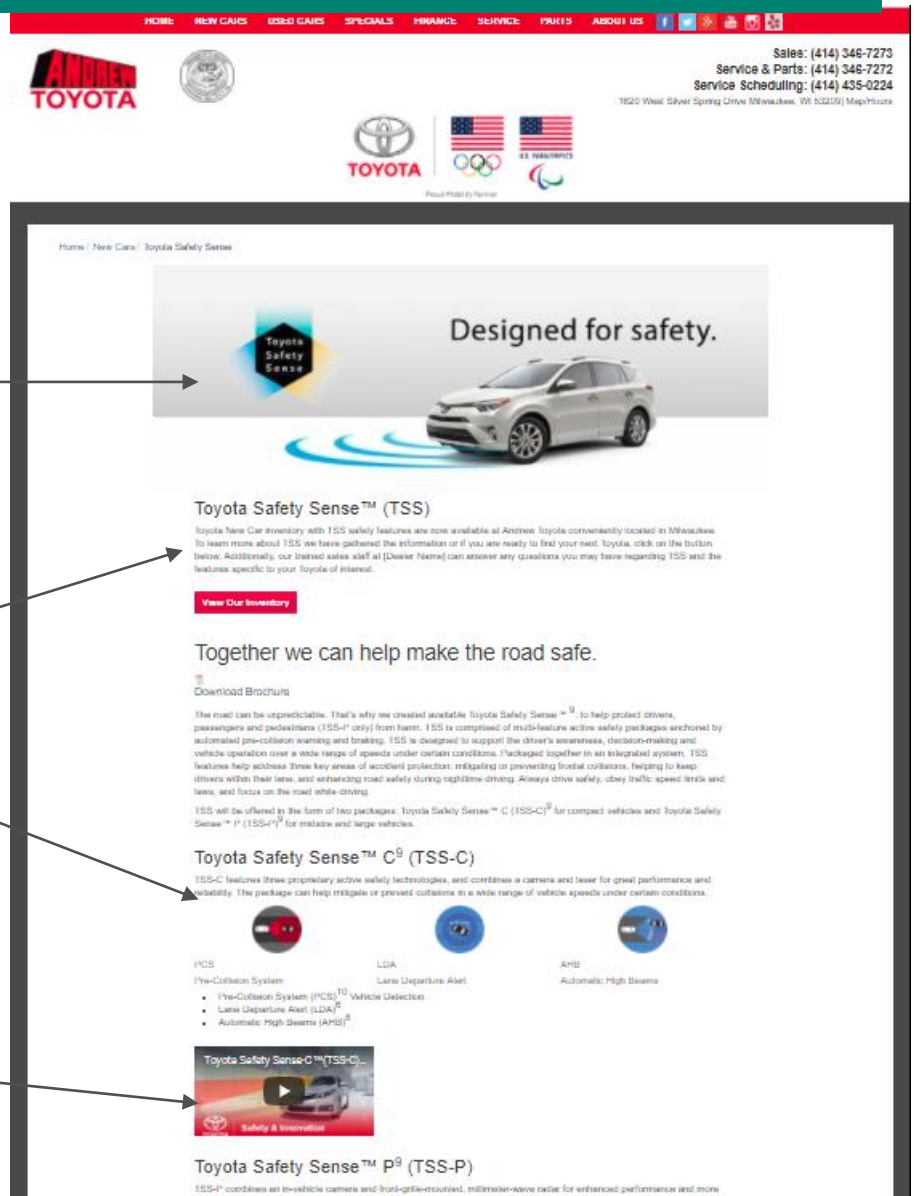
Data Source: SEM Rush, Featured Snippet Study, 2018

Step 3: Provide a rich and detailed answer

Images

Text

Video



Step 3: Provide a rich and detailed answer

Toyota Safety Sense™ (TSS)

Toyota New Car inventory with TSS safety features are now available at Andrew Toyota conveniently located in Milwaukee. To learn more about TSS we have gathered the information or if you are ready to find your next Toyota, click on the button below. Additionally, our trained sales staff at [Dealer Name] can answer any questions you may have regarding TSS and the features specific to your Toyota of interest.

View Our Inventory

Together we can help make the road safe.

Download Brochure

The road can be unpredictable. That's why we created available Toyota Safety Sense™ 9, to help protect drivers, passengers and pedestrians (TSS-P[*] only) from harm. TSS is comprised of multi-feature active safety packages anchored by automated pre-collision warning and braking. TSS is designed to support the driver's awareness, decision-making and vehicle operation over a wide range of speeds under certain conditions. Packaged together in an integrated system, TSS features help address three key areas of accident protection: mitigating or preventing frontal collisions, helping to keep drivers within their lane, and enhancing road safety during nighttime driving. Always drive safely, obey traffic speed limits and laws, and focus on the road while driving.

TSS will be offered in the form of two packages: Toyota Safety Sense™ C (TSS-C)[9] for compact vehicles and Toyota Safety Sense™ P[*] (TSS-P[*])[9] for midsize and large vehicles.

Toyota Safety Sense™ C[9] (TSS-C)

TSS-C features three proprietary active safety technologies, and combines a camera and laser for great performance and reliability. The package can help mitigate or prevent collisions in a wide range of vehicle speeds under certain conditions.

PCS	LDA	AHB
Pre-Collision System	Lane Departure Alert	Automatic High Beams

- Pre-Collision System (PCS)[10] Vehicle Detection
- Lane Departure Alert (LDA)[8]
- Automatic High Beams (AHB)[8]

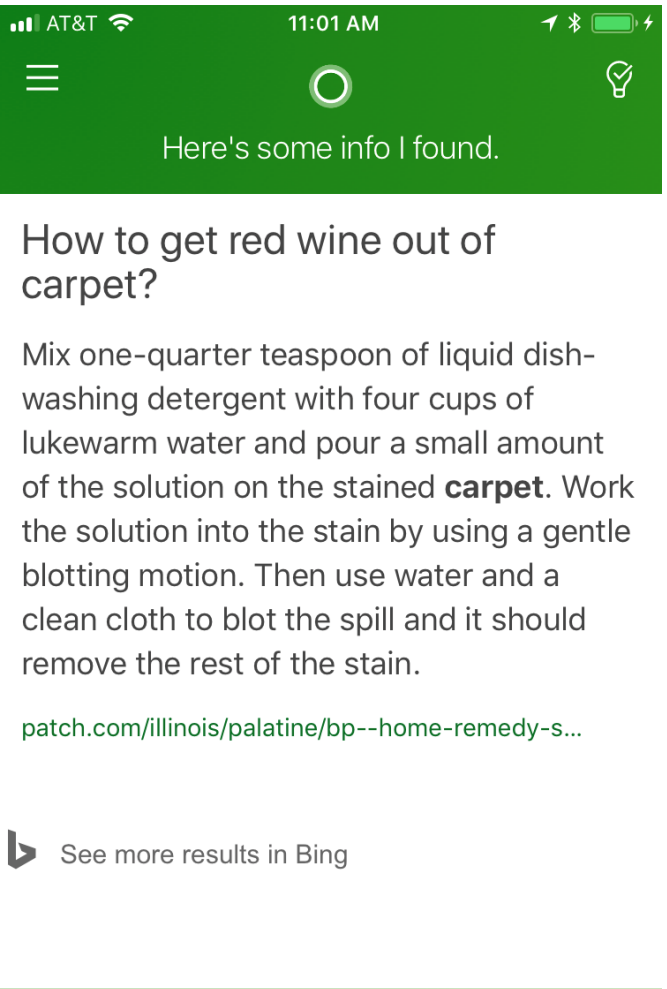
Answer the Question – Add Value

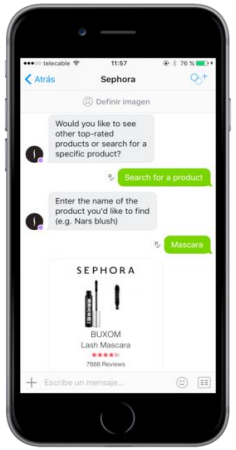
Reminder:
Create content for humans,
not for bots

Step 4: Do a natural language check

Does the answer make sense when spoken aloud

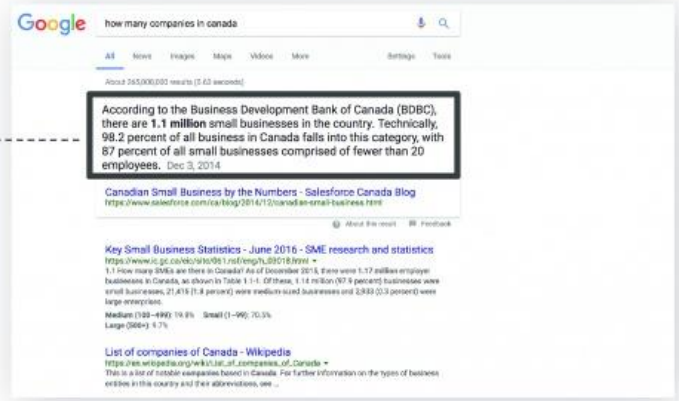
Step 5: Check the content length





Step 5: Check the content length by snippet type

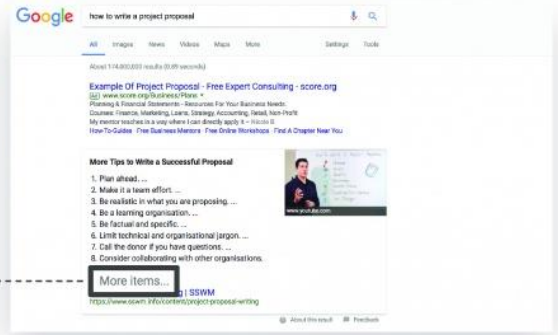
PARAGRAPH	WORDS	CHARACTERS
AVERAGE	46	272
MAXIMUM	84	370



43 words long

Salesforce ranks **4th**, but earned the Featured Snippet.

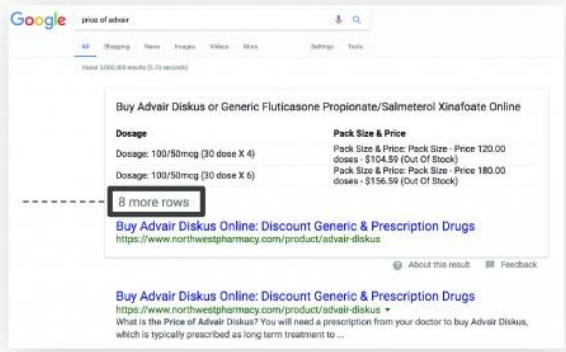
LIST	ITEMS	WORDS PER ITEM
AVERAGE	5.5	8.1
MAXIMUM	8	57



Truncated after **8 rows** and shortened text

Give them a reason to read more.

TABLE	ROWS	COLUMNS
AVERAGE	5.6	3.4
MAXIMUM	7	4



Truncated after **2 rows**

Data Source: SEM Rush, Featured Snippet Study, 2018

Step 6: Check the SEO Fundamentals on page

- ❑ Indexable ROBOTS.TXT, Page Status Codes, Canonical Tag
- ❑ Crawlable Link Structure <REL=FOLLOW>, <REL=NOFOLLOW>
- ❑ Schema Markup
- ❑ High Quality Content
- ❑ Friendly URL
- ❑ Page Title + Description <META>
- ❑ Descriptive and Targeted H1, H2, H3 Tags
- ❑ Descriptive ALT Tags for images/videos

- ❑ Optimized for Page Speed / ?AMP?

Step 6: Check technical optimization fundamentals

- ❑ Is your Site Indexed
- ❑ Website Server Status Codes
- ❑ Optimizing Page Speed
- ❑ AMP vs PWAs

- ❑ Google Search Console
- ❑ Bing Webmaster Tools

Speakable Schema Markup

Currently available in a beta for News Articles – Must be part of Google News / Bing News

1. • Follow Google News / Bing News Guidelines via Google News Producer or Publisher Center
2. • Speakable markup for text content only. (Not Photo captions or source attributions)
3. • Don’t use Speakable on the entire article. Use it for key points.
4. • Speakable text should be 2-3 sentences and take no more than 30 seconds to read.
5. • The story should be broken up into short sentences.

Implementing Speakable Schema

```
<html>
  <head>
    <title>He does it again! Fox Jumps Over Dog</title>
    <meta name="description" content="The quick brown fox jumps over the lazy dog for the 30th time.
    This time the dog was snoozing after eating at his favorite restaurant, Mr. Barkley's! The last
    time this happened the lazy dog was resting his head on a cool rock." />
    <script type="application/ld+json">
{
 "@context": "http://schema.org/",
 "@type": "WebPage",
 "name": "Quick Brown Fox",
 "speakable":
 {
  "@type": "SpeakableSpecification",
  "xpath": [
    "/html/head/title",
    "/html/head/meta[@name='description']/@content"
    ]
 },
 "url": "http://www.quickbrownfox_example.com/quick-brown-fox"
 }
  </script>
  </head>
</html>
```

1. Type=Webpage or Article
2. Name=Title/Name. Don't keyword stuff!
3. Always SpeakableSpecification
4. Either xpath or CSS
5. This pulls the xpath title & meta description to be the spoken content
6. Article or Page URL